

GUIDELINE 7

LAND ACQUISITION FOR IRRIGATION DEVELOPMENT

GUIDELINE 7: LAND ACQUISITION FOR IRRIGATION DEVELOPMENT

1. INTRODUCTION

This guideline discusses the issues on land acquisition. The land is a very sensitive issue for investment especially in the rural areas as the land is one of the most important properties for the rural inhabitants to generate their income. It would not be possible to acquire land for irrigation facilities without reasonable compensation. Apart from the compensation, there is sensitivity of the community, which the investors have to duly consider not only for land acquisition but also even for the change of land use into irrigation.

This preliminary guideline describes 1) relevant laws and policies which should be followed for land acquisition, 2) the structure of land administration, 3) general procedure for land acquisition with different land classification, namely community land, public land and private land. Some instructions are also indicated based on the actual situation such as customary rights, land demarcation and registration, conflicts over land, etc (Case 1 and Case 2 in the boxes below are the examples).

This guideline remains briefly to describe the elements to consider for land acquisition. It needs the accumulation of experiences particularly for investment in the land in rural areas and the enacting several relevant laws would facilitate the clear procedure for dealing with land issues. This preliminary guideline, therefore, suggests the points to consider preparing a full-scale guideline in the future, as well.

2. FRAMEWORK OF THE GUIDELINE

The guideline for land acquisition deals with the issues to transform a land into irrigated land with investment. Man-made modification of natural environment of a landscape for production or any other purpose is generally understood as Land Use. In most of the cases, communities, together with the government, allocate the land for various purposes by taking account of traditions, existing land use policies or other similar guidelines, rules and regulations. Land use involves modification and management of natural land environment; usually called as Land Cover; for the betterment of the community.

Prevailing land administration in the RSS went through the history of colonial, independent Sudan till 1970s, from 1980s till Comprehensive Peace Agreement (CPA) 2005, and finally to date. Through these periods, the communal landownership has been restored and the Land Commission has been established. Then the Transitional Constitution of RSS (TCRSS) 2011 stated that all land owned by the people of South Sudan and its usage was regulated by the government in accordance with law. With these backgrounds, the following describes the framework to prepare the guideline:

- The TCRSS has the provision (article 171) of the National Land Commission, which is focal body for devising necessary policies and acts. Furthermore, Land Policy (draft), 2013, which has been adopted by the Council of Ministers, is under consideration for adoption in the legislature. Being in transitional period, the land administration is still not streamlined, but there is substantial encouraging development: specifically Land Act 2009 and Land Policy (draft) 2013; together with Local Government Act 2009. These policy and acts are the references for preparing this guideline for land acquisition.
- The long establishment procedure for making land cadastre and registry based on the Land Settlement and Registration Ordinance 1925 is in place in Juba County as well as other four (4)

towns, namely Malakal and Renk in Upper Nile, Bentiu in Unity, and Wau in Western Bahr el Ghazal States. For the rest of the country, the land is still governed/ managed by the community authority (Traditional Chief) under the customary law and, in most of the cases, without proper physical demarcation and registration. This fact is also taken into consideration in preparation of the guideline.

- Following classification of land and demarcation of roles by the governments stipulated in Land Act, 2009 will be the framework of this guideline to define the procedure according to the category of the land and role of the stakeholders.
- Under section 9 of Land Act 2009, it is the first time to properly classify three (3) types of land; namely Public, Community and Private; and elaborated it in section 10, 11 and 12 respectively. And the ownership mentioned in section 7 (2), where land can be acquired, held and transacted through (a) Customary, (b) Freehold and (c) Leasehold tenure system. This classification of the land also consists of the framework of this guideline.

Table 9.1 Category of Land (Land Act 2009)

Category of Land	Definition
Public land	All government (central, state and local) occupied land and land used for public utilities and services (such as road, airport), under water areas (such as river, wetland), gazetted forest national park and game reserve and any other land, except privately and communally owned. Public land is usually registered under %Freehold Tenure System+.
Community land	All land under the %Traditional Authority (defined in Chapter XII, Local Government Act, 2009)+ and managed under the %Customary Law+ is owned by community under %Customary Tenure System+ and mostly not registered. Such land, which usually includes community forests, grazing areas, cultivated areas, waterholes, shrines, may be allocated (Section 15, with the provision of Section 16, Land Act, 2009) by the traditional authority and registered with the Local Government, jointly or individually, in the name of community or community member for their livelihood, not for commercial purpose, with the area less than 250 feddan. Prior verification and approval from State Government is needed for the commercial purpose with land area more than 250 feddan.
Private land	All the land registered in the name of individual and private entity. Currently registration is under %Leasehold Tenure System+, but may include %Freehold+ as well.

3. LAND ADMINISTRATION

Chapter VII and VIII of Land Act 2009 together with Sections 15 and 88 to 96 of Local Government Act 2009 stipulate the provision of the government bodies: who and how the land should be administered and managed while harmonizing the Statutory and Customary practices and laws.

Table 9.2 Role and Responsibility of the Administration

Level	Role and Responsibility	
National Government	Mainly responsible for devising land and natural resources regulations by enacting policy and legislation and other land related matter of national interests as stipulated in the Section 42, Land Act, 2009 and Schedule 4A, TCRSS, 2011. Formulation of administrative (Registry) and technical (Cadastre) standards and provide necessary assistance and guidance to the states.	
State Government	Manage the state land and natural resources as stipulated in the Section 43, Land Act, 2009 and Schedule 4B, TCRSS, 2011 by devising necessary states rules and regulations in accordance with National policy and legislation including Registry and Cadastre standards. Land Zoning and Gazetting after demarking (through necessary survey) the land in collaboration with Traditional Authority and open and maintain registry (section 54, 55, 58 and 59, Land Act, 2009) issue certificate of title (section 57, Land Act, 2009) and transfer title (section 56, Land Act, 2009).	
Local Government	There are three tier of administrative body; namely (a) County, City, Municipality and Town (Councils), (b) Payam and Block Councils (Coordinative administrative Units), and (c) Boma and Quarter Councils (Basic Administrative Units); however Land is managed by the following two local government bodies.	
	County Land Authority (CLA)	For each County, the state government establishes Count land authority, with defined number of members and functions as stipulated in Section 44, 45 and 46 of Land Act, 2009, respectively. The CLA facilitates, support and assist the implementation of land registration (Registry) and survey (Cadastre) under the relevant ministry of the state. And CLA gets necessary assistance from the Payam Land Council (PLC) while doing so. Furthermore, it also provides necessary advice and guidance to Traditional Authority on land issues to manage community land in accordance with customary law.
	Payam, Land Council (PLC)	For each Payam, the state government establishes Payam Land Council, with defined number of members and functions as stipulated in Section 48, 49 and 50 of Land Act, 2009, respectively. The PLC provides necessary assists to the CLA.

Land administration system at State and Local Government level has been devised; however the implementation is in early stage. There are still few CLA and PLC established to date. The institutions are not yet appropriately equipped and staffed at all levels of government body. Here shown in Figure below is the land administration system under development in Yambio County/Yambio Payam, Western Equatoria State. This guideline will also follow the system for cadastre and registry, though these tasks are mainly targeted to the towns at the initial stage.

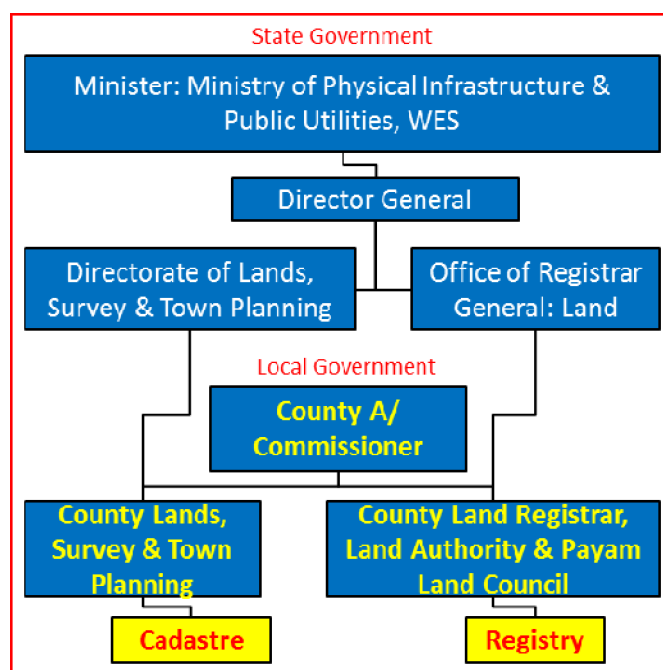


Figure 9.1 Structure of Land Administration in WES

4. PROCEDURE FOR LAND ACQUISITION AND REGISTRATION

4.1 Overall

Following suggest the points to be considered in the process of land acquisition based on Land Act 2009 and actual situation of land holding on the ground.

(1) Most of the land in the rural area is community land. Prior to any decision related to their lands, the project implementers have to consult with the communities concerned through land administration or traditional authorities.

Land Act 2009 defines and stipulates the land tenure system in Section 7 as Land may be acquired, held and transacted through the following tenure system:ö

- a) Customary (rights on land conferred by or derived from customs or customary law and / or practices)
- b) Freehold (a form of land ownership held in perpetuity with the rights to transfer and dispose of such land)
- c) Leasehold (an agreement between the owner of land and another party by which the owner transfers possession and occupancy of such land to another party in consideration for rent but not ownership)

Most of the land in the rural area in RSS is held under community tenure and rights are administered by traditional authorities, e.g. the traditional authority has the rights for land allocation subject to the consultation with the community members. Therefore the acquisition on community lands should well follow the customary rights, laws and practices.

At the present situation analysis, a questionnaire survey can be carried out as well as discussion with traditional authorities to know the land holding status of the community in the target project site. A sample of questionnaire is attached hereunder.

Irrigation is a public interest. Therefore, the land acquisition for constructing irrigation facilities

should be of public interest. Then according to the laws, the procedure for land acquisition shall be conducted with due consultations with the communities. The public interest includes the interest of the communities living in the target area. Land Act 2009 stipulated land acquisition in Section 63 as follows:

- The activity to be carried out by the investor shall reflect an important interest for the community or people living in the locality
- It shall contribute economically and socially to the development of the local community
- The concerned Ministries in the Government of South Sudan and the State and the Investment Authority shall consult with the Community concerned on any decision related to the land that investor intends to acquire and the view of the community shall duly be taken into consideration.

(2) Follow the customary rights whether it is registered or not for boundary setting

As for boundary setting, follow the customary rights regardless whether it is registered or not at this moment. Customary rights are equally protected with freehold or leasehold by Land Act 2009 Section 8. So go with the customary rights based on indigenous knowledge. According to law, the community land should be registered or lawfully held or transferred. But the actual situation on the ground the community land is in many cases not registered or even its boundary is not clearly known but recognized through indigenous knowledge of the surrounding communities.

Land Act 2009 also recognizes the evidence of rights maintained by the community as saying, "Right of ownership and all derivative rights to land shall be proven by a prima facie legal title in accordance with the provisions of this Act; Right of ownership and derivative rights to land may be proven by any other practices recognized by communities in Southern Sudan in conformity to equity, ethics and public order" (Land Act 2009: Section 39 Evidence of Rights to Land).

(3) Irrigation Development can promote land registration in parallel with land acquisition.

Actual situation is stagnancy of land registration and clear demarcation of boundaries. In this situation on the ground, at the planning stage, the layout of the irrigation scheme can follow the customary rights based on the indigenous knowledge of the surrounding communities. However, at the implementation stage, i.e. detail design stage, the land should be registered.

Section 90 of Land Act 2009 stipulates Irregular Allocation. At the stage of the implementation registration of the land would have to be completed in order to avoid the judgment of irregular allocation.

(4) Alternatives of compensation: re-plotting land

Section 64 of Land Act 2009 says "any community or persons affected by such activities in the area of investment shall be compensated". The amount of compensation should be just and equitable, and the value of land in the market etc. shall be taken into account.

There is an alternative of compensation in case of irrigation development. In order to layout the canals so as to efficiently convey irrigation water to the plot of farmland, so-called re-plotting method has been applied in irrigation scheme design in Japan. This method is to re-plot individual lands among the beneficiaries in a manner of maintaining the original area of individual lands or equally contribute a portion of their land to create a land for public use, i.e. land for irrigation facility. By this method, an efficient canal layout will become possible and basically all the individual lands will be maintained in

size or size of the land acquisition for public use will be equally shared among individuals.

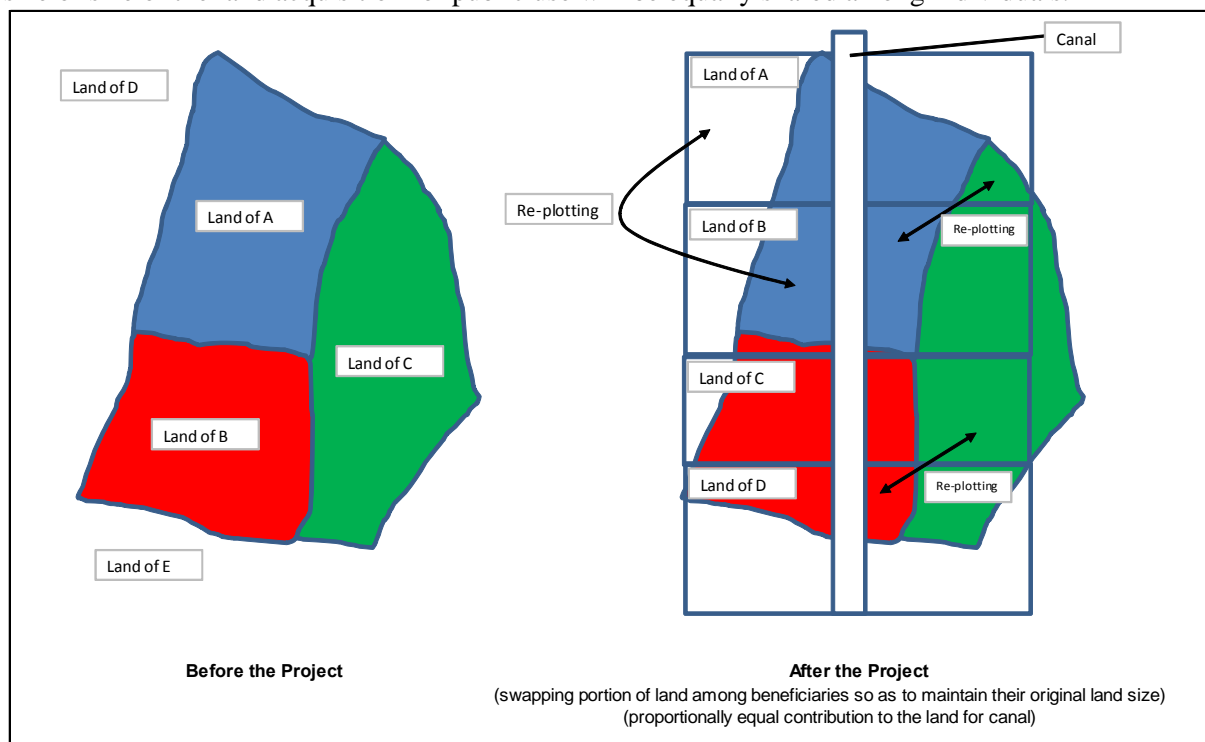


Figure 9.2 An Image of Land Re-plotting

This method is just a suggestion and it has to be carefully examined and sensitization made over it with the communities since it may transfer one's land to another location as a new entitlement, a scenario that might bring a very sensitive undertaking by individuals within a given community. When this idea is talked to them, they may think that their lands would be taken away. Very clear explanation on irrigation development has to be provided to the community members, e.g. that irrigation is to increase productivity with minimum expropriation of land for physical infrastructure such as canals.

4.2 Acquisition of Community Land

As a step of land acquisition in case of community land, following process would be undertaken:

- 1) Evaluation and assessment of the land and its surrounding environment by the investor together with the community involved,
- 2) Community takes decision on land utilisation for different activities and purposes involving various stakeholders,
- 3) The land allocation process to the individual, group or any legal entity starts, and (Traditional authorities allocate, notify County Land Authority or Payam Land Council or any other relevant land administration)
- 4) Clarification and registration for its ownership in given land tenure system and its governance and management will go along with the process of land allocation.

In case of the land over 250 feddan, approval of concerned Ministry shall be required with the following verification:

- a) The purpose for which land is to be used and its compliance with rules and regulations in the State.

- b) Compatibility of such an activity with the land use system in the area.
- c) Consensus on the allocation between members of the community.
- d) Allocation does not exceed such a size that the Minister finds against principles of equity and fairness, and
- e) The social and environmental impact that activity may cause.

While developing irrigation in a given area, some portion of land of that area is consumed by the irrigation facilities and the rest becomes the irrigated land. Thus the ownership issues need to be examined by taking into account the followings:

Table 9.3 Issues on Land Tenure

Land	Issue
Beneficiaries of the Irrigated Land Area	The beneficiaries might be new settlers, farmers and pastoralists; one of them or combination of them either individual or farming group. In terms of their status of land ownership, they might be land owners or tenants. Thus, for a new irrigation project, the land can be assigned to an individual or a group under ownership or tenancy categories. However, it would be desirable that the land should be registered in the name of an individual under the Private Land categories with Leasehold Tenure System.
Provision of Land for Irrigation Facility Development	It is obvious that some land area need to be used for the irrigation facility development, such as reservoir, intake, pump house, canal, access road, etc. Such land can be obtained from one of the land classes; namely Public, Community and Private land. Community land can be obtained by proper consultation with community chief through State and Local Government. For private land compensation mechanism, as mentioned in Land Act, 2009 and Transitional Constitution of RSS 2011, should be followed. All the land used for the facility development should be registered in the name of competent government in Public Land category under Freehold tenure system.

4.3 Acquisition of Public Land

Public land is the land owned collectively by all people of South Sudan and held in trust by the appropriate level of government. In utilizing the public land for irrigation development, the land acquisition is easier but to whom to allocate will be the main issue.

According to Land Act 2009, County Land Authority takes role for holding and allocation and it requires of the State or National Ministry to make a clear plan for whom to cultivate the land: nearby communities, the settlement of IDP, or any other people, etc. This may be foreseen as the land use as a contract of usufruct the section 31 of Land Act 2009.

Target people of irrigation land allocation as public land should also refer to the Draft Land Policy 2013. The development of irrigation farmland under the public land can be a way of assisting vulnerable peoples of the society such as IDPs. The Policy states as one of the policy statements (Statement 2) on the role of security of land tenure in reducing poverty that the policy encourages planners responsible for designing development initiatives for agriculture, water use and the use of other natural resources, to design them in ways that involve and directly benefit low-income land holders and that respect and protect the rights of smallholders over their land, water and grazing rights.

4.4 Acquisition of Private Land

It will be hardly to encounter a private land in rural areas, but in such a case if the land needs to be acquired from this category, likewise the project implementers shall consult with the land owners, to agree on land acquisition and compensation. Such an agreement shall be arranged without delay according to the Land Act 2009.

Case 1: Conflict between farmers and pastoralists

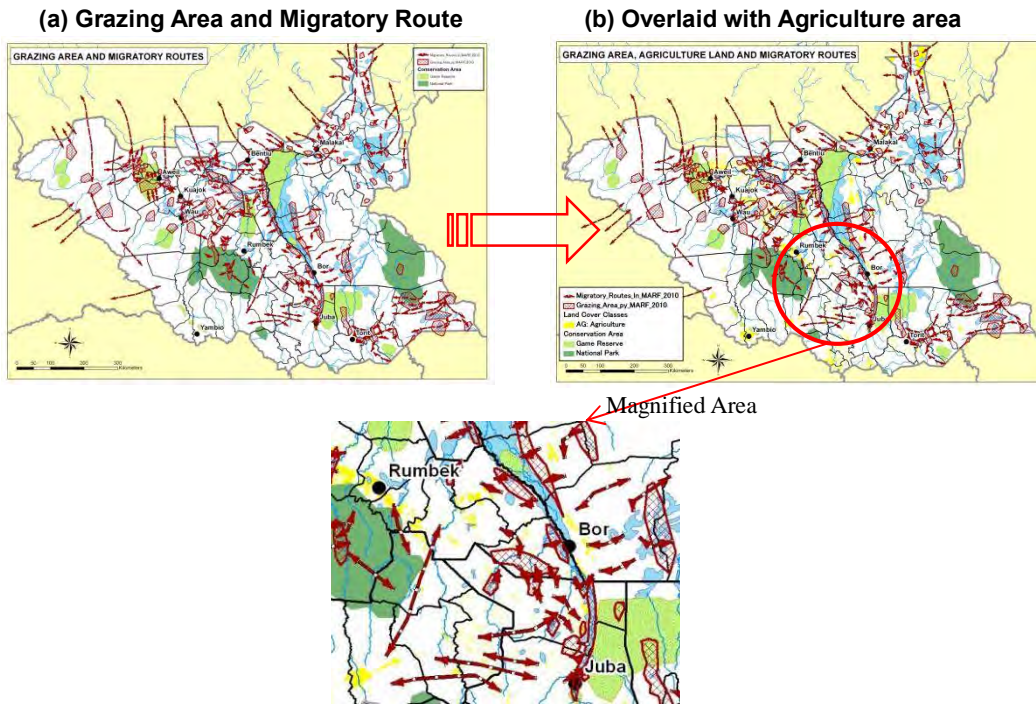
The land acquisition for irrigation can bring social conflicts over the ownership and use of the land, e.g. conflicts over the livestock husbandry and crop production can be predicted, and therefore proper land use and land zoning are essential components of the irrigation development to secure land and water for both Farmer and Pastoralist.

The livelihood and way of life of the people in RSS is mostly dominated by livestock rearing (using natural grazing areas and generally Transhumance or Nomadic Type; usually called as Pastoralist) and crop production (mostly settled communities or villages, with some exceptions of shifting cultivation; usually called as Farmer). Both Pastoralists and Farmers are having, more or less, equal importance in the South Sudanese society as well as economy of the country. And most of the time Farmer and Pastoralist compete for land and water. Thus it would be desirable to see what would be the implications of land use and zoning on irrigation development to the followings:

- Livestock migratory route
- Existing and Future ownership of the grazing land

As shown in Figure below by National Bureau of Statistics (NBS) GIS database, there is no definite information about how the grazing areas were zoned or demarcated; however such zoning might have included the Grasslands, Savanna and Forest Land. It is obvious from the Figure that some of the migratory routes or grazing areas either passing/overlapping or will pass/overlap through or on Agriculture area

While talking about the ownership of Grazing Land, it is with the Pastoralist Community under the customary law, which is widely recognised and will be formalised under statutory law after enacting Community Land Act as recommended in Land Policy, 2013. In similar way Farmer Community ownership on the Cropland (which may include various kinds of crop production for example cereals, vegetables, and fruit trees) will also be formalised. The irrigation development guideline will include proper procedures for acquiring land for irrigation without raising social tensions as demonstrated below, in predicting a scenario of potential conflict.



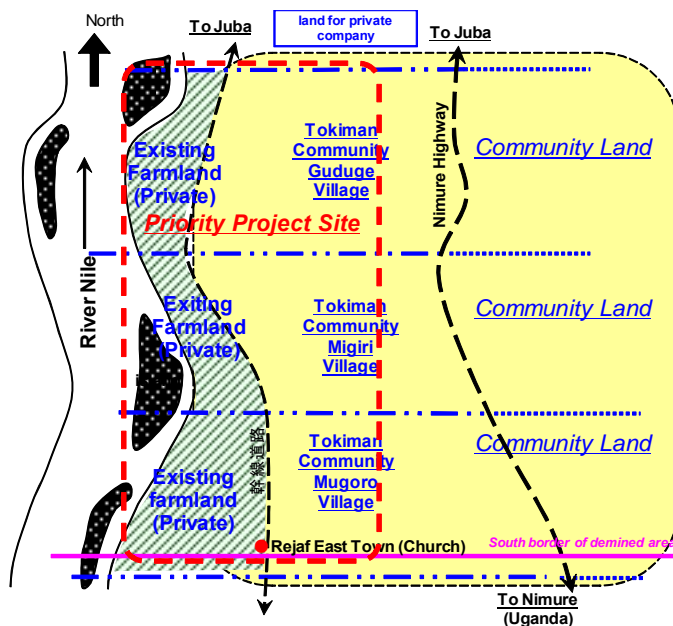
Transhumance, Farming, Grazing Area and Migratory Route

Case 2: Rejaf East: people have already been cultivating land

The boundary of the communities in Rejaf East area is generally drawn at right angles to the Bahr el-Jebel (shown as blue dotted line on the figure below). This arrangement would be in consideration of equal access to water by each community. Also it is presumed that the boundaries of the communities get vague as the land gets further away from the river.

Consensus building with the related communities in Rejaf East (area shown with yellow colour on the figure) was more difficult than Jebel Lado site, in which the target project area was identified within the non-cultivated community land. Because, at Jebel Lado, the community land in the target site has not been demarcated to individual community members, which made it easy to reach consensus with the community for irrigation development on that area.

Whereas, the part of the lands in the Rejaf East site have been allocated to individuals and they have been farming on that lands. This situation made it difficult to reach consensus among the community members. The layout of irrigation canals will not necessarily be rational, leaving the shape of existing farm plots so that irrigation development would have not been felt by the existing cultivators as their lands might be taken away. Although there is high potential of productivity increase to transform the existing farmland to irrigated one and therefore the idea of re-plotting comes up from engineering point of view, social aspects have to be duly considered even to get consensus among the community members on the way forward.



5. UPDATING THE PRELIMINARY GUIDELINE FROM UPCOMING POLICIES AND LEGISLATIONS

This part of the preliminary guideline in this Master Plan will be updated from the following expected policy processes and legislations:

- Adoption of Land Policy (draft), 2013.
- Review and necessary amendments of Land Act, 2009 based on provisions of Land Policy, 2013 and harmonizing it. For example
 - o Clearly redefining the procedures to be followed in allocation of land by central, state, local government and customary authority, as there are some unclear and overlapping lines of authority among the land administrators;
 - o Extend the restitution (a process of land restoration to its rightful owner) process and then promulgation of regulations defining restitution procedures. Even Transitional Constitution of RSS 2011 and passage of laws, including Land Act 2009, role and responsibility of land administration, Adjudication (judicial decision) and Protection of land right remains unclear or unfulfilled; and
 - o Others (a) issue of land for IDPs (0.39 million) and Returnees (due to civil war and natural calamities): current institutions and procedure for restitution and compensation of lost land or facilitation to integrate into host communities are absent or inadequate to resolve land conflicts (b) issue of poor and landless people; informal settlements in urban periphery (c) operation of land market in urban and rural areas (d) sustainable use of natural resources (Agriculture, forest, pasture land, water, environment, etc.).
- Need to enact Community Land Act (define land right without any discrimination, such as gender, and modernise land administration of Customary Land Right) and harmonise with Land Act, 2009. Local Government Act, 2009, may need to be amended on the inheritance provision of land right for women and children.
- For land use, enact Town and County Planning Act and Harmonise with Local Government Act, 2009: for National, Regional and Local Area land use plans assigned to appropriate institutions with necessary capacity. While doing so consideration should be given to (i) ecosystem protection (forest, wildlife habitat, wetlands, fragile ecosystem, pasture and water pollution) for sustainable use and (ii) urban environment management (solid waste, drainage, air pollution) through necessary EIA regulation. It demands Cross-Sectorial land use management approach and harmonised sectorial policy with the land policy.
- Enact Land Registration Act, Land Survey Act and Land Information Act for land administration; defining (i) land right delivery (ii) land adjudication and registration (iii) land demarcation, survey and mapping (iv) cadastre (v) Land information system (LIS) management (vi) fiscal aspect of land management, such as Land taxation system (LTS) and (vi) land disputes management.
- Develop Land Use Policy for land use management
- The land governance/management system must be harmonised with one system and should be practiced in all states. And, as illustrated and mentioned in previous section, the case of Yambio should be adopted as national standard.

APPENDIX-1: SAMPLE OF A QUESTIONNAIRE RELATED TO LAND OWNERSHIP

To be asked with Household (Family): **Name of Head of House Hold:**

Q1. What is Land Tenure type of your cultivating land? Please choose from below:

- Community - Private - Other ()

Q2. Have you registered your Agricultural land?

- Yes - No - Partial (% of total agricultural land holding)

Q3. For your land’s Tenure as ‘Community’:

i) If you want to sell land, can you decide yourself?

- Yes - No

• **If No, then whom you need permission from:**

- Traditional Attorney
- Public Attorney (Land Commission / County Land Authorities / Payam Land Councils / Otherí í í í í í í í í ..)

ii) If you want to change Land use type (For instance: Grassland to Agriculture), can you decide yourself?

- Yes - No

• **If No, then whom you need permission from:**

- Traditional Attorney
- Public Attorney (Land Commission / County Land Authorities / Payam Land Councils / Otherí í í í í í í í í ..)

iii) If you want to change the currently cultivating crop to another crop (For instance: Sorghum to Vegetable Crops), can you decide yourself?

- Yes - No

• **If No, then whom you need permission from:**

- Traditional Attorney
- Public Attorney (Land Commission / County Land Authorities / Payam Land Councils / Otherí í í í í í í í í ..)

Q4. For your land’s Tenure as ‘Private’:

i) If you want to sell land, can you decide yourself?

- Yes - No

• **If No, then whom you need permission from:**

- Traditional Attorney

- Public Attorney (Land Commission / County Land Authorities / Payam Land Councils / Otherí í í í í í í í í ..)

ii) If you want to change Land use type (For instance: Grassland to Agriculture), can you decide yourself?

- Yes - No

• **If No, then whom you need permission from:**

- Traditional Attorney

- Public Attorney (Land Commission / County Land Authorities / Payam Land Councils / Otherí í í í í í í í í ..)

iii) If you want to change the currently cultivating crop to another crop (For instance: Sorghum to Vegetable Crops), can you decide yourself?

- Yes - No

• **If No, then whom you need permission from:**

- Traditional Attorney

- Public Attorney (Land Commission / County Land Authorities / Payam Land Councils / Otherí í í í í í í í í ..)

Q5. Is your cultivating land Hereditary land?

- Yes - No - Partial (% of total agricultural land holding)

Q6. Who will be successor of your Hereditary land?

- Son - Daughter - Other person ()

Q7. If irrigation network is passing through your private land, how you coordinate with the surrounding land belonging to other people for its smooth operation?

Q8. If the planned irrigation canal is passing through your land, will you accept to let it pass through?

Thank you very much

To be asked with Community Chief:

Name of Chief:

Name of Community:

Q1. How decision regarding land distribution to farmer is done?

Q2. How decision regarding type of crop to be cultivated to a land is done?

Q3. How decision regarding selling of land is taken?

Q4. Please comment regarding your relationship with government authority on Land related issues.

Q5. What role do you play as a mediator between government authority and farmers on Land related issues?

Q6. For the condition of single irrigation network, how will you coordinate for its smooth operation?

i) Within your community:

ii) With other communities:

Thank you very much

GUIDELINE 8

DESIGN AND CONSTRUCTION OF IRRIGATION INFRASTRUCTURE

GUIDELINE 8: DESIGN AND CONSTRUCTION OF IRRIGATION INFRASTRUCTURE

INTRODUCTION

Construction is very costly, and if it is damaged due to a number of factors, including poor design and bad workmanship, its economic and financial lost are not easily repairable. Also, overestimation (in terms of both selection of materials and methods of work can hamper participation of important cluster of stakeholders. Unreasonable inflation of prices might come as a result of lack of knowledge such as local practices and prevailing circumstances. Therefore, an adequate degree of appropriateness in design and supervision of works is required for progress and achievement of the strategic IDMP goals. Memorising or doing things by common sense or good will is always difficult; in addition people with an institutional memory do not stay forever, to address this dilemma, adoption or preparation of manuals to contains desired standards, norms and procedures for successful implementation of irrigation infrastructure in RSS.

1. TECHNICAL MANUALS

The Japanese Institute of Irrigation and Drainage (JIID) develops several engineering design manuals, aiming at disseminating those developing countries which want to establish technical standard or improve their design works. During IDMP formulation, JICA TT provided JIID's engineering manuals to RSS-TT, after obtaining dissemination permission from JIID.¹ Followings are the list of available engineering manuals for irrigation and drainage developed by JIID.

- a) Canal Works
- b) Land Consolidation
- c) Small-scale Hydro-Power Generation
- d) Basics of Construction Management
- e) Fill Dam
- f) Headworks
- g) Upland Irrigation
- h) Drip Irrigation Planning Guide
- i) Pump Facilities
- j) Farm Land Conservation
- k) Drainage
- l) Groundwater
- m) Water Management (Case Study Edition)
- n) Water Management (Monitoring and Control System)

It should be noted, however, that the engineering design manuals were developed based on the natural and socio-economic conditions of Japan. The standards are introduced as an example and will of course be adjusted to the circumstances of South Sudan, in the course of the full development of the guidelines. Therefore in the meantime RSS-TT members have to use it with careful consideration of South Sudan's own natural and socio-economic conditions.

¹ Another dissemination permission from JIID is required if third party, excluding MEDIWR, want to have a copy of the JIID's engineering manuals.

Contact Information

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On the other hand, the then Ministry of Water Resources and Irrigation (MWRI) under the then Government of Southern Sudan (GoSS) had developed 14 Technical guidelines which were reviewed after independence of the Country, but not yet published, the guidelines are:

1. Guidelines For the Installation of Borehole with a hand pump
2. Guidelines For Drinking Water Distribution Networks
3. Guidelines for the Construction of Drinking Water Treatment Facilities
4. Guidelines for the Construction of Hand Dug Wells with Hand Pumps
5. Guidelines for the Construction of Hand Dug Well Water Yard
6. Guidelines for the Construction of Latrines for Rural Health Institutions
7. Guidelines for Household Latrines
8. Guidelines for Construction and Management of High Capacity Water Yard
9. Guidelines for the construction and Management of Improved Haffir
10. Guidelines for the Construction and Management of Improved Small Dam
11. Guidelines for the Construction of Low Capacity (Mini) Water Yard- motorized Borehole
12. Guidelines for the construction of School Latrines
13. Guidelines for the Construction of Slow Sand Filtration Systems
14. Guidelines for the Construction and Management of Protected Spring and Roof Water Harvesting.

These Guidelines will help in the establishment of required water facilities that will be used in an integrated manner. For instance, Guidelines for the Construction and Management of Water structures such as Haffirs, Protected Springs and Small Dams; in addition to the ones related to motorized boreholes will be used for rainwater, seasonal streams or springs harvesting and storage; and groundwater exploitation.

2. CONTENTS OF THE MANUALS RELATED TO IDMP PRE-FEASIBILITY STUDY

Canal Works: This manual specifies general terms to be considered in the design and construction or rehabilitation of canals in the irrigation development project. Main contents of manual include 1) classification of canals, 2) design of canal system, 3) investigation methods, 4) basic design, 5) hydraulic design, 6) structural design, 7) division works, water measurement facilities, and confluent structures, 8) regulating facility, 9) protective structure, 10) safety structure, 11) management, and 12) construction. Table of contents of the technical manual of Canal Works is attached in Attachment 1.

Fill Dam: This manual specifies general terms to be considered in the design and construction of fill dam in the irrigation development project. Contents of the manual include 1) Fill Dam Design 2) Design of Intake Works and Outlet Works, 3) Temporary Diversion Facility Design, 4) Improvement Works for Reservoir Site and its Surrounding Area, 5) Monitoring System Design, 6) Fill Dam Construction Planning, 7) Preparation Works and Construction Equipment, 8) Temporary Diversion Facility Construction, 9) Foundation Excavation, 10) Foundation Treatment, 11) Dam Body Construction, 12) Asphalt Seepage Control Work Construction, 13) Inspection Gallery, Construction, 14) Construction of Intake Works And Outlet Works, 15) Countermeasures for Sloping Ground near Reservoirs, 16) Ponding Plan, 17) Supervision, and 18) Redevelopment of Fill Dam. Table of contents of the technical manual of Fill Dam is attached in Attachment 2.

Pump Facilities: This manual specifies general terms to be considered in the design and construction or rehabilitation of pump facilities in the irrigation development project. Contents of the manual include 1) Construction Work and Management, 2) Roles of Construction Management, 3) Progress

Control, 4) Dimension Control, 5) Statistical Method in Quality Control, 6) Civil Works, 7) Construction Control Standards, 8) Civil Works Inspection Technique Standards, and 9) Concept of Civil Works Construction Standards. Table of contents of the technical manual of Pump Facilities is attached in Attachment 3.

Basics of Construction Management: This manual specifies general terms to be considered in the construction management in the irrigation development project. Contents of the manual include 1) Construction Work and Management 2) Roles of Construction Management 3) Progress Control, 4) Dimension Control, 5) Statistical Method in Quality Control, 6) Civil Works Construction Control Standards, 7) Civil Works Inspection Technique Standards, and 8) Concept of Civil Works Construction Standards. Table of contents of the technical manual of Construction Management s is attached in Attachment 4.

3. COSTS ANALYSIS RELATED TO IDMP PRE-FEASIBILITY STUDIES

Costs analysis in this chapter is related to the unit cost of construction materials, workmanship and labour. Unit costsø rates enable preparation of "Engineer's Estimates" for irrigation projects; and comparison of different possible cost scenarios for selecting most feasible economical alternative construction applications and materials to be used in various parts of the infrastructure.

Investment cost was estimated in USD for the three priority projects. Unit prices were analysed based on the actual construction orders made by MEDIWR, and costs for similar past implemented projects under the then MWRI. Also, due consideration was given to different available construction materials. Unit prices were established, in order to select lowest unit price for available materials at each project site. This is important, so that the cost is not unnecessary high, therefore based on site conditions and availability, choice of materials and construction options is made.

The unit prices vary from project site to the other uncontrollable factors such transportation. Especially the imported materials such as cement, steel bars, etc., contributed in elevating investment cost of the projects. Also, the cost of purchasing equipment and transportation from outside the country has dramatically pushed up the investment costs higher. Other important costing item is skilled labour, which shall be low if there are available local skilled labourers. Another cost is related to administration to meet related administrative activities such as tendering process and contract management, taxation and customsøduties. Analysis of the construction materials unit costs is shown as Attachment 5.

Establishing an irrigation scheme/farm necessitates both machines and manual works. Therefore it is necessary to finance machinesøworks; and to organise and trained community members and farmers on how to carry out manual works. Regarding earth works, machines and manual work rates are shown in Attachment 6. On the other hand, different labour unitsøcost rates for the other works are shown in Attachment 7.

4. SPECIFICATIONS

Knowing local circumstances, materials available, possible workmanships and labour; in addition to units cost rates, helps in adopting appropriate design and specifications; so as to safeguard against inflating of prices. In fact, initial costs may be deliberately high, e.g. when considering future expenditure; and a case in point is a decision to go for lined or unlined canal if affordable by the project promoter/investor or if it is the feasible technology.

**APPENDIX-1: TECHNICAL MANUAL FOR CANAL WORKS (DEVELOPED BY JAPANESE
INSTITUTE OF IRRIGATION AND DRAINAGE (JIID))**

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**APPENDIX-2: TECHNICAL MANUAL FOR FILL DAM (DEVELOPED BY JAPANESE
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**APPENDIX-4: TECHNICAL MANUAL FOR BASIC CONSTRUCTION MANAGEMENT
(DEVELOPED BY JAPANESE INSTITUTE OF IRRIGATION AND
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APPENDIX-5: CONSTRUCTION MATERIALS UNIT COSTS (PREPARED BY IDMP TT)

Irrigation facility	Building element/part	Materials to be used	Unit	Cost in USD	Remarks
Pump house building	Floor, Wall and Roof	reinforced concrete	m ³	450	Locally available materials: sand, gravels, etc. Other materials: steel bars, cement, etc. The cost is inclusive of materials, workmanship and labour
	Roof	Corrugated iron sheets (26 Gauge) on timber	m ²	50	Locally available materials: Timber Other materials: Corrugated Iron, Nails, etc. The cost is inclusive of materials, workmanship and labour
	Wall	Bricks	m ³	150	Locally available materials: sand, bricks Other materials: cement The cost is inclusive of materials, workmanship and labour
	Wall	Stones (masonry)	m ³	350	Locally available materials: sand, stone Other materials: Cement
	Gabion Wall	Dry Stones place in wire mesh	m ²	250	Locally available materials: Stone, Sand Other materials: Cement The cost is inclusive of materials, workmanship and labour
Canal lining	Bed and side slopes	Plain concrete	m ³	386	Locally available materials: sand, gravels Other materials: steel bar, cement, etc. The cost is inclusive of materials, workmanship and labour
	Bed and slopes	Bricks	m ³	141	Locally available materials: gravels, bricks Other materials: Steel bar, cement, sand, etc The cost is inclusive of materials, workmanship and labour
	Bed and slopes	Stone masonry	m ³	138	Locally available materials: sand, stone, etc. Other materials: cement The cost is inclusive of materials, workmanship and labour

APPENDIX-6: EARTH WORKS MACHINE AND MANUAL UNIT COSTS (PREPARED BY IDMP TT)

Supply, Excavation or Dumping of materials	Unit	Unit price USD (for material)	Placing, excavating or dumping of materials by machine	Unit	Unit price USD	Placing, excavating or dumping Manually	Unit	Unit price USD	Remarks
Site Clearing (Cutting & Clearing of Grasses, Bushes, etc.)						Site Clearing (Cutting & Clearing of Grasses, Bushes, etc.)	ha	11,900	Possible by both Machine and manual
Aggregate	m ³	50.0	Spreading (Bulldozer)	m ³	13.0				Possible only by machine
Gravel	m ³	50.0	Embankment with Compaction (machinery work)	m ³	14.0	Embankment with Compaction (Manual Work)	m ³	26.0	Possible by both Machine and manual
Soil (Banking, Heaping or piling)	m ³	7.6	Hauling or shipping by Dump/Tipper Truck	m ³	9.0				Excavating and transporting by machine only
Common Excavation			Excavation by machine	m ³	10.0	N/A	m ³	N/A	Possible by both Machine and manual
Excavation of Surface Soil (200mm Depth)			Excavation by machine	m ³	8.0	N/A	m ³	N/A	Possible by both Machine and manual
Sand for pipe laying (under)	m ³	24.0	Sand for pipe laying (under)	m ³	N/A	Sand for pipe laying (under)	m ³	N/A	Possible by both Machine and manual
Sand for pipe laying (around)	m ³	24.0	Sand for pipe laying (around)	m ³	N/A	Sand for pipe laying (around)	m ³		Possible by both Machine and manual

APPENDIX-7: DIFFERENT UNIT COSTS FOR LABOUR WORKS (PREPARED BY IDMP TT)

1. Reinforced Concrete (C20): Wall upper-part (t=15cm) for building 20m*10m area			
Work Description		Unit	Unit Price (US\$)
1	Mixing Concrete (C20)	m ³	160
2	Placing Concrete	m ³	25
3	Iron monger (reinforcement bars)	ton	1,100
4	Form works	m ²	25
2. Reinforced Concrete (C20): Roof for building 20m*10m area			
Work Description		Unit	Unit Price (US\$)
1	Mixing Concrete (C20)	m ³	160
2	Placing Concrete	m ³	17.5
3	Reinforcement bars	ton	1,100
4	Form works	m ²	25
5	Support works (scaffoldings)	m ²	8.3
6	Corrugated iron sheets	m ²	N/A
7	Timber trusses	m	N/A
3. Brick Work (400mm*200mm*150mm) for building 20m*10m area			
Work Description		Unit	Unit Price (US\$)
1	Cement Brick laying (A=10m ²)	No.	1.3
2	Cement Mortar preparation	m ³	200
3	Skilled labour, Common labour, etc. (20% of materials cost)	LS	38
4. Stone Masonry for building 20m*10m area			
Work Description		Unit	Unit Price (US\$)
1	Placing of Stone Boulders (dia. 30cm-40cm)	m ³	50
2	Preparation of Cement Mortar	m ³	200
3	Skilled labour, Common/unskilled labour, etc. (20% of materials cost))	LS	200
5. Galvanizes iron plate			
Work Description		Unit	Unit Price (US\$)
1	Galvanizes iron plate t=1.6mm (21kg/1.67m ²)	ton	910
2	Skilled labour, Common labour, etc. (10% of materials cost))	LS	90

GUIDELINE 9

IRRIGATION SCHEMES MANAGEMENT ESTABLISHMENT

GUIDELINE 9: IRRIGATION SCHEMES MANAGEMENT ESTABLISHMENT

1. ESTABLISHMENT OF O&M MECHANISM

1.1 Management Structure in the Draft Water Bill

According to the Draft Water Bill of the Republic of South Sudan dated August 2014, water resource is managed by Water Resources Management Authority (WRMA) at national level, Basin Water Boards (BWBs) at river basin level, Catchment or Sub-catchment Committees at catchment area level, and Water Users Association (WUAs) at user or community level.

Power and function of each management body stipulated in the Draft Water Bill are summarized in table below. As of June 2015, no any organization has been established since the Water Bill is not yet enacted. Therefore, it is necessary to confirm whether the envisaged management organizations are established at the time of planning of the irrigation projects. If not, it is recommended to establish these organizations, or at least, involve each stakeholder at national, basin, catchment area and community level, from planning stage till implementation stage of irrigation scheme development.

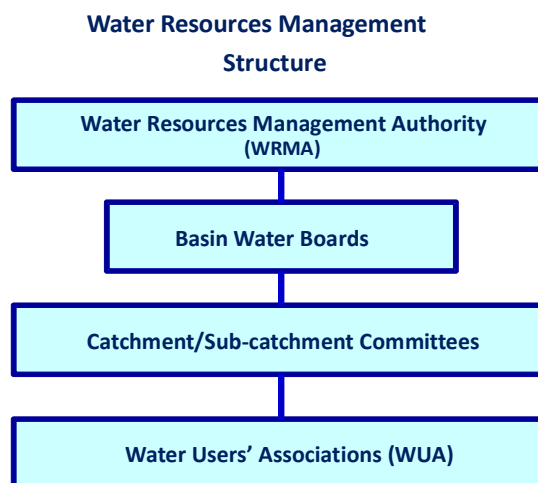


Figure 11.1 Water Resources Management Structure

Source: Draft Water Bill (August 2014)

Table 11.1 Powers and Functions of Water Management Bodies

Management Body	Powers and Functions
Water Resources Management Authority (WRMA)	<ul style="list-style-type: none"> • Regulate the management, development and use of water resources; • Advise the government on management and use of water resources; • Collect and provide information to the government as required for any purpose; • Formulate and implement standards, procedures and regulations for the management, development and use of water resources, including flood and drought mitigation; • Issue regulations on water resource allocation and the issuance of permits; • Issue permits for inter-basin water transfer; • Monitor compliance by water users on the basis of the conditions of permits and the requirements of the Act; • Provide guidelines to BWB on the pricing strategy for charges to be levied under this Act, such strategy being in accordance with other RSS policies, laws, and regulations; • Ensure collection, analysis and dissemination of data and information on water resources to relevant authorities and groups; • Ensure public access to information on water resources; • Issue annual reports for the benefit of the public on water issues and the performance of water resource institutions; • Liaise with other regional, RSS and international bodies for the better assessment, management, development and use of the water resources
Basin Water Boards (BWBs)	<ul style="list-style-type: none"> • Protecting water resources and increasing water availability; • Receiving permit applications for water abstraction, water use and recharge, determining, issuing & varying water permits and enforce the conditions of the permits; • Receiving permit applications for the construction of works, and determining, issuing and enforcing the conditions of those permits; • Enforcing regulations; • Reporting to the users and the public on water issues and their performance within the basin annually; • Ensuring the collection of water resources data, analysis and management of the

Management Body	Powers and Functions
	information system; <ul style="list-style-type: none"> • In accordance with the regulations, provide information to the WRMA; • Formulating the Basin Integrated Water Resources Management Plan and submit the same to the WRMA; • Coordinate and facilitate the formation and activities of WUA; • Setting the level of charges to be levied under this Act in accordance with the pricing strategy and guidelines issued by the WRMA; • Collecting water permit and water use charges; • Carryout flood and drought mitigation activities; • Facilitating information sharing within the basin; • Ensuring equitable water sharing within the basin through water allocation plans; • Appointment Chairman, members of the Catchment and Sub-Catchment Committees; • Delegation of duties to the Catchment and Sub-catchment Committees in conformity with the principle of decentralisation of responsibility for water resources management to the lowest appropriate competent administrative level.
Catchment and Sub-catchment Committees	<ul style="list-style-type: none"> • To formulate catchment or sub-catchment integrated water resources management plans in consultation with the Basin Water Boards, WUA and other stakeholders; • To resolve water resources conflicts in the catchment or sub-catchment; and • To perform other functions delegated by the Basin Water Board.
Water Usersq Associations (WUAs)	<ul style="list-style-type: none"> • Manage, distribute and conserve water from a source/facility used jointly by the members of the water users association; • Resolve conflicts between members of the association related to the joint use and management of a water resource; • Collect water user fees on behalf of the BWB; • Represent the special interests and values arising from water used for both public and private purposes, such as in an environmental or conservation area or irrigation purposes.

Adopted from: Draft Water Bill, August 2014.

1.2 Irrigation Management Organization

An irrigation management organization is basically responsible for: (1) run, operate and manage the water intake and distribution facilities, (2) repair, maintain and operate the irrigation system. (3) In some cases, the irrigation management organization also manages, collection of irrigation service fees, (4) provision of subsidiary services including seeds, fertilizers, pesticides and agricultural machineries, (5) provision of technical services through agricultural extension works, and (6) provision of post-harvest services such as milling, storing and selling of products.

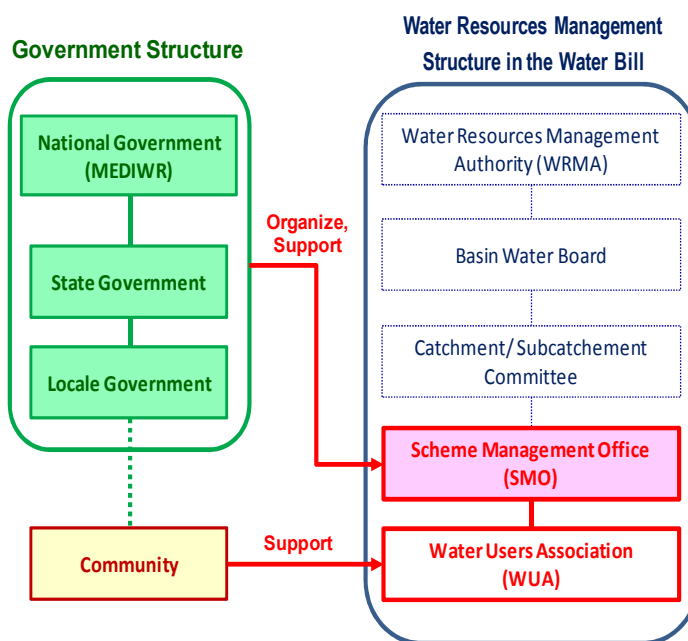
Features of the irrigation management differ by project scale, irrigation method, and demarcation of responsibility. In general, however, the operation and maintenance of the main irrigation facilities, including water source facility like intake facility, and main or secondary canal, are conducted by national or state government, whereas below a certain level of the system is managed by group of farmers such as water users associations or cooperatives.

Also scale of the irrigation management organization, such as number of staff and equipment, varies depending on various conditions; the location of the structures in the river system, the location of the organization, the demarcation of responsibility, the maintenance levels of the installed facilities and equipment, the complexity of services, mobility, etc. In addition, transportation conditions, communications condition, labour conditions, the availability of contractors have also much impact on the structure and the scale of the organization.

Some examples for the irrigation management organizations including management bodies of Awiel Irrigation Rice Scheme and examples from other countries are shown in Attachment G9-1.

In South Sudan, as an irrigation management organization, establishment of the Scheme Management Office is recommended. In the water management structure stipulated in the draft water bill, a working-level organization which conduct daily operation and maintenance of irrigation scheme at each irrigation site cannot be found except WUA. If WUA is enough capable to operate and maintain all irrigation facilities including dam/reservoir, pump station, distribution canal, gate facilities and on-farm structures, the management structure can be work. However, operation and maintenance of irrigation scheme needs special skills and knowledge for

engineering and technical issues on irrigation water management. Therefore, a specialized organization for irrigation scheme management at each site is required in addition to the WUA. The Scheme Management Office would be placed between the Catchment/ Sub-catchment Committee and the WUA in the structure of the Water Bill's water resources management. Details of the Scheme Management Office are discussed in the following section.



On one hand, for National Irrigation Scheme Development Programme (NISDP), State Irrigation Scheme Development Programme (SISDP), and County Irrigation Scheme Development Programme (CISDP), management structure of these schemes can follow the above structure. On the other hand, for Community Irrigation Farms Development Programme (CIFDP), the community takes responsibility to organize the WUA with support from the national, the state and/or the local government. However, at present, community has no ability to organize WUA and manage irrigation system, and the issue would be a future matter. In the case of Private Sector Investment Promotion in Irrigation Development Programme (PSIPIDP), management structure of their irrigation scheme, particularly relation with farmers, is depending on the private firm's decision.

1.3 Proposed Scheme Management Office

To manage an irrigation scheme, it is recommended to establish Irrigation Scheme Management Office (SMO) at each irrigation site. For example, Aweil Irrigation Rice Scheme (AIRS) is managed by the SMO since 2012, and officials for operation and maintenance of the scheme are working together through the Office. The SMO in Aweil has 7 departments under the Management, including Administration Department, Irrigation Department, Agronomy Department, Farm Operation Department, Extension Department, Workshop Department and Rice Mill Department.

The SMO also has rice milling facility and heavy equipment including backhoes, bulldozers and tractors for operation and maintenance purpose. This system is quite efficient and effective since all resources relating to O&M of the scheme are placed under one management. Details of the Aweil Scheme Management Office and other countries experiences are shown in Appendix 5-1.

Based on the existing policy and institutional framework in relation to irrigation subsector; in addition to experiences in Aweil and other countries' irrigation management, establishment of SMO is proposed.

Following table shows functions and staff of the proposed SMO in South Sudan irrigation management. Relevant specialists and their numbers; in addition to the support staff, should be determined based on irrigation method and scale of the irrigation scheme. Also, an analogous arrangement could be worked out, in the case of watershed afforestation; fish farming; and irrigated rangeland and other associated projects for livestock.

Table 11.2 Required Function and Staff of the Proposed Scheme Management Office (SMO)

Department	Function	Required Staff
General Administration	<ul style="list-style-type: none"> • Overall management of the scheme • Coordination among stakeholders • Marketing • Procurement • Assets tracking • Keeping books of accounts for scheme operations • Irrigation fee collection Administration of salaries, wages and other disbursements	Manager Accountant Tariff Collector Cooperative Officer Messenger Guard Driver
Irrigation/Dam Operations & Maintenance	<ul style="list-style-type: none"> • Annual planning and monitoring of dam/pump operations, water distribution, etc. • Maintenance of dam/pump facilities, distribution network, etc. Hydromet data recording, monitoring and reporting <ul style="list-style-type: none"> • Opening, closure and maintenance of water control and distribution gates • Supervision of canals maintenance Safeguarding of supplies and the facilities	Irrigation/Dam Engineer Electromechanical Eng. Planning/Budgeting specialist Irrigation Technician Pump Operator Irrigation Water Controller (Gate Operator) Facilities' Guard
Farm Level Operations	<ul style="list-style-type: none"> • Seed multiplication, observation trials for new rice varieties • Annual planning and monitoring of cropping plan and water requirement • Extension of irrigated agriculture On-farm water management planning and supervision <ul style="list-style-type: none"> • Provision of outreach services to farmers • On-farm water management among farmers Supervision of distribution and field canals maintenance	Agronomist (cropping plan, water requirement estimation) Agricultural Engineer Extension Worker Extension Worker Tractor Operator
Processing Operations	<ul style="list-style-type: none"> • Collection, conservation, drying, milling, etc. • Storing with proper pesticide control 	Miller

To perform above management function, followings are ideal equipment and machineries at the scheme management office. These equipment and machineries should be determined based on irrigation method and scale of the irrigation scheme.

Table 11.3 Ideal Equipment and Machineries at the Proposed Scheme Management Office

Function	Equipment and Machineries
1. Administration	• PC for accounting and financial management purpose
2. Irrigation Operations	• PC for planning and data management purpose • Amphibious excavator, Backhoe, Bulldozer, Dump track
3. Farm Level Operations	• PC for planning and data management purpose • Motorbike for extension purpose • Tractor, Harvester
4. Processing	• Mill
5. Workshop	• Working machines and materials

MEDIWR takes an initiative to organize SMO in collaboration with MAFCRD. However, SMO cannot be managed by officials from MEDIWR and MAFCRD alone. Hence, collaboration with the other relevant stakeholders, especially MTII, MLFI & MTRB (where appropriate) and the line state/local governments institutions is inevitable. At the time of design work (detail design stage of the irrigation development planning), it is recommended to discuss establishment of SMO intensively, on

the functions and delineation of responsibilities, including staff and budget allocations.

Also, it is important to discuss demarcation with WUA. Ideal demarcation among stakeholders is as follows;

Table 11.4 Ideal Demarcation of roles and responsibilities among Stakeholders

Stakeholders	Demarcation
1. National Government	<ul style="list-style-type: none"> • Taking initiative to establish SMO (MEDIWR in collaboration with MAFCRD) • Based on the report from SMO, taking necessary measure to repair or rehabilitate the irrigation system (MEDIWR) • Assign relevant officials to SMO (mainly MEDIWR & MAFCRD; in addition to MLFI & MTII where appropriate)
2. State/Local Government	<ul style="list-style-type: none"> • Assign relevant officials to SMO • Supervising SMO's activities
3. Scheme Management Office (SMO)	<ul style="list-style-type: none"> • Coordinate and facilitate the formation and activities of WUA • Operation and maintenance of main irrigation facilities (dam, pump station, main and secondary canal, intake gate until on-farm) • Collection of irrigation service fee
4. WUA	<ul style="list-style-type: none"> • Operation and maintenance of tertiary (distribution) canals • On-farm level operation and maintenance, e.g., on-farm water management among farmers • Payment of irrigation service fee

1.4 Private Sector Involvement in O&M

1) Ways of Private Sector Involvement

Traditionally, in many countries in the world, irrigation including construction of irrigation facilities, management of irrigation system, and operation and maintenance of irrigation facilities has long been a responsibility of the central government agencies. Farmers have been allowed to join the very limited irrigation management task of closing and opening gates of inlets/outlets on their plots based on direction of the agencies.

The World Bank defines Participatory Irrigation Management (PIM) as the involvement of irrigation water users in all aspects of irrigation management and at all levels. All aspects include planning, designing, construction, operation and maintenance, financing, decision rules and monitoring and evaluation of the irrigation system, whereas all levels include primary, secondary and tertiary level of irrigation structures. A more comprehensive variant of PIM is Irrigation Management Transfer (IMT). IMT is the full or partial transfer of responsibility and authority for the governance, management and financing of irrigation system from the government to water users' organizations.

In the Republic of South Sudan, comprehensive irrigation development has just started through the IDMP, and establishment of organizational structure and capacity development of the government officials has just started at the national level. Technical and administrative capacity development at state, county and community level will be conducted afterward. Therefore, IMT must be a future issue, after the community obtain enough experiences and capabilities on O&M of irrigation facilities.

However, when we consider current constraints on irrigation development including sophisticated land holding system, and capacity of the government in terms of financial and human resources, introduction of PIM must be necessary to promote the irrigation development to nationwide. In this regard, community participation in irrigation development from planning stage till operation and maintenance of irrigation facilities at least on-farm level is required.

Another way of private sector participation is the Public Private Partnership (PPP). The PPP is defined as a government and private business venture which is funded and operated through a partnership of government and one or more private sector companies¹. As the definition indicated, the PPP is a concept of participation of enterprises, agro-firms, or private investors in the public services. There are various types of PPP, including service contract, management contract, lease contract, concession and affermage. Definition of each form of PPP is shown in the Guideline 1, Institutional Arrangements for Irrigation Development and Management (Chapter 4. Private Sector Involvement, 4.3 Public Private Partnership (PPP)).

Some examples of involving private sector in the operation and maintenance of irrigation scheme management are as follows;

- And Under full responsibility of the SMO, private sector provides services, including production and provision of qualified seeds, provision of trainings to beneficiary farmers regarding fertilizer application, integrated pesticide management (IPM), irrigation farming methods, and capacity development of the water users association (WUA) management (Service Contract)
- Private sector takes part of responsibility for management of the irrigation scheme, such as collection of ISF on behalf of the Scheme Management office which directly connected to the financial sustainability of the scheme management (Service Contract)
- Private sector takes full responsibility of management of the irrigation scheme, including daily operation and maintenance of the scheme, setting and collection of ISF, and training of farmers (Management Contract)
- Private sector borrow the irrigation scheme itself for their own purpose, including making a profit for own purposes, with fixed lease payment to the government (Lease Contract)
- Private sector takes on public service to provide irrigation water to farmers with contingent fee contract (Affermage Contract)
- Private sector construct and operate the irrigation scheme, and in the future transfer or own the scheme (BOT or BOO)
- Private sector rehabilitate, operate and transfer the irrigation scheme to the government (ROT)

In either ways, a success of the irrigation scheme management depends on the capability of the private sectors. The government requires prudent assessment of capability of the private organizations.

2) Water Users Association (WUA)

Farmers will participate in the irrigation scheme management through formulating Water Users Association (WUA). According to the Draft Water Bill (August 2014), Basin Water Board has a responsibility to coordinate and facilitate the formation and activities of Water Users Association (WUA). However, the Basin Water Board has not yet been established since the law is still under discussions. Therefore, from practical reason, it is recommended that the irrigation scheme management office, which will be established at each irrigation scheme, takes primal responsibility to facilitate formation of WUA, in collaboration with the state government, the local government and the communities/farmers concerned. Particularly, the role of State Directorates of Cooperatives and

¹ "Is a Asia's Irrigation Ready for PPP?", Arnaud Cauchois, SAER

Rural/Community Development is important to support organizing communities/farmers to form WUAs. These Directorates have experiences in establishing community-based organizations, including cooperatives.

At the time of establishing WUA, it is recommended to involve graduates of Irrigation Technology Centre (ITC), which is suggested to establish under the Human Resource and institutional Development for Irrigated Agriculture Programme (HRIDIAP) in the IDMP, aiming at providing technical trainings on irrigation development to the national and the state level officials.

Detail procedures for establishing WUA is introduced in the Guideline 2, Process of Irrigation Development (Chapter 2. Implementation Process, 2.3 Formulation of Water Users Association)

2. OPERATION PLAN

2.1 Operation of Irrigation Facilities²

Each infrastructure has its own economic life or durability. The economic life or the durability is taken into account when planning a facility, estimating its depreciation and conducting economic evaluations of a project. However, if it is properly managed and maintained well, most structures can be sustained more or less permanently.

The main tasks of water management include the O&M of irrigation and drainage facilities so as to make full use of their design capacities. The O&M includes gate opening and closing, operation of pumps and other facilities, opening and closing outlets, and so on. Recently, a part of these operations have been automated. In General, water management operations are carried out by manual, even when they make use of electric power. Dams, pumps, main canals and other basic infrastructures are generally managed by the national, the state or the local government, but terminal facilities including on-farm level facilities tend to be managed by WUA or groups.

The amount of labor and expenses required for irrigation management, vary depending on the level of the facilities. In general, the necessary labor and management expenses for any given part of the system are provided by the organization in charge of the management of that part. Moreover, thorough water management requires appropriate transmission of information, adequate means of transportation and close mutual communication between these management organizations. Particularly in cases where water is conveyed for long distances, enhanced operational efficiency can only be materialized by taking into consideration water travelling time, and the hydraulic behaviors of structures in the system as a whole.

2.2 Operation Plan at Design Stage

1) Water Distribution Plan

Operation plan includes basic operation plan at feasibility planning stage, and annual operation plan after implementation of the project. Objective of the basic operation plan is to establish basic method of operation, such as selection of water distribution method and order of the water distribution among upstream/downstream or large-/small-scale farmers. Typical water distribution methods are summarized in Table 11.5. Responsible organizations at this stage are the scheme management officials from MEDIWR and MAFCRD, and collaboration between both organizations and communities is necessary.

² "Engineering Manual for Water Management (Case Study)", JIID, March 2002.

Table 11.5 Typical Water Distribution Method in Open Canal Scheme

Method	Description
Flow Sharing (Proportional Delivery) Method	Every farm receives an equal share of the canal discharge. The structure that is suitable for this method of water distribution is the proportional division box. The flow over each weir is proportional to the width of the crest, provided that these crests have the same height and shape. This method does not need any action by farmers or operators for regulating the flow of irrigation water to the farms.
Time Sharing (Rotation) Method	Every farm receives the full canal discharge. The distribution of an irrigation delivery to one farm must be chosen in a way that both meets the irrigation water needs of the crops and is convenient to the farmers. With this method, there is no need for a flow division structure. It may be convenient to have structures with allow either closure or passage of the full canal flow. The method does require action from operators or farmers to direct the canal flow to the farm that is schedule to receive irrigation water.

Adopted from: Irrigation Scheme Operation and Maintenance, Irrigation Water Management Training Manual No.10, FAO1996.

2) Dam Operation Rule

Before starting annual dam operation, it is necessary to establish basic operation rule of proposed irrigation dam. Basically, the dam operation must consider 2 aspects which are opposed to each other. The first is to promote effective discharge to meet water requirement in the downstream area. However, the promotion of effective discharge results in reduction in water storage in dam reservoir. The second is to address a potential water shortage, which requires putting restraints on water discharge. To meet these requirements, it is necessary to set storage target by month or by season. However, for this purpose, accurate river flow data and rainfall in catchment area are required.

It is also necessary to make a dam operation role based on the objective of the dam. For example, on one hand, if the main objective of the dam is to supply supplemental water to peak cropping season, it is necessary to store water by the time of the peak season. On the other hand, if the main objective of dam is to supply irrigation water during dry season, it is necessary to store water until peak level by the end of rainy season.

In addition, it is necessary to establish the operation rule under the flood warning condition. Under the situation, dam operator has to collect meteorological data promptly and forecast inflow to dam reservoir. Then, if the dam has spillway gate, the operator has to make decision whether it is necessary to discharge stored water from dam. For this purpose, it is necessary to establish flood warning system involving stakeholders including local government, police station, and residents in downstream areas.

2.3 Annual Operation Plan

The annual operation plan includes preparation of cropping calendar, estimation of expected water demand and supply, and irrigation facility operation planning. After irrigation system being constructed, MAFCRD takes responsibility on developing annual cropping calendar, which in turn utilized in estimation of crop water requirement or water demand. Then, water distribution plan (including dam operation plan) is developed by MEDIWR, based on water distribution method, irrigation water availability, and management capacity of gate operator. Basic process of the water management is as follows;

- 1) The scheme management officials from MAFCRD, in collaboration with farmers, develop cropping calendar and crop water requirement. Then the scheme management officials estimate seasonal water demand for command area

- 2) Based on the request from the water users, the scheme management officials from MEDIWR decide water volume at intake facility or dam site and develop pump operation plan or dam operation plan
- 3) Based on the above plan, in-charge of water control makes schedule of water distribution including gate operation plan
- 4) The above water distribution plan should be informed to all over the operators at main and branch as well as terminal canals thoroughly.

According to FAO's guideline for irrigation development, the planning of irrigation schedules should take into consideration the following issues³.

- Irrigation schedules must be simple, in particular in irrigation schemes where many farmers are involved. It will often be necessary to discuss with the farmers the various alternatives and come to an agreement which best satisfies all parties involved. Important to guarantee, is that in these discussions all groups of farmers, small and large, head-end and tail-end, women and men, are properly represented.
- On-demand water delivery ensures the farmers an adequate and timely water supply, in cases where water is not a limiting factor. On-demand rotation is often convenient for them in terms of flexibly planning their work. A disadvantage might be that influential irrigators can better defend their interests than vulnerable or female irrigators, whose on-demand may not be heard. Especially during peak periods such as land preparation or transplanting, less influential farmers, notably women farmers, could have problems to secure their water turn.
- A scheduled water delivery or rotation system has the advantage that it guarantees a regular supply of water to each plot, although timing might be less convenient and quantity not always adequate, especially in the tail end of the scheme. If possible a design that plans for night irrigation should be avoided, as especially for women it might not be socially acceptable or dangerous to go out at night for their irrigation turn. During planning meetings with the farmers these issues need to be discussed, and a decision reached on what type of water delivery suits everyone best.
- In a scheduled rotation system it is crucial for all groups of farmers to have access to information regarding the timing of their water turn. Women may have less access to this information than men. Not having access to the right information results in sometimes losing all, or part, of their water share.

³ SEAGA Sector Guideline, FAO, 1998

2.4 Operation Activities and Responsible Organizations

Table 11.6 shows a typical operation activities and their responsible organization;

Table 11.6 Typical Operation Activities and Responsible Organization

Planning	Activity	Details	Timing	Responsible Organization
Basic Operation Planning (before construction)	Establishment of basic method of operation	Whether to adopt Flow Sharing (proportional delivery) Method or Time Sharing (rotation) Method. How to coordinate the intention of large-scale farmers and small-scale farmers, upstream farmers and downstream farmers.	at the F/S stage, design work stage, at the start of every season or every two seasons	MEDIWR in collaboration with MAFCRD
Annual Irrigation Planning (after construction)	Preparation of cropping calendar	Develop cropping calendar by season (dry and rainy season), per month, taking into consideration of pattern of planting (gradual increase in planting season and gradual decrease in harvesting season)	at the start of every season or every two seasons	Scheme Management Office (MAFCRD Units)
	Estimation of expected water demand and supply	Estimation of crop water requirement, based on cropping calendar. Water demand is estimated by considering effective rainfall, runoff, evaporation, transpiration, percolation, and conveyance loss.	at the start of every season or every two seasons	Scheme Management Office (MEDIWR Units)
	Irrigation scheduling and facility operation planning	Water distribution plan (including dam operation and pump operation plans) is developed based on water distribution method, irrigation water availability, and management capacity of gate operator.	at the start of every season or every two seasons	Scheme Management Office (MEDIWR Units)

3. MAINTENANCE PLAN

3.1 Maintenance Method

Division of role in maintenance work is a key for successful and sustainable operation of irrigation system. Maintenance plan have to be developed based on clear commitment of all stakeholders, in addition to financial, human resources and technical capacity of them.

At the time of maintenance planning, technical and financial capabilities of stakeholders have to be discussed. In this regard, it is necessary to identify required maintenance works of each irrigation facilities. The required maintenance works vary from structure to structure as shown in Table 11.7.

Table 11.7 Typical Maintenance Activities of Irrigation Facilities

Irrigation Facilities	Maintenance Activities
Dams and Reservoirs	Removal of waterweeds, Removal of foreign materials, Lubrication (oiling or greasing) of gates, Anticorrosion treatment (painting) of gates, Monitoring of water quality, Survey and removal if possible solid deposition (silt ad stones), Monitoring of dam embankment and catchment area (watershed condition, water pollution, land slide, inflow of debris flow, etc.)
Intake Weirs and Gates	Cleaning and removal of floating debris and foreign materials around weir bodies, trash racks, and scouring sluice dates, Cleaning of the site around the intake, Lubrication (oiling or greasing) of gates, Anticorrosion treatment (painting) of metal works, Monitoring of water quality of the river, Removal of soil deposition (silt and stones) if possible
Irrigation Network (lined canals)	Repair of damaged joints, slabs and lining concrete with cracks, Weed control at joints and on surface of slabs, Removal of silt
Irrigation Network (unlined canals)	Removal of silt, Cutting and removal of earth weeds and waterweeds on wetted parts of canal slopes, and floating waterweeds, Plugging small holes and replacement of porous soils to prevent seepage, Rebuilding of eroded banks
Head gates, check dates and other structures	Removal of silt and obstructions, Lubrication (oiling and greasing) of gates, Anticorrosion treatment (painting) of mechanical elements
Drainage Network	Weed control in the canal section, Removal of silt, Repair and shaping of canal section
Farm Road	Refilling of holes on road surface, Grading road surface, Repair of road shoulders eroded, Desilting and repair of side ditches and culverts, Provision of additional pavement materials for paved roads
Flood Dikes	Refilling of holes on dike surface, Grading dike surface, Repair of shoulders eroded
Bunds in the Fields	Weed control, Compaction

3.2 Maintenance Activities and Responsible Organizations

Maintenance works consist of routine maintenance, periodical maintenance and emergency maintenance works. The routine maintenance is a day-to-day maintenance work including cleaning silt at flow measuring devices, removal of floating debris, minor repair of canal and structures and greasing or oiling of gates of facilities. WUA should actively participate in this activity at least for on-farm level structure.

Periodical maintenance is works to be done at a certain interval, after harvest season or before planting season for example. Basically, WUA bear a responsibility for on-farm level maintenance, whereas the governments are obligated to main facilities such as intake facilities, main and second canals, and gate structures. Emergency maintenance is an emergency works at the time of natural disasters which causes damages on irrigation structures. This type of maintenance requires large investment for long term and/or large scale of replacement, and main responsible organization should be the government except on-farm level structures.

Following table shows ideal demarcation of each stakeholder in maintenance work.

Table 11.8 Typical Maintenance Activities and Responsible Organization

Maintenance Level	Description	Activities	Responsible Organization
Routine Maintenance	Day-to-day maintenance work.	- cleaning silt at flow measuring devices - removal of floating debris - minor repair of canal and structures - greasing or oiling of gates	- Tertiary and On-farm structures: WUA/Community - Main and secondary facilities: County/State/National
Periodical Maintenance	Works to be done at a certain interval.	- strengthening of banks and structures - desilting - grass cutting - repair of damaged structures /a - repair of damaged equipment /b - painting of structures	- Tertiary and On-farm Structures: WUA/Community - Main and secondary facilities: County/State/National
Emergency Maintenance /a	Emergency work	- repair of damaged structure caused by unforeseen disasters, including floods, heavy rainfall, earthquake, theft, etc.	- Main and secondary facilities: County/State/National - Tertiary and On-farm Structures: WUA/Community

Note: a/ Diagnosis of damaged structures (e.g. dam embankment, gate, etc.) is outsourced to engineering firms.

b/ Maintenance of equipment (pump, electric supply, etc.) is outsourced to suppliers and manufacturer.

4. FINANCIAL MANAGEMENT OF THE IRRIGATION SCHEME

4.1 Cost Recovery through Irrigation Service Fee

Whether an irrigation system is operated and maintained by a government agency or private organization, it always requires budget to undertake O&M activities. It needs budget for; 1) the services rendered by people in the delivery and distribution of irrigation water, 2) the normal maintenance of irrigation facilities and structures, and 3) the periodic and emergency repair of irrigation facilities and structures. Therefore, generating budget for these O&M activities is one major function in managing an irrigation system.

There is an important issue that, to which extent, the irrigation service fee (ISF) should cover costs of irrigation management. The costs of irrigation scheme management include regular O&M cost, heavy repairs if any, and depreciation of fixed assets. In case of the full transfer type of the irrigation management transfer (IMT) contract, WUA in the Philippines have to pay the depreciation cost in addition to O&M and repairing cost. Followings are general principal for setting ISF for the full cost recovery of the irrigation scheme development and management⁴.

- Irrigation Service Fee should be determined on the basis of the actual cost of water delivery
- The cost of irrigation service includes at least O&M cost, if possible, cost of heavy repairs and depreciation of fixed assets.

However, the level of the ISF is a sensitive issue in managing an irrigation scheme. If the level of ISF is too low, it would be impossible to mobilize adequate fund for regular operation and maintenance of the scheme, which in turn result in poor service delivery of the scheme. In contrast, if the ISF level is too high for farmers, price of products will increase due to high production cost, and farmers may lose incentive to participate in management of the irrigation scheme.

⁴ Research on Standard of Irrigation Service Fee, Wan Xiugui and Qian Xuilai.

Therefore, it is quite important to set up a reasonable level of ISF to ensure management of the irrigation scheme. To identify the reasonable level of ISF, the planner sometime conducts interview survey to farmers for grasping their willingness-to-pay (WTP) and affordability-to-pay (ATP)⁵. In most irrigation scheme, ISF just cover regular O&M cost of the scheme, since other costs are too heavy for small-scale farmers to bear.

4.2 Pricing Methods of the ISF

1) Pricing Methods

There are two (2) major practical pricing methods, namely area-based pricing and volumetric pricing. Further, the volumetric pricing method can be divided into two (2) methods, including block pricing and two-parts pricing. General feature of the three pricing methods are summarized in table below.

Table 11.9 Pricing Methods of Irrigation Service fee

Pricing Method	Description
Area-based Pricing	<p>Area-based Pricing is a fixed charge based on the area irrigated or %supposed+to be irrigated. They are often calculated by dividing the total area irrigated into the O&M costs of providing irrigation water, which basically follows the average cost pricing principle.</p> <p>【Advantage】 it is simple to calculate, easy for farmers to understand, and the implementation costs are lower than for volumetric pricing because water deliveries do not have to be measured. Also,</p> <p>【Disadvantage】 once the irrigated area decision is made, the water charge will have no effect on farmersqwater consumption, because the marginal cost of applying additional quantities of water per hectare is zero. It is likely to lead to overuse of water by farmers near the head of the canal.</p>
Volumetric Pricing	<p>With volumetric water pricing, the charge is based on the amount of water delivered.</p> <p>【Advantage】 it encourages farmers to limit their water use. Also, it is easy to understand in the sense that you pay for the quantity of water delivered to your farm.</p> <p>【Disadvantage】 the implementation costs can be high because meters are required, and they have to be honestly read and reported.</p>
<u>Block Pricing:</u>	<p>Block pricing involves varying the water price when water use for a set time period exceeds a set volume (e.g. 5,000 m3 per hectare per season). If high water charges are a concern, an increasing block charge can be used.</p>
<u>Two-parts Pricing:</u>	<p>Two-part pricing is a combination of volumetric pricing and a fixed admission charge (sometimes based on size of the area irrigated). The volumetric part can be based on marginal cost, which encourages less water use, while the fixed part can be used to make up any deficits and ensure a certain revenue flow regardless of how much water is available and delivered. Even for O&M costs, there is a fixed component that does not depend on the amount of water delivered, and these fixed costs have to be paid even when water is not used for one season.</p>

Source: %Cost Recovery and Water pricing for Irrigation and Drainage Projects+, K. William Easter and Yang Liu, Agriculture and Rural Development Discussion Paper 26, The World Bank.

Basic formula of the area-based pricing method (ISFa), on one hand, is as follows;

$$ISFa = [O + M] \div A$$

Where: O = annual operation costs

M = annual maintenance costs

A = total area irrigated

⁵ In water sector, affordability to pay is usually estimated at 3 to 5% of disposable income (e.g. UNDP).

On the other hand, formula of the volumetric pricing method (ISFv) is as follows;

$$\text{ISFv} = [\text{O} + \text{M}] \div \text{W}$$

Where: W = volume of water supplied annually

2) Willingness-to-pay (WTP) and Affordability-to-pay (ATP)

The level of the ISF is a sensitive issue in managing an irrigation scheme. If the level of ISF is too low, it would be impossible to mobilize adequate fund for regular operation and maintenance of the scheme, which in turn result in poor service delivery of the scheme. In contrast, if the ISF level is too high for farmers, price of products will increase due to high production cost, and farmers may lose incentive to participate in management of the irrigation scheme.

Therefore, it is quite important to set up a reasonable level of ISF to ensure management of the irrigation scheme. To identify the reasonable level of ISF, the planner sometime conducts interview survey to farmers for grasping their willingness-to-pay (WTP) and affordability-to-pay (ATP). Usually, WTP is estimated based on the socio-economic survey, and the survey was conducted in the course of IDMP formulation. However, since most farmers had no idea for systematic provision of irrigation water, it was difficult to obtain proper reply to estimate WTP. Therefore, in this ISF estimation, ATP was figured out to obtain proper level of ISF.

In water sector, ATP is usually estimated at 3 to 5% of disposable income. By following the precedent, the lowest figure of 3% was applied in this analysis, and ATP was estimated based on net income of planned crops in the Wau Irrigation Scheme. Following table shows estimated ATP of the scheme.

4.3 Collection Method of the ISF

There are two key steps in cost recovery; the first is to design a pricing mechanism that covers the appropriate costs, and the second is to achieve high collection rates through effective water management. Collecting ISF from farmers is crucial in many developing countries since most farmers are poor. In some countries in Middle-east, there is a traditional believe that water is a gift from God, and collecting ISF from farmers faces difficulty in these countries.

The best way to achieve high collection rate is to collect ISF before delivery of irrigation water. In this case, it is not necessary to chase for payment after each season. In Southern Oasis of Tunisia, beneficiary farmers have to pay ISF before receiving irrigation water, and give a water ticket to gate keeper to obtain irrigation delivery. In this case, ISF collection rate can be achieve 100%.

However, in many developing countries, farmers are very poor and they cannot pay in advance of water delivery. Therefore, it is very common to collect ISF after harvesting when farmers could gain income from their farm products. In this case, in actual situation, collection rate of ISF becomes lower since farmers have strong incentive to minimize expenditure including ISF.

One of solution for this issue is to allow farmers to pay in kind such as products or labour instead in paying cash. Indeed, this is a good idea to increase collection rate of ISF. However, it should be noted that, for the collector side, it is necessary to keep in-kind payment in storage till selling the products. In this regards, it can be said that transaction cost of in-kind payment is higher than the cash payment. Even though transaction cost becomes higher, it is recommended that diversification of payment method is better way to achieve higher ISF collection rate.

- Based on the above discussion, followings are ideal method for collecting ISF and membersø

fee.

- Farmers have to inform their cropping plan of the season, before starting the crop season. WUA will compile each farmer's plan and submit to the Scheme Management Office. Then the Office will issue ISF bill to each farmer through WUA. SMS billing system through mobile phone is more effective since most people nowadays use mobile phone.
- ISF and member's fee is collected after harvesting crops when farmers can obtain cash income from their farm products. Payment methods include cash, bank transmission, check, and in kind. Farmer should pay at the Scheme Management Office after harvest of the season.
- Member's fee can be paid by in kind. ISF can also be paid by in kind, but it is recommended to collect ISF in cash since it is equal to or less than the ATP.
- Penalty clause must be clearly stated in statute, and properly be executed.
- Introduction of an incentive measure to ISF collectors is effective. Each collector should have own jurisdiction and those who mark the highest ISF collection rate of the year will be commented by managers of the Scheme
- Privatization of billing and ISF collection (PPP) is also effective. Traditional chief or local authority would be involved with a certain incentives.

4.4 Cash Flow Analysis to Set Management Target

To see the balance of revenue and expenditure and assure the sustainability of the irrigation scheme management, cash flow statement of the scheme management office is effective. The cash flow statements show the movement of the scheme management office's revenue and expenditure during a certain period. Cash inflow comes from daily operation of the scheme management office, including the collected ISF and other revenue such as member's fee and penalty fee, whereas cash outflow includes regular operation and maintenance expenditures. Cash flow analysis will help the scheme management office to set relevant ISF to cover O&M costs of irrigation management, and help the office foresee potential deficit which would be the subsidy from the national or state government.

In the short-term, it could be happened that the revenue of the scheme management office cannot cover all O&M costs and the office heavily depends on subsidy from the government, since farmers are still poor and cannot pay higher ISF. However, in the mid-term, it is better to increase ISF rates in accordance with growing farmer's income so that the revenue can cover all O&M expenditure of the scheme. In the long-term, further, it is recommended to introduce IMT in the small-scale irrigation scheme and let WUA to manage all expenses from the water delivery service including O&M and amortization.

A sample of the cash flow analysis is shown in Appendix 2

APPENDIX-1: SCHEME MANAGEMENT OFFICE IN AWEIL AND OTHER COUNTRIES

1) Scheme Management Office in Aweil

To manage the irrigation scheme, it is recommended to establish Irrigation Scheme Management Office at each irrigation site. For example, Aweil Irrigation Rice Scheme (AIRS) is managed by the Scheme Management Office since 2012, and officials for operation and maintenance of the scheme are working together at the Office. The Scheme Management Office in Aweil has 7 departments under the Management, including Administration Department, Irrigation Department, Agronomy Department, Farm Operation Department, Extension Department, Workshop Department and Rice Mill Department.

The Scheme Management office also has rice milling facility and heavy equipment including backhoes, bulldozers and tractors for operation and maintenance purpose. This system is quite efficient and effective since all resources relating to O&M of the scheme are placed in one place. However, even though cultivated area in 2013 was 2,400 feddan (1,008 ha), number of staff in the Aweil Scheme Management Office was 108 as shown in table below.

Table 11.10 Management Structure of Aweil Irrigation Scheme

Department	Functions and Responsibilities	No. of Staff
1.Management	<ul style="list-style-type: none"> Direct the activities Control resources Coordination and supervision of all the work 	1
2.Adminisraion	<ul style="list-style-type: none"> Keeping books of account for scheme operations and farmers Administration of salaries, wages, other disbursements, other transactions 	26
3.Irrigation	<ul style="list-style-type: none"> Irrigation water control down to the block inlet Repair of dykes and desilting of canals 	6
4.Agronomy	<ul style="list-style-type: none"> Seed multiplication (BG 400; RR-4) ; because of its color, multiplication of BG 90 has been discontinued while Nerica variety is under observation. Observation trials for new rice varieties 	5
5.Farm Operations	<ul style="list-style-type: none"> Land Preparation: Ploughing, harrowing and sowing (drilling/planting) Transport of Rice 	27
6.Extension	<ul style="list-style-type: none"> Demarcating and allocating one feddan plots to tenant-farmers Mobilizing and preparing farmers for various scheme activities Issuing seed, fertilizers and sacks to farmers Overseeing tractor ploughing, disc harrowing and sowing operations (tractor drilling and sowing in Basin 7, 8 &9) (manual broadcasting in Basin 15) Supervising and monitoring growing crop (weeding, pest& diseases, arising problems) Supervising field water management at the block level, including rotation from block to block Supervising manual application of fertilizer, two weeks after sowing Supervising crop harvesting (security, harvesting time, sack filling and transport to scheme stores) 	7
7.Workshop	<ul style="list-style-type: none"> Repair and maintenance of tractors and machineries Administration of operators and mechanics 	15
8.Rice Mill	<ul style="list-style-type: none"> Milling rice 	21
Total		108

2) Scheme Management Offices in other Countries

a) Sudan

Pump irrigation schemes, under the project for upgrading food production infrastructure in the Republic of Sudan, implemented by JICA since 2012, are managed by the scheme management offices. Basic O&M activities conducted by the scheme management offices are stated in the Governmental Agricultural Project Law of the River Nile State for the Year 2006, in which the manner for election of board members, methods of scheme management, irrigation service fee and its collection, and O&M methods of the scheme are stipulated. According to the O&M plan of the project, budget for management activities, including O&M of pumps, canals, and salary of the scheme officials, will be generated by collecting irrigation service fee from beneficiary farmers.⁶

Following table shows organizational structure of the scheme management offices under the JICA-funded pump irrigation project.

Table 11.11 Organization Structure of Irrigation Scheme in Sudan

Item	Aliab Irrigation Scheme	Kitiab Irrigation Scheme	K14 (New Halfa Irrigation Scheme)
Irrigation Method	Pump	Pump	Pump
Irrigable Area (ha)	2,205 ha	2,394 ha	13,020 ha
No. of Scheme Staff	37	48	54 for K14
No. of Board (Members)	1 (11)	1 (11)	1(14)
Farmer's Union (Members)	1 (30)	1 (40)	1 in NHAC
Irrigation & Agriculture Committee (ditto)	1 (4)	None	None
Financial Committee (ditto)	1 (4)	None	None
No. of Pump Operators	13	21	8
No. of Canal & Farm Guards	7	2	5+20
No. of Agricultural Extension Workers	2	1	8 in NHAC
No. of Accountants	2	2	5 in NHAC
Annual O&M Cost (USD/ha) /a, b	265 USD/ha	266 USD/ha	223 USD/ha

Source: The Preparatory Survey Report on Project for Upgrading Food Production Infrastructure in the republic of Sudan, prepared by JICA and Sanyu Consults Inc., April 2012.

Note: a/ O&M cost of K14 is estimated based on irrigation service fee (250SDG) and irrigable area.

b/ Exchange rate of USD0.375/SDG in April 2012 is applied to convert SDG to USD.

Pump operators in the schemes in River Nile State bear a responsibility for daily-basis maintenance and inspection of pumps including minor repairing of diesel pumps. They work under two-three shift system. Thirteen (13) pump operators in Aliab and twenty-one (21) in Kitiaab, including mechanics and labors, are deployed at each pump station. In K14 pump station in Kassala State, eight (8) operators along with electrical engineers and labors are deployed and work under two shift system, and engineers in the workshop under the Ministry of Agriculture and Irrigation are in charge of repairing and O&M of electric pumps.

Among above three irrigation schemes, the scheme management offices in Aliab and Kitiaab irrigation scheme in River Nile State take principal role on operation and management, whereas Ministry of Agriculture and Irrigation, a national government, takes principal role in K14 pump station in New Halfa Irrigation Scheme. Following tables shows role and responsibility for operation and maintenance among stakeholders including the scheme management office and relevant ministries in

⁶ The Preparatory Survey Report on Project for Upgrading Food Production Infrastructure in the republic of Sudan, prepared by JICA and Sanyu Consults Inc., April 2012

Aliab and New Halfa Irrigation Scheme.

Table 11.12 Sharing of Roles in O&M of Irrigation Facilities (Aliab Scheme)

Facilities	Operation and Management	Dredging, Maintenance, Repairing
Pump station/Pumps	Scheme	Scheme
Main canal	-	MoAIF of the River Nile State
Cross regulators	Scheme	MoAIF of the River Nile State
Off-take gates	Scheme	MoAIF & Scheme
Sub-minor canal	-	MoAIF of the River Nile State
Abu-Ashreen Canals	-	Scheme
Abu-Shitta Canals	-	Farmers (No WUA)

Source: "The Preparatory Survey Report on Project for Upgrading Food Production Infrastructure in the republic of Sudan", prepared by JICA and Sanyu Consults Inc., April 2012.

Table 11.13 Sharing of Roles in O&M of Irrigation Facilities (K14)

Facilities	Operation and Management	Dredging, Maintenance, Repairing
Pump station/Pumps	MoAI	MoAI
Major canal	-	MoAI
Cross regulators	MoAI	MoAI
Off-take gates	MoAI	MoAI
Sub-minor canal	-	NHAC
Abu-Ashreen Canals	-	Farmers (No WUA)
Abu-Shitta Canals	-	Farmers (No WUA)

Source: "The Preparatory Survey Report on Project for Upgrading Food Production Infrastructure in the republic of Sudan", prepared by JICA and Sanyu Consults Inc., April 2012.

b) Tanzania

Management structure of irrigation scheme in Tanzania is quite similar to the one the Draft Water Bill intended to establish. The management structure of the water sector in Tanzania is that it has a National Water Board and there are Nine (9) water basins, each of these basins has a Basin Water Board. Seven (7) out of the Nine (9) basins are trans-boundary basins. Each basin has an office and is responsible for water allocation to various water uses. Under the each Basin Water Board, Catchment/Sub Catchment Committees are organized, and each Committee usually has 5 members including 3 members from the Local Government Authorities (LGAs) and 2 members from WUAs.

The irrigation development in the country follows a bottom up approach, where the needs are identified by the farmers; the communities are encouraged to contribute to the development of the scheme and are later trained on various aspects of the project/scheme. Government does not own a scheme, but forms a Scheme Management Team which assists in O&M. The zonal office does feasibility study, design works, supervising, and Assist in operation and maintenance (but is mainly done by the Irrigators Organizations (IOs)). The government also assigns irrigation technicians and agricultural extension officers to the district office.

The communities are facilitated to identify their needs using "Opportunities and Obstacle in Development" tool. All proposed schemes follow the developed guidelines. According to the guidelines communities are expected to contribute 5% of their produce for operation and maintenance of the scheme. Following table shows general features of the visited scheme management offices.

Table 11.14 Outline of Scheme Management Office in Tanzania

Irrigation Management Scheme	General Features
Mkindo Agriculture Scheme (Mvomora District, Morogoro Zone)	<ul style="list-style-type: none"> • The scheme management office has 10 staffs, and has a responsibility to organize the water users for the scheme to manage irrigation water and contribution. • This scheme has 300 farmers (150 male and 150 female). The current area under cultivation is 120 hectare and they plant two cropping seasons per year. The land belong to the farmers. • The scheme grows paddy rice with an average production of 5ton/ha. While for off season productions is at 6ton/ha. Farmersquses hand tolls in land preparations but uses machine in paddling. • Farmers pay Tsh8,000 per acre for each year. It was also noted that the out growers pay for water
Mombo Agriculture Scheme (Mombo District, Kilimanharo Zone)	<ul style="list-style-type: none"> • The scheme is managed by an Agricultural Cooperative Society which comprises of 429 farmers (169 male and 233 female). • Current command of the farm is 220 ha and Paddy is the sole crop grown in this scheme in two seasons. Average yield of rice is 6t/ha (key and intermediate farmers produces 7-10 t/ha). • The scheme develops irrigation schedule for farmers which are managed by the block leaders. Farmers dedicate 2 days per week for communal work to maintain farm access roads and canals. The scheme also employs two water masters who manage the distribution of water to farmers at the intake to tertiary canals. • The land belongs to the cooperative society and each farmer is allocated 0.5 ha. Mombo has a water user association which collects Tsh300,000 for the 220 ha as water fees. Additionally each farmer contributes Tsh67,000/season to support farmers education and land preparation. • The scheme was able to disseminate rice production to the surrounding areas.
Lekitatu Agriculture Scheme (Meru District, Kilimanjaro Zone)	<ul style="list-style-type: none"> • The scheme has 856 ha out of which 600 ha is irrigated; (400ha for paddy and 200ha for upland rice). They also grow other crops such as Maize: 100ha, Beans: 72 ha, vegetables: 25ha, and Mpunga: 400 ha. The land belongs to the individual farmers. The government subsidies agricultural inputs, but farmersqhave to buy from market since the subsidy is not enough. • The board has 9 members, and the scheme has 6 committees including 1) Planning and finance, 2) Operation, 3) Maintenance & Rehabilitation, 4) Supervision, 5) Education, and 6) Marketing. • Membership fee is Tsh5,000 per member and each member has to buy 5 shares at rate of Tsh10,000 each share. • Water fees: The tariff is set by the Basin office. <ul style="list-style-type: none"> • Each scheme farmer pays Tsh2,000/acre • Non-scheme members but living within scheme area pays Tsh5,000/acre • Non-scheme members but living outside scheme area pays Tsh15,000/acre • Tsh600,000 annually are remitted to the basin office

Adopted from: Study Tour Report by RSS-TT, Dec. 2013

c) Kenya

Kenya has already introduced a concept of the participatory irrigation management (PIM), and some schemes are targeted to shift the irrigation management transfer (IMT). National Irrigation Board manages seven (7) national irrigation schemes, and the scheme manager is located below the regional manager and the chief agricultural officer in NIB's organizational structure. For management structure of the scheme management office, 6 officers are assigned under the scheme manager including ITC officer, procurement officer, scheme accountant, irrigation officer, agriculture and extension officer, and scheme HR/admin office.

Following table shows outline of major irrigation scheme under the NIB in Kenya. Among then,

Mwea Irrigation Scheme has 6,400ha of irrigated area, and number of the scheme management office in 2007 was 18 staffs including 3 irrigation engineers, 2 maintenance staff, 1 water management engineer, 1 facility operator, 4 accountants, 4 administrative staffs, and 3 drivers⁷. Out of 18 staffs, 4 staffs (1 irrigation engineer, 1 accountant and 2 drivers) are temporal employee.

Table 11.15 Outline of Scheme Management Office in Kenya

Irrigation Management Scheme	General Features
Mwea Irrigation Scheme	<ul style="list-style-type: none"> • Scheme has a gazetted area of 12,14ha. A total of 6,400ha has been developed for paddy production. In addition to this, the scheme has a total of 1,600ha of out-grower and jua kali areas under paddy production. The rest of the scheme is used for settlement, public utilities, subsistence and horticultural crops farming. • The farmers were settled as tenants each with a holding of at least 4 acres. This acreage was based on the minimum economic acreage sufficient for the full time upkeep of the farmers. Due to the increase in the population, most of the holdings have been subdivided among family members and in other cases transferred to new farmers. • NIB is responsible for maintenance and water management in the main and secondary canals; making of cropping program and land administration in the scheme. WUA is responsible of water management in the tertiary unit, facility maintenance in the tertiary units except roads and ensuring farmers' payment of O&M fee. • The routine operation and maintenance of the scheme is being done using the funds collected from the farmers. The last assessment done on the recommended charges for sufficient O & M of the scheme is Kshs 5,000 but the farmers are currently paying NIB a flat rate of Kshs 2,000.00 per acre per season while farmers from out grower areas pay Kshs 1,000 per acre per season. • At the beginning of each financial year, the scheme NIB management together with WUA officials sits together and comes up with a cropping program and maintenance programs which reflects the amount of money expected from the farmers. Scheme NIB management and WUA holds a monitoring and evaluation meeting once a month.
Tana Irrigation Scheme	<ul style="list-style-type: none"> • The scheme has 4,800ha included 1,880ha of irrigated land. Current number of farming family is 908 registered households. • Main cash crop was cotton with other crops i.e ground nuts, maize inter-cropped with leguminous crops like cow peas, soya beans, green grams, fruits recommended for low altitude climate e.g yellow passion, pawps and oranges • NIB is responsible for infrastructure development, water management, and operation and maintenance of main facilities, whereas WUA is responsible for O&M of tertiary level facilities and O&M payment to NIB. Roles of other organization are; advisory committee for land administration and dispute solution, Farmers Cooperative for marketing of products and provision of inputs and credit, and Ministry of Agriculture for provision of extension services.,
West Kano Irrigation Scheme	<ul style="list-style-type: none"> • The scheme has about 780 farmers with a gross area of 1780 ha and farm size of 1-4 acres. The scheme irrigation water is abstracted by pumping and the drainage system is through gravity. The scheme does rice as the main crop of three main varieties i. e Basmati 370, IR 2793,ITA 310 and BW 196. The average yield is about 3.0 . 4.0 t/ha with a approximate net income of between kshs. 25,000 . 35,000. • Main farmers organization in the scheme are; Advisory committee (land administration), WUA (water distribution), Farmer's cooperative society and other farmer groups (production and marketing).
Bura Irrigation Scheme	<ul style="list-style-type: none"> • The project has a tenant population of 2,245 farmers settled in 10 villages. Each farmer was allocated 1.25 ha for main crops and 0.05 ha for vegetables garden.

Adopted from: Official HP of National Irrigation Board, Kenya

⁷ Mwea Irrigation Scheme Development, Project Finding Report, ADCA (2008)

APPENDIX-2: A SAMPLE OF CASH FLOW ANALYSIS (WAU IRRIGATION SCHEME)

To see the degree of cost recovery based on the proposed ISF rate, cash flow analysis was conducted in the pre-feasibility study of Wau Irrigation Scheme, and three targets were set up in the cash flow analysis as follows;

- Target 1: Cost recovery of the annual O&M cost, which includes personnel expenses, pump operation fee, equipment and machinery operation costs, and normal maintenance cost of irrigation facilities.
- Target 2: Cost recovery of the annual O&M cost and a part of depreciation cost (equipment and machineries cost)
- Target 3: Cost recovery of the annual O&M cost and the total depreciation cost, including equipment and machineries cost, and project facilities such as dam, pump station, canals, and on-farm structures.

Then, before starting the cash flow analysis, followings assumptions were established.

- Revenue includes ISF, membersø fee, tractor service fee and milling service fee, whereas expenditure includes annual O&M cost and depreciation of equipment, machineries and the project facilities. The milling fee of rice is estimated based of the volume of rice to be milled by farmers.
- Price escalation is taken into consideration in the cash flow analysis. By taking linear regression of consumer index for four years (2011-2015), price escalation rate of 1.67%/annum for general consumption goods and 3.34% for fuel and electricity is estimated.
- ISF collection rate is lower at the beginning of irrigation service provision, but will increase after 5 years, and 10 years on the ground of incentive measures to the collectors and penalty measures to the farmers. As a default setting, ISF collection rate is set as 60% in the short-term, 70% in the mid-term and 80% in the long-term.
- Cropping area will change in short-term, mid-term, and long-term. According to the socio-economic survey conducted by the IDMP-TT at the project site, most farmers want to plant cereal crops for food security reason. However, it can be reasonably assumed that as farmer experiences irrigated agriculture more, they recognizes potential of irrigation farming and tend to increase cash crop production more.
- ISF is estimated based on the ATP of planted crops. In the short-term, minimum rate of 3% is applied in due consideration of farmersø financial capacity. However, as farmers become more familiar with irrigation farming and obtain more income from the farming, the ATP will be increase. In the mid-term and the long-term, the ATP of 5% is adopted.

As for irrigation service fee (ISF) estimation, in this analysis, the area-based pricing method is adopted. The O&M costs composed of fixed parts and variable parts. The former is depreciation costs which are constant during economic life of the equipments, machineries and facilities, whereas the latter is changeable in accordance of irrigation scheme management. Followings are assumption of the ISF estimation.

- Depreciation cost of project facilities (infrastructure components) are excluded from the fixed charge estimation since the investment cost of the project facilities are too heavy for

farmers to shoulder, and can be regarded as the national government's property.

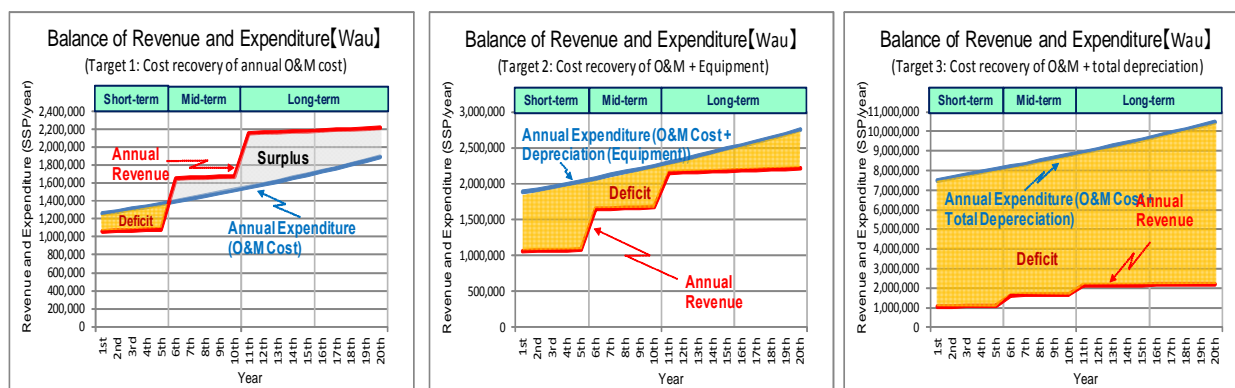
- On the other hand, equipment and machineries, including tractors and its attachments, can be regarded as properties of the irrigation management office since their economic life are relatively short, and should be reinvested by the users.
- However, among the depreciation costs of equipment and machineries, the cost for milling equipment is excluded from the ISF estimation. The milling equipment must be amortized by other revenue, namely milling service fee from its users.
- As for the variable part, in this analysis, it includes personnel expenses, pump operation fee, equipment and machinery operation costs, and normal maintenance cost of irrigation facilities. This part was divided by proportion of water consumption volume of each crop, and then divided by planted area of each crop, so that ISF rate of each crop can be obtained.
- Minimum farm lot size is set as 1 feddan, due consideration of possible income generated from farmland.
- Then, fixed charge as a member fee, and variable charge as an ISF were estimated. On one hand, the estimated ISF was adjusted by ATP to obtain payable and practical level of ISF. On the other hand, member fee is not adjusted by ATP, but can be paid by in kind. Following table shows proposed ISF and members' fee in the Wau Irrigation Scheme.

Table 11.16 Proposed ISF and Members' Fee in Wau Irrigation Scheme

Crop	ISF			Members' Fee	
	Estimated ISF (SSP/feddan)	ATP (SSP/feddan)	Adjusted ISF (SSP/feddan)	Members' Fee (SSP/feddan)	In Kind (=Labour in Days)
Rice	1,190	250	250	1,074	27 days
Leaf Vegetables	1,190	160	160		
Fruits Vegetables	1,190	1,880	1,190		

Based on the above assumptions, cash flow analysis was conducted. The major findings of the cash flow analysis are as follows.

- Among three targets, only Target 1 could show positive result in the mid-term and the long-term operation period, and other two targets were far from the cost recovery. It means the cost recovery of the annual O&M is achievable, whereas the cost recovery of depreciation costs is quite difficult in this scheme.



- As for the Target 1, in the short-term, in other words, during the first 5 years, the balance of annual O&M cost and revenue is minus. The deficit must be compensated by the national

government as a subsidy. However, in the mid-term and the long-term, the balance will become õplusö, meaning the Scheme Management Office can start accumulation of the earning retention to cover a part of depreciation costs after 6th year of its operation.

- As for the Target 1, the balance of revenue and expenditure cannot be õplusö during the short-term period. To overcome this situation, there are two possible ways for the scheme management, including increase in ISF rate, or increase in ISF collection rate. Among the alternatives, increase in ISF is not better solution since farmers are still poor at the beginning of irrigation water provision. Rather, making efforts to increase ISF collection rate is realistic. However, even if ISF collection rate becomes 100%, the balance at the short-term period is still õminusö due to mainly high project cost, O&M costs, and low revenues.
- Result of the cash flow analysis indicated that the Scheme Management Office can achieve the target 1, and can manage at least annual O&M cost under the proposed ISF level. Also, the Scheme Management Office can obtain a surplus from the 6th year, which can be the internal revenue fund for covering a part of depreciation costs or unexpected events.
- However, the office cannot manage depreciation costs in full including amortization of equipment, machineries, and project structures, since the initial investment costs is quite high. Therefore, government support as a subsidy to cover the depreciation costs is necessary for reinvestment of the Wau Irrigation Scheme.

(Unit: SSP)

Cash Flow Analysis [Wau]

	Short-term					Mid-term					Long-term									
	1st Year	2nd Year	3rd Year	4th Year	5th Year	6th Year	7th Year	8th Year	9th Year	10th Year	11th Year	12th Year	13th Year	14th Year	15th Year	16th Year	17th Year	18th Year	19th Year	20th Year
Revenue																				
Member Fee /a	536,690	536,690	536,690	536,690	536,690	536,690	536,690	536,690	536,690	536,690	536,690	536,690	536,690	536,690	536,690	536,690	536,690	536,690	536,690	536,690
Irrigation Service Fee /b	619,048	619,048	619,048	619,048	619,048	1,333,333	1,333,333	1,333,333	1,333,333	1,333,333	1,761,905	1,761,905	1,761,905	1,761,905	1,761,905	1,761,905	1,761,905	1,761,905	1,761,905	1,761,905
ISF Collection Rate	60%	60%	60%	60%	60%	70%	70%	70%	70%	70%	80%	80%	80%	80%	80%	80%	80%	80%	80%	80%
Amount of ISF Collected	371,429	371,429	371,429	371,429	371,429	933,333	933,333	933,333	933,333	933,333	1,409,524	1,409,524	1,409,524	1,409,524	1,409,524	1,409,524	1,409,524	1,409,524	1,409,524	1,409,524
Tractor Service Fee /c	100,000	103,340	106,792	110,358	114,044	117,853	121,790	125,858	130,061	134,405	138,894	143,533	148,327	153,282	158,401	163,692	169,159	174,809	180,648	186,681
Rice Mill Service Income /d	57,700	58,664	59,643	60,639	61,652	62,682	63,728	64,793	65,875	66,975	68,093	69,230	70,387	71,562	72,757	73,972	75,207	76,463	77,740	79,039
Sub-total	1,065,819	1,070,122	1,074,553	1,079,116	1,083,815	1,650,558	1,655,541	1,660,673	1,665,959	1,671,403	2,153,201	2,158,978	2,164,928	2,171,057	2,177,372	2,183,878	2,190,580	2,197,486	2,204,602	2,211,934
Expenditure																				
Annual O&M Cost (SSP/year)																				
Personnel Expenses	732,800	745,038	757,480	770,130	782,991	796,067	809,361	822,878	836,620	850,591	864,796	879,238	893,921	908,850	924,028	939,459	955,148	971,099	987,316	1,003,804
Pump Operation	250,039	258,390	267,020	275,938	285,155	294,679	304,521	314,692	325,203	336,065	347,289	358,889	370,876	383,263	396,064	409,292	422,963	437,090	451,689	466,775
Equipment and Machinery (1% of Procurement Cost)	91,090	94,132	97,276	100,525	103,883	107,353	110,938	114,644	118,473	122,430	126,519	130,745	135,111	139,624	144,288	149,107	154,087	159,234	164,552	170,048
Maintenance Cost (0.1% of Project Cost)	181,571	184,604	187,687	190,821	194,008	197,248	200,542	203,891	207,296	210,757	214,277	217,856	221,494	225,193	228,953	232,777	236,664	240,617	244,635	248,720
Sub-total	1,255,500	1,282,164	1,309,463	1,337,415	1,366,036	1,395,346	1,425,362	1,456,104	1,487,591	1,519,843	1,552,881	1,586,727	1,621,402	1,656,930	1,693,333	1,730,635	1,768,862	1,808,039	1,848,192	1,889,348
Depreciation Cost (SSP/year)																				
Project Facility	5,629,648	5,723,663	5,819,248	5,916,429	6,015,234	6,115,688	6,217,820	6,321,658	6,427,229	6,534,564	6,643,691	6,754,641	6,867,443	6,982,130	7,098,731	7,217,280	7,337,809	7,460,350	7,584,938	7,711,606
Equipment and Machinery	626,500	636,963	647,600	658,415	669,410	680,589	691,955	703,511	715,260	727,204	739,349	751,696	764,249	777,012	789,988	803,181	816,594	830,231	844,096	858,193
Sub-total	6,256,148	6,360,625	6,466,848	6,574,844	6,684,644	6,796,277	6,909,775	7,025,169	7,142,489	7,261,768	7,383,040	7,506,337	7,631,693	7,759,142	7,888,719	8,020,461	8,154,403	8,290,581	8,429,034	8,569,799
Annual O&M + Depreciation (Equipment)	1,882,000	1,919,126	1,957,063	1,995,829	2,035,447	2,075,936	2,117,318	2,159,615	2,202,851	2,247,047	2,292,230	2,338,423	2,385,651	2,433,942	2,483,321	2,533,816	2,585,456	2,638,270	2,692,288	2,747,540
Annual O&M + Depreciation (Total)	7,511,647	7,642,789	7,776,311	7,912,259	8,050,680	8,191,624	8,335,138	8,481,273	8,630,080	8,781,611	8,935,921	9,093,064	9,253,095	9,416,071	9,582,052	9,751,096	9,923,265	10,098,620	10,277,226	10,459,146
Balance																				
Target 1: Annual O&M Cost	-189,681	-212,041	-234,909	-258,298	-282,222	255,212	230,179	204,569	178,368	151,560	600,320	572,251	543,526	514,128	484,039	453,243	421,718	389,447	356,410	322,586
Subsidy (SSP/year)	189,681	212,041	234,909	258,298	282,222	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Subsidy (%)	15%	17%	18%	19%	21%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Target 2: Annual O&M Cost + Depreciation (Equipment)	-816,181	-849,004	-882,509	-916,713	-951,632	-425,377	-461,776	-498,942	-536,891	-575,644	-139,029	-179,445	-220,724	-262,884	-305,949	-349,938	-394,876	-440,784	-487,686	-535,606
Subsidy (SSP/year)	816,181	849,004	882,509	916,713	951,632	425,377	461,776	498,942	536,891	575,644	139,029	179,445	220,724	262,884	305,949	349,938	394,876	440,784	487,686	535,606
Subsidy (%)	43%	44%	45%	46%	47%	20%	22%	23%	24%	26%	6%	8%	9%	11%	12%	14%	15%	17%	18%	19%
Target 3: Annual O&M Cost + Depreciation (Total)	-6,445,829	-6,572,667	-6,701,757	-6,833,142	-6,966,865	-6,541,065	-6,679,596	-6,820,599	-6,964,121	-7,110,208	-6,782,720	-6,934,086	-7,088,167	-7,245,014	-7,404,680	-7,567,218	-7,732,684	-7,901,134	-8,072,624	-8,247,213
Subsidy (SSP/year)	6,445,829	6,572,667	6,701,757	6,833,142	6,966,865	6,541,065	6,679,596	6,820,599	6,964,121	7,110,208	6,782,720	6,934,086	7,088,167	7,245,014	7,404,680	7,567,218	7,732,684	7,901,134	8,072,624	8,247,213
Subsidy (%)	86%	86%	86%	86%	87%	80%	80%	80%	81%	81%	76%	76%	77%	77%	77%	78%	78%	78%	79%	79%

Note: a/ Member fee (fixed charge per year) is estimated by dividing procurement cost of equipment by number of lot (=1feddan). In Wau, milling facility is excluded from the procurement cost.

b/ Irrigation service fee (ISF) is estimated by dividing total water consumption volume by each crops' water consumption volume in a season.

c/ Unit price of tractor service fee is SSP200/feddan, quoted from Socio-economic Survey conducted by IDMP-TT in 2015.

d/ Milling fee (SSP0.75/kg) is estimated to cover depreciation cost of milling equipment, and each household keep 187kg of paddy for home consumption which is target of the service.

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THE REPUBLIC OF SOUTH SUDAN

MINISTRY OF ELECTRICITY, DAMS, IRRIGATION & WATER RESOURCES



WATER SECTOR

IRRIGATION DEVELOPMENT MASTER PLAN

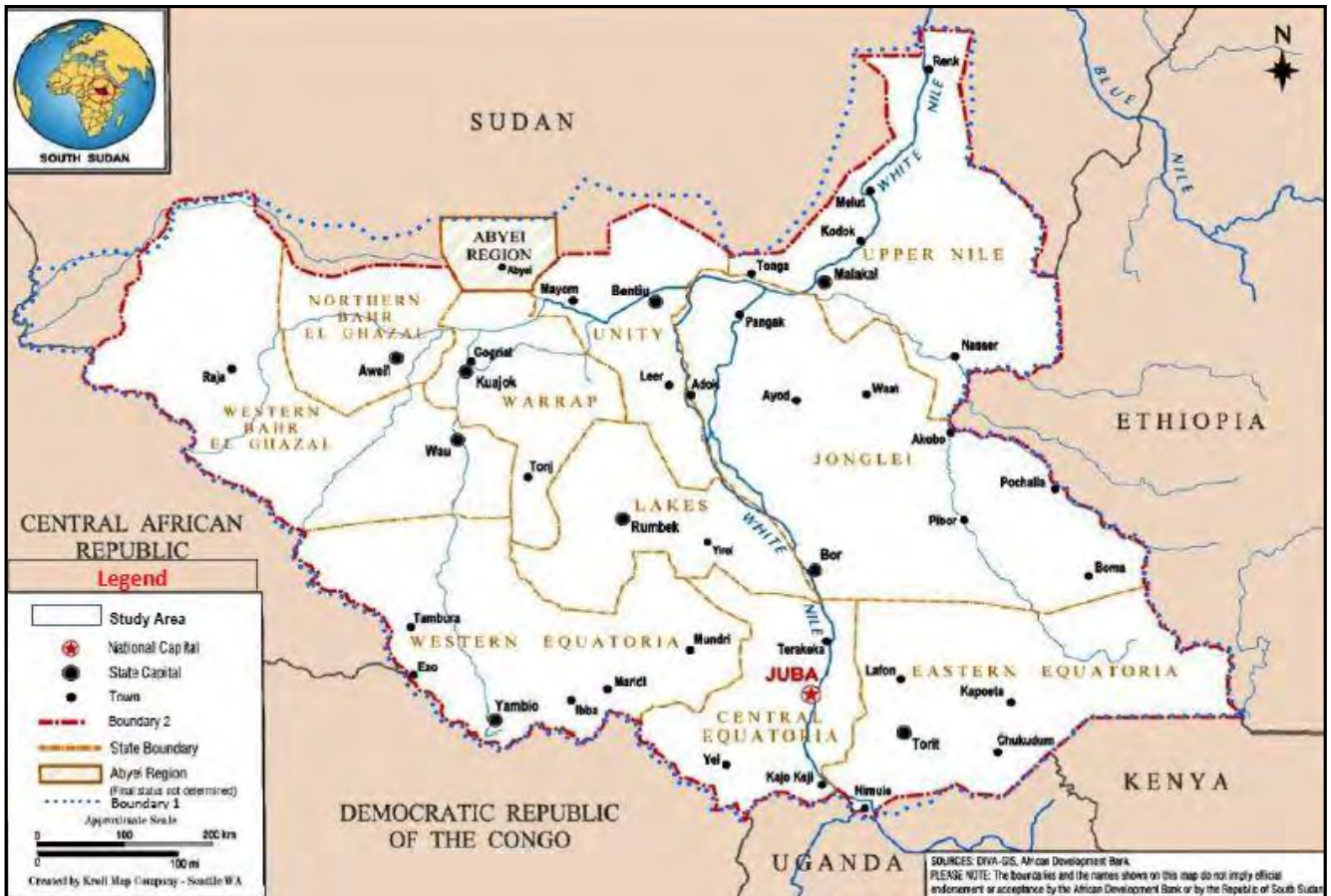
(FINAL REPORT)

ANNEX 6: PROGRAMMES' PROFILES

NOVEMBER 2015

THE PROJECT FOR IRRIGATION DEVELOPMENT MASTER PLAN IN THE REPUBLIC OF SOUTH SUDAN (RSS) LOCATION MAP

Map of the Republic of South Sudan



Location Map: Adopted from African Development Bank

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1. OUTLINE OF THE PROGRAMMES

As outlined in Chapter 6 (programmes), nine (9) programmes have been identified to achieve the strategic goals of irrigated agriculture and other productive uses of water without jeopardising needs of the other sectors across the country at all levels.

Among the nine (9) programmes, in relation to physical establishment, the core programmes pertaining to irrigation schemes/farms development programmes, are defined as five (5) with different ownerships, namely national irrigation scheme; state irrigation scheme; county irrigation scheme; community irrigation farms; and private sector irrigation investment promotion.

The other four (4) programmes, namely irrigation development guidelines formulation; irrigated agriculture extension; human resources and institutional development; and information network system establishment are defined as supportive programmes, to enhance and promote development and management of the irrigated agriculture and other productive uses schemes/farms efficiently and effectively.

Programme profiles are detailed as follows.

2. PROGRAMMES' PROFILES

2.1 Irrigation Development Guidelines Formulation Programme (IDGFP)

Items	Reference/Description
-------	-----------------------

Part 1: Programme Profile Administration

1.1 Programme identification

(1) IDMP Element:	01 Policy, Legal and Regulatory Framework (PLRF)		
(2) Programme name:	Irrigation Development Guidelines Formulation Programme (IDGFP)		
(3) Programme ID:	0	1	
(4) Start and ending fiscal year:	Starting FY: 2015	Ending FY: 2040	Duration (years): 25
(5) Total Cost:	SSP 4,387,000	USD 1,487,000	Note: Including recurrent cost
(6) Name of this file (automatic):	IDMP Programme profiles		

1.2 Programme classification scheme

	Code	Abbreviation	Description	Reference
(1) Development theme:	01, 02, 03, 04, 05, 11, 12, 13, 15,	FG, RR, FS, ED, AT, EID, SID, EH, NR	Function of the Government (FG), Reconstruction and Recovery (RR), Food and Nutrition Security (FNS), Economic and income growth (ED), Agricultural Sector Transformation (AT), Economic Infrastructure Development (EID), Social Infrastructure Development (SID), Education and Health (EH), Natural Resources management (NR),	Table 2-1
(2) Element:	01	PLRF	Policy, Legal and Regulatory Framework (PLRF)	Table 2-2
(3) CAADP Pillars:	01	CAADP-P1	Land and water management	Table 2-9
Other Initiatives:	09	IGAD	IGAD Regional Water Resources Policy	Table 2-9
	11	NBI	Information disclosure policy	Table 2-9
	12	NBI	Environmental and Social Policy	Table 2-9
	13	NBI	Wetland management strategy	Table 2-9
	14	NBI	Climate change strategy	Table 2-9
(4): Location	00	RSS	The Republic of South Sudan	Table 2-3
State(s):	00		All states of South Sudan	Table 2-3
Administrative Area:	01	AA	Abyei and Pibor	Table 2-3
Others:	02			Table 2-3
(5) Government organisation 1:	02	DID (MEDIWR)	Directorate of Irrigation and Drainage	Table 2-4
Government organisation 2:	04	DPP (MEDIWR)	Directorate of Planning and Programmes	Table 2-4
Government organisation 3:	03	DWRM (MEDIWR)	Directorate of Water Resources Management	Table 2-4
Government organisation 4:	07	DEG (MEDIWR)	Directorate of Power Engineering and Grid	Table 2-4
Government organisation 5:	06	DRWSS (MEDIWR)	Directorate of Rural Water supply and Sanitation	Table 2-4
Government organisation 6:	05	DHS (MEDIWR)	Directorate of Hydrology and Survey	Table 2-4
Government organisation 7:	12	DAPES (MAFCRD)	Directorate of Agricultural Production and Extension Services	Table 2-4
Government organisation 8:	03	DCD (MAFCRD)	Directorate of Cooperatives	Table 2-4
Government organisation 9:	08	DRD (MAFCRD)	Directorate of Rural Development	Table 2-4
Government organisation 10:	07	DF (MAFCRD)	Directorate of Forestry	Table 2-4
Government organisation 11:	13	DPAE (MAFCRD)	Directorate of Planning and Agriculture Economics	Table 2-4
Government organisation 12:	05	DAPRM	Directorate of Animals Production and Range	Table 2-4

RSS, MEDIWR, Water Sector, Irrigation Development Master Plan (IDMP)

Items	Reference/Description			
		(MLFI)	Management	
Government organisation 13:	10	DEPD (MLFI)	Directorate Extension and Pastoralists Development	Table 2-4
Government organisation 14:	06	DFAD (MLFI)	Directorate of Fisheries and Aquaculture Development	Table 2-4
Government organisation 15:	01	DPSD (MLFI)	Directorate of Planning, Statistics and Documentation	Table 2-4
Government organisation 16:	04	DIMS (MLFI)	Directorate of Investment, Marketing and Supplies	Table 2-4
Government organisation 17:	13	MWLCT	Directorate of Wild Life Conservation	Table 2-4
Government organisation 18:	01	DWS (SMPI)	State Directorates of Water and Sanitation	Table 2-4
Government organisation 19:	01	CDWS (LG)	County Department of Water and Sanitation	Table 2-4
Government organisation 20:	01,02	SDAFLF (SLMAFLF)	State Directorate of Agriculture, forestry, Livestock and Fisheries	Table 2-4
Government organisation 21:	02		County Department of Agriculture, forestry, Livestock and Fisheries	Table 2-4
Government organisation 22:	02	SDC/RD (SLMC/RD)	State Directorate of Cooperatives, Rural/Community Development	Table 2-4
Government organisation 23:	02	SDLS (SMPI)	State Directorate of Land and Survey	Table 2-4
Government organisation 24:	01	CDWS (LG)	County Department of Water and Sanitation (CDWS)	Table 2-4
Government organisation 25:	02	CDALFF (LG)	County Department of Agriculture, Livestock, Fisheries and Forestry (CDALFF)	Table 2-4
Government organisation 26:	03	CDC/RD	County Department of Cooperatives, Community/Rural Development	Table 2-4
Government organisation 27:	10	DPP (MLH&PP)	Directorate of Physical Planning	Table 2-4
Government organisation 28:	18	MoJ	Ministry of Justice	Table 2-4
Government organisation 29:	04	DWB (MoE)	Wetlands and Biodiversity	Table 2-4
Government organisation 30:	11	DI (MTI&I)	Directorate of Industry	Table 2-4
Government organisation 31:	04	DSW (MGCSW)	Directorate of Social Welfare	Table 2-4
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Government organisation 34:	16	SSBS	South Sudan Bureau of Standard	Table 2-4
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Government organisation 36:	10	WRMA	Water Resources Management Authority	Table 2-4
Government organisation 37:	11	BWB	Basin Water Boards	Table 2-4
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(6) Other organisation 1:	01	PS	Private Sector	Table 2-4
Other organisation 2:	02	DP	Development Partners	Table 2-4
Other organisation 3:	09	NGO	Non-Governmental organizations	Table 2-4
Other organisation 4:	03	CBO	Community based organization e.g. a community development committee	Table 2-4
Other organisation 5:	04	F U	Farmers Union	Table 2-4
Other organisation 6:	05	PU	Pastoralists Union	Table 2-4
Other organisation 7:	06	CS	Cooperatives Society	Table 2-4
Other organisation 8:	07	FF	Fishing Folks	Table 2-4
Other organisation 9:	08	CS	Civil Society	Table 2-4
(7) Irrigation Potential Zones1:	01	MZ	Mountainous Zone (MZ)	Table 2-5
Irrigation Potential Zone 2:	02	IZ	Intermittent Zone (IZ)	Table 2-5
Irrigation Potential Zone 3:	03	PZ	Plains Zone (PZ)	Table 2-5
Irrigation Potential Zone 4:	04	WRCZ	Wetland and river corridor Zone (WRCZ)	Table 2-5
(8) Planning Phases (start):	01, 02, 03,	PH1, PH2,	Phase-1 (5 years), Phase-2 (5 years), Phase-3	Table 2-6

Items	Reference/Description			
(9) Objective time horizon:	04	PH3, PH4	(5 years), Phase-4 (10 years)	
	01, 02, 03	ST MT LT	Short-term (ST), Medium-term (MT), Long-term (LT)	Table 2-7
(10) Ownership:	01	NPNI	Nationally Planned and Nationally implemented (NPNI)	Table 2-8
(11) Funding sources 1:	11	NB	National budget (NB)	Table 2-10
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(12) Activity types 1:	101	ID-LI	Legal and institutional development	Table 2-11
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Activity types 3:	207	SD-PL	Granting of permits and licences	Table 2-11
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Activity types 5:	208	SD-PO	Parastatal Organisations (Public Corporations)	Table 2-11

Part 2: Programme Description

2.1 Programme justification and rationale

(1) Justification and rationale:

(General rationale)

In the Republic of South Sudan (RSS), currently irrigated agriculture is practiced only on less than 5% of the cultivated land (Joint Baseline Survey Report on the Agriculture and Animal Resources in SS, Oct. 2010). The natural conditions of the RSS are diverse by region with annual rainfall ranging from less than 500 mm to around 1,500 mm. Flood and drought occur occasionally threatening national food security. Therefore, fluctuation in annual production is significant due to the seasonal and climate variability. Under such circumstances, irrigation development is crucial in order to stabilize food security situation in the country in utilizing available water resources for agricultural production, to meet the national needs.

There has been less investment in irrigation sector in SS and even the established irrigation schemes have been left without continuous operation, maintenance and rehabilitation except for a limited part of Aweil Rice Irrigation Scheme. While the Northern Upper Nile pumps irrigation schemes are not completely operational. An abundant irrigation development potential has been identified from water resources, land productivity, and socio-economy assessments under this master plan.

Guidelines pertaining to Irrigation Development are therefore needed under IDMP due to the following:

The South Sudan Water sector policies/institutions are evolving. As such specific guidelines for irrigation development, management and operation have not been in existence. However, within the 2007 water policy, the 2011 WASH strategic framework and 2014 draft Water bill, water use for agricultural production has been captured under water resources management i.e. in terms of allocation procedures, water use rights, prioritisation, etc. In these documents, the integrated water resources management/development approach on the basis of hydrological boundaries e.g. by watershed has been consistently emphasised; and therefore those principles will be the pillar for the IDMP guidelines formulation.

At the institutional level, the aforementioned documents clearly distinguish and recognise delineation of roles and devolution of responsibilities. For instance, there is a separation between management and service delivery duties; and there is assignment of mandates to institutions at different government levels on the basis of competencies. The implementation of such provisions is not yet in place e.g. responsibility of MEDIWR and MAFCRD in irrigation development, operation and maintenance at the scheme level at one hand and the demarcation of such responsibilities between national, state and local government or communities is not well established or functioning. A case in point is Aweil Irrigation Rice Scheme (AIRS), which is the only currently operating public irrigation scheme in RSS. Further, the private sector involvement is not yet articulated or realised.

These issues necessitate development of guidelines for irrigation development, which

Items	Reference/Description
(2) Overall description including temporal and spatial extent of programme:	<p>would cover planning, designing and implementation of irrigation projects and schemes; and the role of institutions, O&M set-up, procedures on environmental and social considerations, land acquisition, water resources management, etc. Here an approach of formulating guidelines for irrigation development in accordance with the national water resources management framework+under the draft water bill is adopted.</p> <p>The guidelines provide a step by step process of developing irrigation schemes which facilitates the enabling environment for investors, implementation; operation and maintenance (O&M) and monitoring and evaluation. It also ensures that the schemes are well established and are effective, efficient and sustainable.</p> <p>The programme will be nationally developed with stakeholdersq participation. The programme will ensure that guidelines are established for Irrigation development and management of irrigation schemes at all levels. Preliminary guidelines will be developed within the master plan, but in short, medium and long term additional guidelines will be developed. Also each of the guidelines would be reviewed when deemed necessary.</p>
2.2 Objective	
(1) Programme objective:	To establish irrigated agriculture and other productive uses development and management guidelines for promotion of effectiveness, efficiency and sustainability
2.3 Outputs	
(1) Programme Outputs:	<p>The following guidelines are developed:</p> <p><Guideline A: Administrative and Management process guideline></p> <ul style="list-style-type: none"> - Administrative procedures - Procurement, e.g. contracts - Budget and human resources allocation, disbursements, accounting - Irrigation development dissemination to States, Local Governments and local communities - Irrigable land acquisition - Settlement/resettlement - Enforcement of International Water Treaties - Conflict Mitigation <p><Guideline B: (Technical Guidelines)></p> <ul style="list-style-type: none"> - Irrigation planning and design, economical evaluation, M&E - Operation and maintenance for irrigation facilities and equipment - Environmental and social consideration - Allocation of water for agricultural production (acquisition of water rights) - Water users association - On-farm level irrigated agriculture
2.4 Projects/Components/Activities identified under the Programme	
(1) Projects/Components/Activities under the Programme:	<ol style="list-style-type: none"> 1) Administrative procedures 2) Procurement, e.g. contracting 3) Budget and human resources allocation, disbursements, accounting 4) Irrigation development dissemination to States, Local Governments and local communities 5) Irrigable land acquisition 6) Settlement/resettlement 7) Enforcement of International Water Treaties 8) Irrigation planning and design, economical evaluation, M&E 9) Operation and maintenance for irrigation facilities and equipment 10) Environmental and social consideration 11) Allocation of water for agricultural production (acquisition of water rights) 12) Water users association 13) On-farm level irrigated agriculture
2.5 Service providers and beneficiaries	
(1) Description of service providers within the framework of the programme:	<p>Related Government institutions including Ministries, public authorities, etc.</p> <p>Private sector</p> <p>Water User Association</p> <p>DPs</p>

Items	Reference/Description
(2) Description of beneficiaries within the framework of the programme	Farmers, Irrigation schemes, private sector, Water Users Association, inhabitants, etc.

2.6 Environmental and social impact, and mitigation measures

(1) Expected level of negative impact (select an indicator from the list in the right)	<table border="1"> <tr> <td>a</td> <td> Programme a: is likely to have minimal or little impact on the environment and/or society b: may have an impact on the environment and/or society c: is likely to have a significant impact on the environment and/or society d: will have a significant impact on the environment and/or society </td> </tr> </table>	a	Programme a: is likely to have minimal or little impact on the environment and/or society b: may have an impact on the environment and/or society c: is likely to have a significant impact on the environment and/or society d: will have a significant impact on the environment and/or society
a	Programme a: is likely to have minimal or little impact on the environment and/or society b: may have an impact on the environment and/or society c: is likely to have a significant impact on the environment and/or society d: will have a significant impact on the environment and/or society		
(2) Description of expected negative and/or positive environmental and social impact, and mitigation measures	<p>Expected negative impacts:</p> <ul style="list-style-type: none"> • Imbalances created by the guidelines e.g. favouring of some crops at expense of the other, interest in large scale verse small scale, etc • Biasness towards attracting investment opportunities into the sector <p>Mitigation measures:</p> <ul style="list-style-type: none"> • Possible mitigation could be a balance between small and large scale, between cash crops and food crops • Gradual introduction of changes during planning, design and implementation stages 		

2.7 Monitoring and evaluation for impact measurement

(1) Measurable indicators and situation at a starting point:	Number of guidelines developed and implemented
(2) Measurable indicators and situation at the end point:	Number guidelines developed and implemented
(3) Methods of measurement and sources of information:	Carry out monitoring and evaluation assessments, Reports, Planning and reviewing workshops, etc
(4) Responsible parties for the monitoring and evaluation:	Related government establishments as enumerated in 1.2 (5), including MEDIWR Directorate of Irrigation and Drainage(DID); MEDIWR Directorate of Planning and Programmes; MAFCRD Directorate of Agriculture Production and Extension Services; DPs; private sector; etc.

2.8 Required human resources

(1) Principle of human resources management:	-Based on public service manual and procedures (including secondment and loan of personnel) - Contract employment and professional services
(2) Required human resources in the public sector (Positions, grades and numbers):	- Based on organizational hierarchy of government establishments above in section 1.2 (5), Including: <ul style="list-style-type: none"> • Position of directors: Grade 2 (D. G.), 3 (Director), 4 (D.D.) and grade 5 (Asst. D.) at programme supervision and management level; • Position of inspectors: Grade 7 (Senior Inspector),8 (inspector) and grade 9 (Asst. Inspector) at programme implementation and field level; and • Position of technicians and sub-professionals: Grade (10-14) at programme support level.
(3) Required human resources from the private sector and DPs including consultants (positions, qualification and numbers):	Technical assistance for programme implementation and management is required (5 professionals)

2.9 Outcomes, impacts and contributions to value added (i.e. economic growth)

(1) Outcomes and impact:s	Innovative, effective, efficient and sustainable development and management of Irrigation schemes
(2) EIRR and/or FIRR, and/or other economic analysis Economic Internal Rate of Return Financial Internal Rate of Return	(if applicable)

2.10 Risk assessment with respect to project objectives and resources to be applied

(1) Expected level of risk	L	L: Low	M: Medium	H: High	(select an indicator from the list)
(2) Explanation of expected risks	- Unforeseen circumstances which are not covered by the guidelines - Negligence from the implementers				

Items	Reference/Description
	- Lack of proper enforcement of guidelines

2.11 Other special considerations and/or notes

(1) Other special considerations and/or notes

- The government establishments above in section 1.2 (5), must be maintained and sustained.
- Establishment and functionality of the structures in the draft water bill
- Capacitating of the related government personal and institutions through training and provision of equipment
- Financial and Technical support
- To be based on customary, South Sudan and other related laws and regulations
- Referring to overseas related documents
- Establishment of reviewing and updating procedures for each guidelines

2.12 Routine operation and required resources after the completion of the IDMP

(1) Description of routine activities and required financial/human resources after the completion of the master plan. Description of the required resources can be done in an indicative manner.

- Dissemination of the guidelines
- Sensitization, strengthening and capacitating of the users, implementers and overseers.
- Ensure that these guidelines are frequently reviewed and updated based on lessons learnt.
- Establishment of steering committee and taskforce (Coordination with the other relevant ministries)
- Information collection study of current Irrigation Implementation situations and socio-economic conditions at State, County and Community levels
- Costing and Budgeting
- Allocating the human resources

2.2 National Irrigation Scheme Development Programme (NISDP)

Items	Reference/Description
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Part 1: Programme profile administration

1.1 Programme identification

(1) Element:	03 Irrigation Facilities Development and Management (IFDM)		
(2) Programme name:	National Irrigation Scheme Development Programme (NISDP)		
(3) Programme ID:	0	2	
(4) Start and ending fiscal year:	Starting FY: 2015	Ending FY: 2040	Duration (years): 25
(5) Total investment:	SSP 14,695,400,000 (include National/State/County)	USD 4,981,500,000 (include National/State/County)	Note: Not including recurrent cost
(6) Name of this file (automatic):	IDMP Programme Profiles		

1.2 Programme classification scheme

	Code	Abbreviation	Description	Reference
(1) Development theme:	01, 02, 03, 04,05,11,13,14	FG, RR, FS, ED, AT, EID, EH, SW	Function of Government (FG), Reconstruction and Recovery (RR), Food and Nutrition Security (FS), Economic and Income Growth(ED), Agriculture Sector Transformation (AT), Economic Infrastructure Development (EID), Education and Health (EH), Social Welfare (SW)	Table 2-1
(2) Element:	03	IFDM	Irrigation facilities development and management	Table 2-2
(3) CAADP Pillars:	01	CAADP P1	Land and water management	Table 2-9
Other Initiatives:	06	NELSAP-MSIOA of NBI	Water resources development and management investment planning programme	Table 2-9
	08	IGAD-ILWRMP	Inland water resources management programme	Table 2-9
	07	ENTRO-MSIOA of NBI	Water infrastructure investment programme	Table 2-9
(4) Location:	00	RSS	The Republic of South Sudan (RSS)	Table 2-3
States:			All States of South Sudan	Table 2-3
Administrative areas:	01	AA	Abyei and Pibor	Table 2-3
Others:	02			Table 2-3
(5) Government organisation 1:	02	DID (MEDIWR)	Directorate of Irrigation and Drainage	Table 2-4
Government organisation 2:	04	DPP (MEDIWR)	Directorate of Planning and Programmes	Table 2-4
Government organisation 3:	03	DWRM (MEDIWR)	Directorate of Water Resources Management	Table 2-4
Government organisation 4:	07	DPEG (MEDIWR)	Directorate of Power Engineering and Grid	Table 2-4
Government organisation 5:	05	DHS (MEDIWR)	Directorate of Hydrology and Survey	Table 2-4
Government organisation 6:	12	DAPES (MAFCRD)	Directorate of Agriculture Production and Extension Services	Table 2-4
Government organisation 7:	03	DCD (MAFCRD)	Directorate of Cooperatives	Table 2-4
Government organisation 8:	08	DRD (MAFCRD)	Directorate of Rural Development	Table 2-4
Government organisation 9:	13	DPAE (MAFCRD)	Directorate of Planning and Agriculture Economic	Table 2-4
Government organisation 10:	02	DAPDC, (MAFCRD)	Directorate of State and Special Projects Coordination	Table 2-4
Government organisation 11:	05	DAPRM (MLFI)	Directorate of Animal Production and Range Management	Table 2-4
Government organisation 12:	09	DLFRD (MLFI)	Directorate of Livestock and Fisheries Research Development	Table 2-4
Government organisation 13:	10	DEPD (MLFI)	Directorate of Extension and pastoralists Development	Table 2-4

Items	Reference/Description			
Government organisation 14 :	06	DFAD (MLFI)	Directorate of Fisheries and Aquaculture Development	Table 2-4
Government organisation 15 :	01	DPSD (MLFI)	Directorate of Planning, Statistics and Documentation	Table 2-4
Government organisation 16 :	04	DIMS (MLFI)	Directorate of Investment, Marketing and Supplies	Table 2-4
Government organisation 17 :	13	DWLC (MWLCT)	Directorate of Wildlife Conservation	Table 2-4
Government organisation 18 :	01	DWS(SMPI)	State Directorate of Water and Sanitation	Table 2-4
Government organisation 19 :	01,02,01	SDALFF (SLMALFF)	State Directorate of Agriculture, Livestock, Fisheries and Forestry (SDALFF)	Table 2-4
Government organisation 20 :	03	SDC/RD (SLMC/RD)	State Directorate of Cooperatives, Rural/Community Development	Table 2-4
Government organisation 21 :	02	DLS (SMPI)	State Directorate of Land and Survey	Table 2-4
Government organisation 22 :	01	CDWS (LG)	County Department of Water and Sanitation (CDWS)	Table 2-4
Government organisation 23 :	02	CDALFF (LG)	County Department of Agriculture, Livestock, Fisheries and Forestry (CDALFF)	Table 2-4
Government organisation 24 :	03	CDC/RD	County Department of Cooperatives, Community/Rural Development	Table 2-4
Government organisation 25:	04	DWB (MOE)	Wetlands and Biodiversity	Table 2-4
Government organisation 25:	10	DPP (MLHPP)	Directorate of Physical Planning	Table 2-4
Government organisation 26:	12	DM/B	Directorate for Multilateral/Bilateral	Table 2-4
Government organisation 27:	01	SSMS (MTRB)	South Sudan Metrological services	Table 2-4
Government organisation 28:	04	DSW (MGCSW)	Directorate of Social Welfare	Table 2-4
Government organisation 29:	14	DPASP (MFEP)	Directorate of Planning (Aid & Sectoral Planning)	Table 2-4
Government organisation 30:	11	DI (MTII)	Directorate of Industry	Table 2-4
Government organisation 31:	01	LC	Land Commission	Table 2-4
Government organisation 32:	14	NBS	National Bureau of Statistics	Table 2-4
Government organisation 33:	15	FSC	Food Security Council	Table 2-4
Government organisation 34:	01	Academia	Universities and Institutes	Table 2-4
Government organisation 35:	10	WRMA	Water Resources Management Authority	Table 2-4
Government organisation 36:	11	BWB	Basin Water Boards	Table 2-4
Government organisation 37:	15	IB	Irrigation Boards	Table 2-4
Government organisation 38:	12	CC	Catchment Committees	Table 2-4
Government organisation 39:	14	WUA	Water Users Association	Table 2-4
(6) Other organisation 1:	01	PS	Private Sector	Table 2-4
Other organisation 2:	02	DP	Development Partners	Table 2-4
Other organisation 3:	09	NGO	Non-Governmental organizations	Table 2-4
Other organisation 4:	03	CBO	Community based organization e.g. a community development committee	Table 2-4
Other organisation 5:	04	F U	Farmers Union	Table 2-4
Other organisation 6:	05	PU	Pastoralists Union	Table 2-4
Other organisation 7:	06	CS	Cooperatives Society	Table 2-4
Other organisation 8:	07	FF	Fishing Folks	Table 2-4
Other organisation 9:	08	CS	Civil Society	Table 2-4
(7) Irrigation Potential Zone 1:	01	MZ	Mountainous	Table 2-5
Irrigation Potential Zone 2:	02	IZ	Intermittent	Table 2-5
Irrigation Potential Zone 3:	03	FZ	Flood plains	Table 2-5
Irrigation Potential Zone 4:	04	WRC	Wet lands and river corridors	Table 2-5
(8) Planning Phases(start):	01, 02, 03, 04	PH1, PH2, PH3, PH4	Phase-1 (5 years), Phase-2 (5 years), Phase-3 (5 years), Phase-4 (10 years)	Table 2-6
(9) Objective time horizon:	01, 02, 03	ST MT LT	Short-term, Medium-term, Long-term	Table 2-7
(10) Ownership:	01	NPNI	Nationally Planned and Nationally implemented	Table 2-8
(11) Funding sources 1:	11	NNB	National budget	Table 2-10

Items	Reference/Description			
Funding sources 2:	12	NDF	National Development fund	Table 2-10
Funding sources 3:	13	NEF	Equity Financing	Table 2-10
Funding sources 4:	31	DPG	Development Partners Grant	Table 2-10
Funding sources 5:	32	DPL	Development Partners Loan	Table 2-10
Funding sources 6:	42	PSL	Private Sector Loan	Table 2-10
Funding sources 7:	51	NGG	NGOs Grant	Table 2-10
Funding sources 8:	53	CI/C	Community Investment/Contribution	Table 2-10
(12) Activity types 1:	103	PFP	Policy formulation and Planning	Table 2-11
Activity types 2:	104	IM	Implementation and Monitoring	Table 2-11
Activity types 3:	201	DIAM	Data & information analysis & management	Table 2-11
Activity types 4:	202	SD-ME	Macroeconomic policy implementation	Table 2-11
Activity types 5:	203	ET	Extension and Training	Table 2-11
Activity types 6:	205	PC	Provision of credit	Table 2-11
Activity types 7:	206	PS	Provision of Subsidy	Table 2-11
Activity types 8:	207	GPL	Granting of Permits and licenses	Table 2-11
Activity types 9:	209	EID	Economic Infrastructure Development	Table 2-11
Activity types 10:	211	COM	Construction, Operation and Maintenance	Table 2-11

Part 2: Programme description

2.1 Programme justification and rationale

(1) Justification and rationale:

(General rationale)

In the Republic of South Sudan (RSS), currently irrigated agriculture is practiced only on less than 5% of the cultivated land (Joint Baseline Survey Report on the Agriculture and Animal Resources in SS, Oct. 2010). The natural conditions of RSS are diverse and vary by region, with annual rainfall ranging from less than 500 mm to around 1,500 mm. Flood and drought occurs occasionally, threatening national food security: therefore, fluctuation in annual production is significant due to seasonal and climate variability. Under such circumstances, irrigation development is crucial, in order to stabilize food security situation in the country, in utilizing available water resources for agricultural production and contribute to the national needs.

There has been less investment in irrigated agriculture in SS, even the established irrigation schemes have been left without continuous operation, maintenance and rehabilitation, except for a limited part of Aweil Rice Scheme. The Northern Upper Nile pumps irrigation schemes are not completely operational.

Abundant irrigation development potential has been identified from land productivity, socio-economic water resources, and assessments under this master plan.

National Irrigation Schemes Development Programme (NISDP) is therefore needed under IDMP due to the following:

- To help putting in place adaptation and mitigation measures, including reduction of risks and vulnerability to seasonal variability, in dealing with negative global climate trends.
- To deal with water delivery and control systems for medium to large scale farming that contributes to national objectives such as food security; job creation; poverty reduction; income growth; and economic development.
- Due to high investment cost; introduction of modern technologies; trans-boundary and intra-national water and land use issues; and risk of social and environmental impacts (among others), national governments fit to deal with immense and complex technical expertise; coordination and management requirements of medium to large scale irrigation development.

(2) Overall description including temporal and spatial extent of project:

The programme is to establish Irrigation Schemes by the National Government as the main owner and operator of irrigation facilities, to streamline and harmonise approaches for better land and water allocation and management; and encourage cooperation instead of competition. It will benefit multiple beneficiaries at all levels, including states; local administrative units; entrepreneurs and enterprises. Through NISDP land degradation and other environmental impacts will be safeguarded; conflicts over significant use of resources will be reduced; and country-wide production and productivity will be stabilized. The Programme covers the irrigation potential areas all over the country. It includes short-term,

Items	Reference/Description
	medium-term and long term time frames.
2.2 Objective	To promote innovative irrigated agriculture and other productive uses nationwide through effective, efficient and sustainable utilization and management of land, water and related resources
2.3 Outputs	<ul style="list-style-type: none"> • Large/Medium scale irrigation facilities rehabilitated/established • Large/Medium scale irrigated farmlands • Enhanced agricultural production systems through irrigation • Enhanced efficiency of water use for agricultural production • Improved water and land conservation practices • Improved flood control and drainage systems • Increased agricultural production and productivity nationwide • Measures to mitigate seasonal and climate variability. • Measures to ascertain provision of water to wildlife and other conservation purposes • Irrigated agricultural contribution to national Gross Domestic Product (GDP). • Jobs created or people employed (including self-employment). • Enterprises facilitated (agribusinesses and agro-industries emerged)
2.4 Components/Projects /Activities Identified under the Programme	<p>(1) Components/Projects/Activities</p> <ol style="list-style-type: none"> 1. Identified projects under NBI regional cooperation (Nyimur multipurpose water resources management and development project of NELSAP on Aswa) 2. NELSAP-MSIOA and ENSAP-MSIOA of NBI 3. Baro Akobo-Pibor Sobat multipurpose water resources study project under ENSAP 4. Priority Projects (Jebel Lado, Rejaf East, Wau Rice Farm, Pacong, Acongcong, Mohammed Ajak, Lafon, Kapoeta, etc.) 5. Provision, operation and maintenance of irrigation facilities and systems in collaboration with private sector and communities for rice production in lowlands/plains. Identified locations include: Aweil rice scheme; Wau Rice scheme; Adior Agot Rice scheme; Pagarou Rice scheme 6. Provision, operation and maintenance of irrigation facilities and systems in collaboration with private sector and communities for tea and coffee plantations within the greenbelt. Identified locations include: Upper Talanga for Tea and Coffee production; Sakure (Nzara) coffee production, etc 7. Provision, operation and maintenance of irrigation facilities and systems in collaboration with the private sector for oilseed crops production (G/nuts, sunflower, sesame) in semi-arid areas e.g. Renk 8. Provision, operation and maintenance of irrigation facilities and systems in collaboration with Ministry of Trade, Industry and Investment; and the private sector for sugarcane production (e.g. Mangalla, Malut, etc.); in addition to any other agro-industry base crop 9. Provision, operation and maintenance of irrigation facilities and systems in collaboration with the private sector for cotton production e.g. Renk, Manyo, Maban 10. Provision, operation and maintenance of dipping and watering facility for livestock at international boarder points. Identified locations include: Nimule, Kaya; Nadapal; War-awar; Wunthou; Jikou; Nasir; Akobo, etc. 11. Provision, operation and maintenance of livestock watering points along cattle migratory routes within the rangelands. Identified locations are in Jongolei; Eastern Equatoria, Warrap and Lakes states 12. Provision, operation and maintenance of water conveyances to wildlife migratory routes and game reserves. Identified locations are in Boma National Park, Southern National Park, Nimule National Park, Lantoto National Park, Shambe National Park, Bandigilo National Park, Zeraf Game Reserve, Fanyikang Game Reserve, Juba Game Reserve, Bire Kapatuos Game Reserve, Bangangai Game Reserve, Kidepo Game Reserve, Chelkou Game Reserve, Ashana Game Reserve, Numatina Game Reserve, Mesha Game Reserve, Boro Game Reserve and etc. 13. Provision, operation and maintenance of irrigation facilities and systems for fruit trees productions in cities and major towns

Items	Reference/Description
	<p>14. Provision of flood control and drainage infrastructure/facilities for farms and pasturelands</p> <p>15. Provision, operation and maintenance of water for small scale aquaculture for communities who have no access to natural fishing opportunities. Identified locations are Yei, Morobo, Kajo-keji in Central Equatoria; Nzara, Ezo, Yambio in Western Equatoria; Wau in Western Bahr el-Ghazal and Eastern Equatoria has been earmarked for fish ponds but locations are yet to be identified (Lafon, Kapoeta and Parajok)</p> <p>16. Restoration of vegetation at water catchments in collaboration with MAFCRD through tree plantation; and water/soil conservation structures (check dams, terraces and etc.), to arrest erosion and prevent siltation in water facilities including reservoirs, canals, etc. Identified areas include Eastern Equatoria water harvesting sites, etc</p> <p>17. Provision, operation and maintenance of water facilities for horticulture and tree nurseries</p> <p>18. Provision, operation and maintenance of water and irrigation/dipping facilities for livestock at demonstration farms e.g. Marial Bai integrated Farm at Wau; and Malakal Dairy Farm, and Central Equatoria Dairy Farm and Central Equatoria Poultry Farm); Kapoeta Sheep ranch</p> <p>19. Provision, operation and maintenance of dipping and watering facilities at livestock auction centers at Juba, Wau and Malakal</p> <p>20. Provision, operation and maintenance of safe water supply facilities at feed mills, e.g. Yei; Renk; Aweil; Wau; Yambio</p> <p>21. Provision, operation and maintenance of safe water supply facilities at feed testing and analysis laboratories</p> <p>22. Provision, operation and maintenance of irrigation facilities and systems in collaboration with private sector and communities for wheat production in semi-arid areas</p> <p>23. Construction of water harvesting/storage, flood control and drainage facilities/structures for irrigated agriculture and other productive uses</p> <p>24. Other irrigation schemes to be identified from high resolution assessment</p> <p>Remarks: All the programme components/projects/schemes will be implemented in short-, Medium- and Long-term</p>

2.5 Service providers and beneficiaries

(1) Description of service providers within the framework of the programme:	National, State and Local Governments; private sector; DPs; etc.
(2) Description of beneficiaries within the framework of the programme	Farmers, irrigation schemes, private sector, local population, residents, etc.

2.6 Environmental and social impact, and mitigation measures

(1) Expected level of negative impact (select an indicator from the list in the right)	<table border="1"> <tr> <td>b</td> <td> Programme a: is likely to have minimal or little impact on the environment and/or society b: may have an impact on the environment and/or society c: is likely to have a significant impact on the environment and/or society d: will have a significant impact on the environment and/or society </td> </tr> </table>	b	Programme a: is likely to have minimal or little impact on the environment and/or society b: may have an impact on the environment and/or society c: is likely to have a significant impact on the environment and/or society d: will have a significant impact on the environment and/or society
b	Programme a: is likely to have minimal or little impact on the environment and/or society b: may have an impact on the environment and/or society c: is likely to have a significant impact on the environment and/or society d: will have a significant impact on the environment and/or society		
(2) Description of expected negative environmental and social impact, and mitigation measures	<p>- Negative impacts:</p> <ul style="list-style-type: none"> - Conflict over land and water use - Diversion of floods or drainage to other people land away from the schemes - Expected health hazards - Voluntary/Involuntary migration <p>Mitigation Measures:</p> <ul style="list-style-type: none"> - Ensuring proper land allocation and ownership in line with land acts and through established land committee - Ensuring proper procedures in water allocation through basin boards, water users association, etc. - Health education and treatment centres 		

Items	Reference/Description
	<ul style="list-style-type: none"> - Ensuring proper compensation procedures and actions - Ensuring of proper water control at the farm including provision of specific retaining areas for flood water and disposal of farms drainage

2.7 Monitoring and evaluation for impact measurement

(1) Measurable indicators and situation at a starting point:	Area irrigated (ha) Crop production (unit yield) Irrigation Efficiency Water and soil conservation practices Types of crops being grown Number of people employed (including self-employed) Number of productive associations, agribusinesses and agro-industries
(2) Measurable indicators and situation at the end point:	Area irrigated (ha) Crop production (unit yield) Irrigation Efficiency Water and soil conservation practices Measures to ascertain provision of water to wildlife and other conservation purposes Types of crops being grown Number of jobs created or people employed No. of schemes developed and rehabilitated Number of productive associations, agribusinesses and agro-industries
(3) Methods of measurement and sources of information:	Carryout assessments and field surveys; and use other sources of information such as: schemes and government documentation by management and departments in charge (e.g. to find out crops yields, cost of inputs, financial agreements, etc.).
(4) Responsible parties for the monitoring and evaluation:	Related government establishments as enumerated in 1.2 (5), DPs, private sector, independent body/consultant, etc.

2.8 Required human resources

(1) Principle of human resources management:	<ul style="list-style-type: none"> - Based on public service regulations and procedures (including secondment and loan of personnel) - Contract employment and professional services
(2) Required human resources in the public sector (Positions, grades and numbers):	Based on organizational hierarchy of government establishments above in section 1.2 (5), Including: <ul style="list-style-type: none"> • Position of directors: Grade 2 (D. G.), grade 3 (Director), grade 4 (D.D.) and grade 5 (Asst. D.); and grade 7 (Senior Inspector), grade 8 (inspector) and grade 9 (Asst. Inspector) at programme supervision, management, implementation and field levels; • Position of technicians and sub-professionals: Grade (10-14) at programme support level.
(3) Required human resources in the private sector and DPs including consultants (positions, qualification and numbers):	Technical assistance for programme implementation is required (6 professionals) e.g. one irrigation engineer, one agricultural engineer, one electromechanical (facility engineer), one socio- economist, costs estimate specialist and one institutional specialist.

2.9 Outcomes, impacts and contributions to value added (i.e. economic growth)

(1) Outcomes and impacts:	<ul style="list-style-type: none"> • Improved land and crop productivity. • Improved food security, and reduction of poverty among farmers and populations nationwide. • Reduction of risks and vulnerability of crops production and other productive uses to seasonal and climate variability. • Realized contribution by irrigated agriculture and other productive uses to national Gross Domestic Product (GDP). • Increase in jobs and enabled productive associations, agribusinesses and agro-industries • Sustained environmental flows and availability of water within conservation areas
(2) EIRR and/or FIRR, and/or other economic analysis Economic Internal Rate of Return Financial Internal Rate of Return	(if applicable)

Items	Reference/Description
2.10 Risk assessment with respect to project objectives and resources to be applied	
(1) Expected level of risk	L: Low M: Medium H: High (select an indicator from the list)
(2) Explanation of expected risks	<ul style="list-style-type: none"> - Unforeseen circumstances which cannot be managed by the programme - Natural disaster (e.g. flood, drought, etc)
2.11 Other special considerations and/or notes	
(1) Other special considerations and/or notes	<ul style="list-style-type: none"> - Coordination between related government establishments above in section 1.2 (5), Private sector (through industrial attachment), DPs, NGOs, etc, at all levels. - The related government establishments in 1.2(5) must be maintained and sustained - Establishment and functionality of the structures in the draft water bill - Financial support either from government, development partners and private sector - Simultaneous implementation with Human Resources and Institutional Development for Irrigated Agriculture Programme, Irrigated Agriculture Extension Programme and relevant CAMP projects
2.12 Routine operation and required resources after the completion of the IDMP	
(1) Description of routine activities and required financial/human resources after the completion of the programme.	<ol style="list-style-type: none"> 1. Development of annual implementation plans 2. Costing and Budgeting 3. Allocation of human resource to project 4. Designing of irrigation schemes and other productive/conservation water supply systems 5. Development of irrigation models for national irrigation schemes 6. Implementation of priority projects 7. Extension of the implementation 8. Prior notification of countries sharing potential water systems 9. Operation, maintenance, monitoring & evaluation of the irrigation schemes 10. Coordination and collaboration with other related ministries/institutions at all levels

2.3 State Irrigation Scheme Development Programme (SISDP)

Items	Reference/Description
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Part 1: Programme profile administration

1.1 Programme identification

(1) IDMP Element:	03 Irrigation Facilities Development and Management (IFDM)		
(2) Programme name:	State Irrigation Scheme Development Programme (SISDP)		
(3) Programme ID:	0	3	
(4) Start and ending fiscal year:	Starting FY: 2015	Ending FY: 2040	Duration (years): 25
(5) Total investment:	SSP 14,695,400,000 (include National/State/County)	USD 4,981,500,000 (include National/State/County)	Note: Not including recurrent cost
(6) Name of this file (automatic):	IDMP programme Profile		

1.2 Programme classification scheme

	Code	Abbreviation	Description	Reference
(1) Development theme:	01, 02, 03, 04, 05, 11, 13	FG, RR, FS, ED, EID, NR, EH	Function of Government (FG), Reconstruction and Recovery, Food Security (FS), Economic and Income Growth (ED), Agriculture Sector Transformation (AT), Economic Infrastructure Development (EID), Education and Health (EH)	Table 2-1
(2) Element:	03	IFDM	Irrigation facilities development and management	Table 2-2
(3) CAADP Pillars:	01	CAADP P1	Land and water management	Table 2-9
Other Initiatives:	06	NELSAP-MSI OA	Water resources development and management planning	Table 2-9
	07	ENTRO-MSIO A	Water infrastructure investment programme	Table 2-9
(4) Location :	00	RSS	The Republic of South Sudan (All States)	Table 2-3
State 1:				Table 2-3
State 2:				Table 2-3
State 3:				Table 2-3
State 4:				Table 2-3
State 5:				Table 2-3
State 6:				Table 2-3
State 7:				Table 2-3
State 8:				Table 2-3
State 9:				Table 2-3
State 10:				Table 2-3
Administrative Area 1:				Table 2-3
Administrative Area 2:				Table 2-3
Others:				Table 2-3
(5) Government organisation 1:	02	DID (MEDIWR)	Directorate of Irrigation and Drainage	Table 2-4
Government organisation 2:	04	DPP (MEDIWR)	Directorate of Planning and Programmes	Table 2-4
Government organisation 3:	03	DWRM (MEDIWR)	Directorate of Water Resources Management	Table 2-4
Government organisation 4:	07	DPEG (MEDIWR)	Directorate of Power Engineering and Grid	Table 2-4
Government organisation 5:	05	DHS (MEDIWR)	Directorate of Hydrology and Survey	Table 2-4
Government organisation 6:	12	DAPES (MAFCRD)	Directorate of Agriculture Production and Extension Services	Table 2-4
Government organisation 7:	03	DCD (MAFCRD)	Directorate of Cooperatives	Table 2-4
Government organisation 8:	08	DRD (MAFCRD)	Directorate of Rural Development	Table 2-4

Annex 6: Programmes' Profiles

Items	Reference/Description			
Government organisation 9:	13	DPAE (MAFCRD)	Directorate of Planning and Agriculture Economics	Table 2-4
Government organisation 10:	02	DSCSP (MLFI)	Directorate of States and Special Projects Coordination	Table 2-4
Government organisation 11:	05	DAPRM (MLFI)	Directorate of Animal Production and Range Management	Table 2-4
Government organisation 12:	09	DLFRD (MLFI)	Directorate of Livestock and Fisheries Research Development	Table 2-4
Government organisation 13:	10	DEPD (MLFI)	Directorate of Extension and pastoralists Development	Table 2-4
Government organisation 14:	06	DFAD (MLFI)	Directorate of Fisheries and Aquaculture Development	Table 2-4
Government organisation 15:	04	DIMS (MLFI)	Directorate of Investment, Marketing and Supplies	Table 2-4
Government organisation 16:	01	DWLC (MWLCT)	Directorate of Wild Life Conservation	Table 2-4
Government organisation 17:	01	SDWS	State Directorate of Water and Sanitation	Table 2-4
Government organisation 18:	01,02	SDALFF (SLMALFF)	State Directorate of Agriculture, Livestock, Fisheries and Forestry (SDALFF)	Table 2-4
Government organisation 19:	03	SDC/RD (SLMC/RD)	State Directorate of Cooperatives, Rural/Community Development	Table 2-4
Government organisation 20:	02	SDLS (SLMLS)	State Directorate of Land and Survey	Table 2-4
Government organisation 21:	01	CDWS (LG)	County Department of Water and Sanitation (CDWS)	Table 2-4
Government organisation 22:	02	CDALFF (LG)	County Department of Agriculture, Livestock, Fisheries and Forestry (CDALFF)	Table 2-4
Government organisation 23:	03	CDC/RD	County Department of Cooperatives, Community/Rural Development	Table 2-4
Government organisation 24:	10	DPP (MLHPP)	Directorate of Physical Planning	Table 2-4
Government organisation 25:	01	SSMS (MTRB)	South Sudan Metrological services	Table 2-4
Government organisation 26:	04	DWB (MOE)	Wetlands and Biodiversity	Table 2-4
Government organisation 27:	04	DSW (MGCSW)	Directorate of Social Welfare	Table 2-4
Government organisation 28:	14	DPASP (MFEP)	Directorate of Planning (Aid & Sectoral Planning)	Table 2-4
Government organisation 29:	11	DI (MTII)	Directorate of Industry	Table 2-4
Government organisation 30:	15	FSC	Food Security Council	Table 2-4
Government organisation 31:	01	LC	Land Commission	Table 2-4
Government organisation 32:	14	NBS	National Bureau of Statistics	Table 2-4
Government organisation 33:	01	Academia	Universities	Table 2-4
Government organisation 34:	10	WRMA	Water Resources Management Authority	Table 2-4
Government organisation 35:	11	BWB	Basin Water Boards	Table 2-4
Government organisation 36:	15	IB	Irrigation Boards	Table 2-4
Government organisation 37:	12	CC	Catchment Committees	Table 2-4
Government organisation 38:	14	WUA	Water Users Association	Table 2-4
Government organisation 39:	01	FU	Farmers Union	Table 2-4
(6) Other organisation 1:	01	PS	Private Sector	Table 2-4
Other organisation 2:	02	DP	Development Partners	Table 2-4
Other organisation 3:	09	NGO	Non-Governmental organizations	Table 2-4
Other organisation 4:	03	CBO	Community based organization e.g. a community development committee	Table 2-4
Other organisation 5:	04	F U	Farmers Union	Table 2-4
Other organisation 6:	05	PU	Pastoralists Union	Table 2-4
Other organisation 7:	06	CS	Cooperatives Society	Table 2-4
Other organisation 8:	07	FF	Fishing Folks	Table 2-4
(7) Irrigation Potential Zone 1:	01	MZ	Mountainous Zone	Table 2-5

Items	Reference/Description			
Irrigation Potential Zone 2:	02	IZ	Intermittent Zone	Table 2-5
Irrigation Potential Zone 3:	03	FZ	Flood plains Zone	Table 2-5
Irrigation Potential Zone 4:	04	WRC	Wet lands and river corridors	Table 2-5
(8) Planning Phases (start):	01, 02, 03, 04	PH1, PH2, PH3, PH4	Phase-1 (5 years), Phase-2 (5 years), Phase-3 (5 years), Phase-4 (10 years)	Table 2-6
(9) Objective time horizon:	01, 02, 03	ST MT LT	Short-term, Medium-term, Long-term	Table 2-7
(10) Ownership:	02	NPSI	State Government	Table 2-8
(11) Funding sources 1:	21	SSB	State Government Budget	Table 2-10
Funding sources 2:	11	NNB	National Government Budget	Table 2-10
Funding sources 3:	23	SEF	Equity Financing(SEF)	Table 2-10
Funding sources 4:	31	DPG	Development Partners Grant (DPG)	Table 2-10
Funding sources 5:	51	NGG	NGO Grant (NGG)	Table 2-10
Funding sources 6:	42	PSL	Private sector Grants(PSL)	Table 2-10
Funding sources 7:	53	CI/C	Community Investment/Contribution	Table 2-10
(12) Activity types 1:	203	SD-ES	Extension and Training	Table 2-11
Activity types 2:	209	SD-EI	Economic Infrastructure Development	Table 2-11
Activity types 3:	211	SD-OM	Construction, Operation and Maintenance	Table 2-11
Activity types 3:	206	SD-SU	Provision of subsidy	Table 2-11
Activity types 4:	205	SD-CR	Provision of credit	Table 2-11
Activity types 5:	207	SD-PL	Granting Permissions and licenses	Table 2-11
Activity types 6:	104	ID-IM	Implementation and Monitoring	Table 2-11
Activity types 7:	201	SD-IM	Data and Information Analysis and management	Table 2-11
Activity types 8:	202	SD-ME	Macroeconomic Policy Implementation	Table 2-11

Part 2: Programme description

2.1 Programme justification and rationale

(1) Justification and rationale:

(General rationale)

In the Republic of South Sudan (RSS), currently irrigated agriculture is practiced only on less than 5% of the cultivated land (Joint Baseline Survey Report on the Agriculture and Animal Resources in SS, Oct. 2010). The natural conditions of the RSS are diverse by region with annual rainfall ranging from less than 500 mm to around 1,500 mm. Flood and drought occur occasionally threatening national food security. Therefore, fluctuation in annual production is significant due to the seasonal and climate variability. Under such circumstances, irrigation development is crucial in order to stabilize food security situation in the country in utilizing available water resources for agricultural production, to meet the national needs.

There has been less investment in irrigation sector in SS and even the established irrigation schemes have been left without continuous operation, maintenance and rehabilitation except for a limited part of Aweil Rice Irrigation Scheme. While the Northern Upper Nile pumps irrigation schemes are not completely operational. An abundant irrigation development potential has been identified from land productivity, socio-economic and water resources assessments under this master plan.

State Irrigation Schemes Development Programme (SISDP) is therefore needed under IDMP due to the following:

- To help putting in place adaptation and mitigation measures, in reducing risks of and vulnerability to seasonal and climate variability at the state level.
- To safeguard land degradation and other environmental impacts through better land and water management, at the state level.
- Transformation from subsistence farming and achieved surplus production by introducing innovative methods including irrigation technologies/techniques, so as to alleviate poverty and increase income of population at state level.
- To consolidate decentralisation, state governments are fit to deal with some small to medium scale irrigation schemes, to coordinate, develop, owned and manage them.
- To deal with water delivery and control systems for small to medium scale farming that

Items	Reference/Description
(2) Overall description including temporal and spatial extent:	<p>contribute to jobs creation; empowerment of vulnerable groups (including women); and enhancement/strengthening of entrepreneurs and enterprises at state level.</p> <p>The programme is to establish Irrigation Schemes by the State Governments as main owners and operators of irrigation facilities, to help putting in place mitigation measures against dry spells, drought and floods; to safeguard land degradation and other environmental impacts through better land and water management; transform from subsistence farming to surplus production by introducing innovative methods, so as to alleviate poverty and increase income of the populations at state level; and to consolidate decentralisation.</p> <p>Specifically, SISDP will deal with water delivery and control systems for small to medium scale farming that contribute to jobs creation; empowerment of vulnerable groups (including women); and enhancement/strengthening of entrepreneurs and enterprises at state level.</p> <p>The Programme covers the irrigation potential area of all over the country excluding the areas cutting across the boundaries of States; and it includes short-term, medium-term and long term time frames.</p>

2.2 Objective

To promote innovative irrigated agriculture and other productive uses through effective, efficient and sustainable utilization and management of land, water and other related resources at state level.

2.3 Outputs

- Medium/small scale irrigation facilities rehabilitated/established
- Medium/small scale irrigated farmlands
- Enhanced agricultural production systems through irrigation
- Enhanced efficiency of water use for agricultural production
- Improved water and land conservation practices
- Improved flood control and drainage systems
- Increased agricultural production and productivity at state level
- Measures to mitigate seasonal and climate variability.
- Irrigated agricultural contribution to state revenues
- Jobs created or people employed (including self-employment).
- Enterprises facilitated (agribusinesses and agro-industries emerged)

2.4 Components/Projects/Activities identified under the Programme

(1) Components/Projects/Activities under the Programme:	<ol style="list-style-type: none"> 1. Provision, operation and maintenance of small scale irrigation facilities and systems for horticulture farming (vegetables and fruits production) in rural areas 2. Provision, operation and maintenance of small scale irrigation facilities and systems for peri-urban horticulture farming (vegetables and fruits production) 3. Provision, operation and maintenance of water facilities for small scale aquaculture for communities who have no access to natural fishing opportunities 4. Restoration of vegetation at water catchments in collaboration with communities through tree plantation; and water/soil conservation structures (check dams, terraces and etc.), to arrest erosion and prevent siltation in water facilities including reservoirs, canals, etc. Identified areas include Eastern Equatoria water harvesting sites, etc. 5. Provision, operation and maintenance of water facilities for horticulture and tree nurseries. 6. Provision, operation and maintenance of irrigation facilities and systems for tea and coffee plantations within the greenbelt in collaboration with private sector and communities. 7. Provision, operation and maintenance of irrigation facilities and systems in collaboration with the private sector for sugarcane production (e.g. Mangalla, Malut, etc.); in addition to any other agro-industry base crop (e.g. cotton). 8. Provision, operation and maintenance of irrigation facilities and systems in collaboration with private sector and communities for rice production in lowlands/plains 9. Provision, operation and maintenance of livestock watering points along cattle migratory routes within the rangelands.
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Items	Reference/Description
	10. Some specific irrigation schemes/projects to be identified from high resolution assessment 11. Provision of flood control and drainage infrastructure/facilities for farms and pasturelands 12. Provision, operation and maintenance of irrigation facilities and systems in collaboration with private sector and communities for wheat production in semi-arid areas 13. Water for productive uses in Eastern Equatoria State with the support of The Netherlands 14. Water for productive uses in Lakes State with the support of The Netherlands 15. Nyimur multipurpose water resources management and development project of NELSAP on Aswa in Eastern Equatoria State 16. Other irrigation schemes to be identified from high resolution assessment Remarks: All the programme components/projects/schemes will be implemented in short-, Medium- and Long-term

2.5 Service providers and beneficiaries

(1) Description of service providers within the framework of the programme:	National, State and Local Governments; private sector; DPs; etc.
(2) Description of beneficiaries within the framework of the programme	Farmers, irrigation schemes, private sector, local population, residents, etc.

2.6 Environmental and social impact, and mitigation measures

(1) Expected level of negative impact (select an indicator from the list in the right)	<table border="1"> <tbody> <tr> <td>b</td> <td> Programme a: is likely to have minimal or little impact on the environment and/or society b: may have an impact on the environment and/or society c: is likely to have a significant impact on the environment and/or society d: will have a significant impact on the environment and/or society </td> </tr> </tbody> </table>	b	Programme a: is likely to have minimal or little impact on the environment and/or society b: may have an impact on the environment and/or society c: is likely to have a significant impact on the environment and/or society d: will have a significant impact on the environment and/or society
b	Programme a: is likely to have minimal or little impact on the environment and/or society b: may have an impact on the environment and/or society c: is likely to have a significant impact on the environment and/or society d: will have a significant impact on the environment and/or society		
(2) Description of expected negative and/or positive environmental and social impact, and mitigation measures	<p>Negative impacts:</p> <ul style="list-style-type: none"> - Conflict over land and water use - Diversion of floods or drainage to other people land away from the schemes - Expected health hazards. - Voluntary/Involuntary migration <p>Mitigation Measures:</p> <ul style="list-style-type: none"> - Ensuring proper land allocation and ownership in line with land acts and through established land committee - Ensuring proper procedures in water allocation through basin boards, water users association, etc. - Health education and treatment centres. - Ensuring proper compensation procedures and actions - Ensuring of proper water control at the farm including provision of specific retaining areas for flood water and disposal of farms drainage 		

2.7 Monitoring and evaluation for impact measurement

(1) Measurable indicators and situation at a starting point:	Area irrigated (ha) Crop production (unit yield) Types of crops being grown Number of people employed (including self-employed) Number of productive associations, agribusinesses and agro-industries
(2) Measurable indicators and situation at the end point:	Number of schemes developed and rehabilitated Area irrigated (ha) Cultivation yield (ton/ha) Number of jobs created or people employed (including self-employment) Number of productive associations, agribusinesses and agro-industries established/formed
(3) Methods of measurement and sources of information:	Carryout assessments and field surveys; and use other sources of information such as: schemes and government documentation by management and departments in charge (e.g.

Items	Reference/Description
(4) Responsible parties for the monitoring and evaluation:	to find out crops yields, cost of inputs, financial agreements, etc.). Related government establishments as enumerated in 1.2 (5), DPs, private sector, etc.

2.8 Required human resources

(1) Principle of human resources management:	- Public services regulations and procedures (including secondment and loan of personnel) - Contract employment and professional services
(2) Required human resources in the public sector (Positions, grades and numbers):	Based on organizational hierarchy of government establishments above in section 1.2 (5), Including: <ul style="list-style-type: none"> • Position of directors: Grade 2 (D. G.), grade 3 (Director), grade 4 (D.D.) and grade 5 (Asst. D.); and grade 7 (Senior Inspector), grade 8 (inspector) and grade 9 (Asst. Inspector) at programme supervision, management, implementation and field levels; and • Position of technicians and sub-professionals: Grade (10-14) at programme support level.
(3) Required human resources in the private sector including consultants (positions, qualification and numbers):	Technical assistance for programme implementation is required (6 professionals) e.g. one irrigation engineer, one agricultural engineer, one electromechanical (facility engineer), one socio- economist, costs estimate specialist and one institutional specialist.

2.9 Outcomes and impact (contributions to value added, i.e. economic and income growth)

(1) Outcomes and impact:	<ul style="list-style-type: none"> • Improved land and crop productivity. • Improved food security; and reduction in levels of poverty among farmers and populations at state level. • Reduction of risks and vulnerability of crops production to seasonal and climate variability. • Realized contribution by irrigated agriculture to state income. • Increased in jobs and enabled productive associations, agribusinesses and agro-industries
(2) EIRR and/or FIRR, and/or other economic analysis Economic Internal Rate of Return Financial Internal Rate of Return	(if applicable)

2.10 Risk assessment with respect to project objectives and resources to be applied

(1) Expected level of risk	L	L: Low	M: Medium	H: High	(select an indicator from the list)
(2) Explanation of expected risks	- Unforeseen circumstances which cannot be managed by the programme - Natural disaster (e.g. flood, drought)				

2.11 Other special considerations and/or notes

(1) Other special considerations and/or notes	<ul style="list-style-type: none"> - Coordination between related government establishments above in section 1.2 (5), Private sector (through industrial attachment), DPs, NGOs, etc, at all levels. - The related government establishments in 1.2(5) must be maintained and sustained - Establishment and functionality of the structures in the draft water bill - Financial support either from government, development partners and private sector - Simultaneous implementation with Human Resources and Institutional Development for Irrigated Agriculture Programme, Irrigated Agriculture Extension Programme and relevant CAMP projects
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2.12 Routine operation and required resources after the completion of the programme

(1) Description of routine activities and outputs and required financial and human resources after the completion of the project. Description of the required resources can be done in an indicative manner.	<ol style="list-style-type: none"> 1. Development of annual implementation plans 2. Costing and Budgeting 3. Allocation of human resource to project 4. Designing of irrigation schemes and other productive/conservation water supply systems 5. Development of irrigation models for state irrigation schemes 6. Implementation of priority projects 7. Extension of the implementation 8. Operation, maintenance, monitoring & evaluation of the irrigation schemes 9. Coordination and collaboration with related ministries/institutions at all levels
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2.4 County Irrigation Scheme Development Programme (CISDP)

Items	Reference/Description
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Part 1: Programme profile administration

1.1 Programme identification

(1) Element:	03 Irrigation Facilities Development and Management (IFDM)		
(2) Programme name:	County Irrigation Scheme Development Programme (CISDP)		
(3) Programme ID:	0	4	
(4) Start and ending fiscal year:	Starting FY: 2015	Ending FY: 2040	Duration (years): 25
(5) Total investment:	SSP 14,695,400,000 (include National/State/County)	USD 4,981,500,000 (include National/State/County)	Note: Not including recurrent cost
(6) Name of this file (automatic):	IDMP Programme Profiles		

1.2 Programme classification scheme

	Code	Abbreviation	Description	Reference
(1) Development theme:	02, 03, 04, 11, 15	RR, FS, ED, EID, NR	Reconstruction and recovery, Food security, Economic and income growth, Economic infrastructure Development, Natural resources management	Table 2-1
(2) Element:	03	IFDM	Irrigation facilities development and management	Table 2-2
(3) CAADP Pillars:	01	CAADP P1	Land and water management	Table 2-9
Other Initiatives:	06	NELSAP-MSI OA	Water resources development and management planning	Table 2-9
(4) Location:	00	RSS	The Republic of South Sudan	Table 2-3
4.1 State:				Table 2-3
4.2 County:				Table 2-3
Others:				Table 2-3
4.3 Administrative Areas				Table 2-3
County:				Table 2-3
Others:				Table 2-3
(5) Government organisation 1:	02	DID (MEDIWR)	Directorate of Irrigation and Drainage	Table 2-4
Government organisation 2:	04	DPP (MEDIWR)	Directorate of Planning and Programmes	Table 2-4
Government organisation 3:	03	DWRM (MEDIWR)	Directorate of Water Resources Management	Table 2-4
Government organisation 4:	07	DPEG (MEDIWR)	Directorate of Power Engineering and Grid	Table 2-4
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Government organisation 9:	13	DPAE (MAFCRD)	Directorate of Planning and Agriculture Economics	Table 2-4
Government organisation 10:	02	DSSPC (MAFCRD)	Directorate of States and Special Projects Coordination	Table 2-4
Government organisation 11:	01	DWB (MOE)	Wetlands and Biodiversity	Table 2-4
Government organisation 12:		DWLC (MWLCT)	Directorate of Wild Life Conservation	Table 2-4
Government organisation 13:	01	DPP (MLHPP)	Directorate of Physical Planning	Table 2-4
Government organisation 14:	05	DAPRM (MLFI)	Directorate of Animal Production and Range Management	Table 2-4

Annex 6: Programmes' Profiles

Items	Reference/Description			
Government organisation 15:	09	DLFRD (MLFI)	Directorate of Livestock and Fisheries Research Development	Table 2-4
Government organisation 16:	10	DEPD (MLFI)	Directorate of Extension and pastoralists Development	Table 2-4
Government organisation 17:	06	DFAD (MLFI)	Directorate of Fisheries and Aquaculture Development	Table 2-4
Government organisation 18:	01	DPSD (MLFI)	Directorate of Planning, Statistics and Documentation	Table 2-4
Government organisation 19:	04	DIMS (MLFI)	Directorate of Investment, Marketing and Supplies	Table 2-4
Government organisation 20:	01	SSMS (MTRB)	South Sudan Metrological services	Table 2-4
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Government organisation 34:	01,02	SDALFF (SLMALFF)	State Directorate of Agriculture, Livestock, Fisheries and Forestry (SDALFF)	Table 2-4
Government organisation 35:	03	SDC/RD (SLMC/RD)	State Directorate of Cooperatives, Rural/Community Development	Table 2-4
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Other organisation 9:	08	CS	Civil Society	Table 2-4
(7) Irrigation Potential Zone1:	01	MZ	Mountainous	Table 2-5
Irrigation Potential Zone 2:	02	IZ	Intermittent	Table 2-5
Irrigation Potential Zone 3:	03	FZ	Flood plains	Table 2-5
Irrigation Potential Zone 4:	04	WRC	Wet lands and river corridors	Table 2-5
(8) Planning time horizon (start):	01, 02, 03, 04	PH1, PH2, PH3, PH4	Phase-1 (5 years), Phase-2 (5 years), Phase-3 (5 years), Phase-4 (10 years)	Table 2-6
(9) Objective time horizon:	01, 02, 03	ST MT LT	Short-term, Medium-term, Long-term	Table 2-7
(10) Ownership:	01	NPNI	National Programme	Table 2-8
(11) Funding sources 1:	11	N/S/CB	National/State/County budget	Table 2-10

Items	Reference/Description			
Funding sources 2:	12	NDF	National development fund	Table 2-10
Funding sources 3:	13	NEF	Equity Financing(EF)	Table 2-10
Funding sources 4:	31	DPG	Development Partners Grant	Table 2-10
Funding sources 5:	32	DPL	Development Partners Loan	Table 2-10
Funding sources 6:	51	NGG	NGO Grant	Table 2-10
Funding sources 7:	42	PSG	Private sector Grants	Table 2-10
Funding sources 8:	53	CI/C	Community Investment/Contribution	Table 2-10
(12) Activity types 1:	209	SD-EI	Economic infrastructure development	Table 2-11
Activity types 2:	211	SD-OM	Construction, Operation and Maintenance	Table 2-11

Part 2: Programme description

2.1 Programme justification and rationale

(1) Justification and rationale:

(General rationale)

In the Republic of South Sudan (RSS), currently irrigated agriculture is practiced only on less than 5% of the cultivated land (Joint Baseline Survey Report on the Agriculture and Animal Resources in SS, Oct. 2010). The natural conditions of the RSS are diversified by region with annual rainfall ranging from 500 mm in the north to 1,800 mm in the south. Flood and drought occurs occasionally threatening national food security, for instance, grain production in the year 2010 was 70% of the national requirement (source: NBS). Further, fluctuation in annual production is significant due to the unstable climate. Under such circumstances, irrigation development is crucial in order to stabilize and utilize the water resources for agriculture to meet the national needs.

There has been less investment in irrigation sector in SS and even collapsed irrigation schemes have been left without rehabilitation except for a limited part of Aweil Rice Irrigation Scheme.

On the other hand, abundant irrigation development potential has been identified from water resources, land productivity, and socio-economy points of view.

(Why do we need as state scheme)

- From medium to small scale of irrigation development, the County (local government) could handle the irrigation development and could have advantage as closeness to the irrigation scheme sites.
- The County (local government) can demonstrate the decentralized administration of the country by establishing the state owned irrigation scheme.

(2) Overall description including temporal and spatial extent:

The programme is to establish Irrigation Schemes by the County (Local Government) as the main owner and operator of irrigation facilities.

The Programme covers the irrigation potential area of all over the country excluding the areas cutting across the boundaries of Counties.

The Programme includes short-term, medium-term and long term time frames.

2.2 Objective

To promote innovative irrigated agriculture and other productive uses through effective, efficient and sustainable utilization and management of land, water and other related resources at county level.

2.3 Outputs

- Medium/small scale irrigation facilities rehabilitated/established
- Medium/small scale irrigated farmlands
- Enhanced agricultural production systems through irrigation
- Enhanced efficiency of water use for agricultural production
- Improved water and land conservation practices
- Improved flood control and drainage systems
- Increased agricultural production and productivity at county level
- Measures to mitigate seasonal and climate variability.
- Irrigated agricultural contribution to county revenues
- Jobs created or people employed (including self-employment).
- Enterprises facilitated (agribusinesses and agro-industries emerged)

2.4 Components/Projects/Activities Identified under the Programme

Items	Reference/Description
(1) Components/Projects/Activities under the Programme:	<ol style="list-style-type: none"> 1. Provision, operation and maintenance of small scale irrigation facilities and systems for horticulture farming (vegetables and fruits production) 2. Provision, operation and maintenance of small scale irrigation facilities and systems for peri-urban horticulture farming (vegetables and fruits production) 3. Provision and establishment of small scale irrigation facilities and systems for maize crop in wet land and river corridors, after recede of floods (drawdown or recession irrigation) 4. Provision, operation and maintenance of water facilities for small scale aquaculture for communities who have no access to natural fishing opportunities 5. Restoration of vegetation at water catchments in collaboration with communities through tree plantation; and water/soil conservation structures (check dams, terraces and etc.), to arrest erosion and prevent siltation in water facilities including reservoirs, canals, etc. Identified areas include Eastern Equatoria water harvesting sites, etc. 6. Provision, operation and maintenance of water facilities for horticulture and tree nurseries. 7. Provision, operation and maintenance of irrigation facilities and systems for tea and coffee plantations within the greenbelt in collaboration with private sector and communities. 8. Provision, operation and maintenance of irrigation facilities and systems in collaboration with private sector and communities for rice production in lowlands/plains 9. Provision, operation and maintenance of livestock watering points along cattle migratory routes within the rangelands. 10. Some specific irrigation schemes/projects to be identified from high resolution assessment 11. Provision of flood control and drainage infrastructure/facilities for farms and pasturelands 12. Provision, operation and maintenance of irrigation facilities and systems in collaboration with private sector and communities for wheat production in semi-arid areas 13. Nyimur multipurpose water resources management and development project of NELSAP on Aswa in Magwi County, Eastern Equatoria State 14. Other irrigation schemes to be identified from high resolution assessment <p>Remarks: All the programme components/projects/schemes will be implemented in short-, Medium- and Long-term</p>

2.5 Service providers and beneficiaries

(1) Description of service providers within the framework of the programme:	National, State and Local Governments; private sector; DPs; etc.
(2) Description of beneficiaries within the framework of the programme	Farmers, irrigation schemes, private sector, local population, residents, etc.

2.6 Environmental and social impact, and mitigation measures

(1) Expected level of negative impact (select an indicator from the list in the right)	<table border="1" style="width: 100%;"> <tr> <td style="width: 5%; text-align: center;">b</td> <td> Programme a: is likely to have minimal or little impact on the environment and/or society b: may have an impact on the environment and/or society c: is likely to have a significant impact on the environment and/or society d: will have a significant impact on the environment and/or society </td> </tr> </table>	b	Programme a: is likely to have minimal or little impact on the environment and/or society b: may have an impact on the environment and/or society c: is likely to have a significant impact on the environment and/or society d: will have a significant impact on the environment and/or society
b	Programme a: is likely to have minimal or little impact on the environment and/or society b: may have an impact on the environment and/or society c: is likely to have a significant impact on the environment and/or society d: will have a significant impact on the environment and/or society		
(2) Description of expected negative environmental and social impact, and mitigation measures	<p>Negative impacts:</p> <ul style="list-style-type: none"> - Conflict over land and water use - Diversion of floods or drainage to other people land away from the schemes - Expected health hazards. - Voluntary/Involuntary migration <p>Mitigation Measures:</p> <ul style="list-style-type: none"> - Ensuring proper land allocation and ownership in line with land acts and through established land committee - Ensuring proper procedures in water allocation through basin boards, water users 		

Items	Reference/Description
	association, etc. - Health education and treatment centres. - Ensuring proper compensation procedures and actions - Ensuring of proper water control at the farm including provision of specific retaining areas for flood water and disposal of farms drainage

2.7 Monitoring and evaluation for impact measurement

(1) Measurable indicators and situation at a starting point:	Area irrigated (ha) Crop production (unit yield) Types of crops being grown Number of people employed (including self-employed) Number of productive associations and agribusinesses
(2) Measurable indicators and situation at the end point:	Number of schemes developed and rehabilitated Area irrigated (ha) Cultivation yield (ton/ha) Number of jobs created or people employed (including self-employment) Number of productive associations and agribusinesses established/formed
(3) Methods of measurement and sources of information:	Carryout assessments and field surveys; and use other sources of information such as: schemes and government documentation by management and departments in charge (e.g. to find out crops yields, cost of inputs, financial agreements, etc.).
(4) Responsible parties for the monitoring and evaluation:	Related government establishments as enumerated in 1.2 (5), DPs, private sector, etc.

2.8 Required human resources

(1) Principle of human resources management:	- Public services regulations and procedures (including secondment and loan of personnel) - Contract employment and professional services
(2) Required human resources in the public sector (Positions, grades and numbers):	Based on organizational hierarchy of government establishments above in section 1.2 (5), Including: <ul style="list-style-type: none"> • Position of directors: Grade 5 (Asst. D.); and grade 7 (Senior Inspector), grade 8 (inspector) and grade 9 (Asst. Inspector) at programme supervision, management, implementation and field levels; and • Position of technicians and sub-professionals: Grade (10-14) at programme support level.
(3) Required human resources in the private sector including consultants (positions, qualification and numbers):	Technical assistance for programme implementation is required (6 professionals) e.g. one irrigation engineer, one agricultural engineer, one electromechanical (facility engineer), one socio- economist, costs estimate specialist and one institutional specialist.

2.9 Outcomes and impacts (contributions to value added, i.e. economic and income growth)

(1) Outcomes and impact:s	<ul style="list-style-type: none"> • Improved land and crop productivity. • Improved food and nutrition security; and reduction in levels of poverty among farmers and populations at county level. • Reduction of risks and vulnerability of crops production to seasonal and climate variability. • Realized contribution by irrigated agriculture to county income. • Increased in jobs and enabled productive associations and agribusinesses
(2) EIRR and/or FIRR, and/or other economic analysis Economic Internal Rate of Return Financial Internal Rate of Return	(if applicable)

2.10 Risk assessment with respect to project objectives and resources to be applied

(1) Expected level of risk	L	L: Low	M: Medium	H: High	(select an indicator from the list)
(2) Explanation of expected risks	- Unforeseen circumstances which cannot be managed by the programme - Natural disaster (e.g. flood, drought)				

2.11 Other special considerations and/or notes

(1) Other special considerations and/or notes	- Coordination between related government establishments above in section 1.2 (5), Private sector (through industrial attachment), DPs, NGOs, etc, at all levels. - The related government establishments in 1.2(5) must be maintained and sustained
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Items	Reference/Description
	<ul style="list-style-type: none"> - Establishment and functionality of the structures in the draft water bill - Financial support either from government, development partners and private sector - Simultaneous implementation with Human Resources and Institutional Development for Irrigated Agriculture Programme, Irrigated Agriculture Extension Programme and relevant CAMP projects

2.12 Routine operation and required resources after the completion of the programme

<p>(1) Description of routine activities and outputs and required financial and human resources after the completion of the project. Description of the required resources can be done in an indicative manner.</p>	<ol style="list-style-type: none"> 1. Development of annual implementation plans 2. Costing and Budgeting 3. Allocation of human resource to project 4. Designing of irrigation schemes and other productive/conservation water supply systems 5. Implementation of county irrigation schemes 6. Implementation of priority projects 7. Extension of the implementation 8. Operation, maintenance, monitoring & evaluation of the irrigation schemes 9. Coordination and collaboration with related ministries/institutions at all levels
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2.5 Community Irrigation Farms Development Programme (CIFDP)

Items	Reference/Description
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Part 1: Programme profile administration

1.1 Programme identification

(1) Element:	03 Irrigation Facilities Development and Management (IFDM)		
(2) Programme name:	Community Irrigation Farms Development Programme (CIFDP)		
(3) Programme ID:	0	5	
(4) Start and ending fiscal year:	Starting FY: 2015	Ending FY: 2040	Duration (years): 25
(5) Total investment:	SSP 34,904,000	USD 11,832,000	Note: Not including recurrent cost
(6) Name of this file (automatic):	IDMP Programme Profile		

1.2 Programme classification scheme

	Code	Abbreviation	Description	Reference
(1) Development theme:	01, 03, 04,05,11, 12, 15	GF, FS, EIG,AT, EI, SI,NR	Government Function, Food security, Economic and income growth, Agricultural Sector Transformation , Economic infrastructures , Social infrastructure, Natural resources management	Table 2-1
(2) Element:	03	IFDM	Irrigation facilities development and management	Table 2-2
(3) CAADP Pillars:	01, 02, 03	CAADP P1, CAADP P2, CAADP P3	Land and water management, market access , Food supply and hunger	Table 2-9
Other Initiatives:	06	NELSAP-MSI OA,	Water resources development and management planning	Table 2-9
(4) State 1:	00	RSS	The Republic of South Sudan(All states)	Table 2-3
(5) Government organisation 1:	02	DID (MEDIWR)	Directorate of Irrigation and Drainage	Table 2-4
Government organisation 2:	04	DPP (MEDIWR)	Directorate of Planning and Programmes	Table 2-4
Government organisation 3:	03	DWRM (MEDIWR)	Directorate of Water Resources Management	Table 2-4
Government organisation 4:	07	DPEG (MEDIWR)	Directorate of Power Engineering and Grid	Table 2-4
Government organisation 5:	05	DHS (MEDIWR)	Directorate of Hydrology and Survey	Table 2-4
Government organisation 6:	01	FSC	Food Security Council	Table 2-4
Government organisation 7:	12	DAPES (MAFCRD)	Directorate of Agriculture Production and Extension Services	Table 2-4
Government organisation 8:	03	DC (MAFCRD)	Directorate of Cooperatives	Table 2-4
Government organisation 9:	08	DRD (MAFCRD)	Directorate of Rural Development	Table 2-4
Government organisation 10:	13	DPAE (MAFCRD)	Directorate of Planning and Agriculture Economics	Table 2-4
Government organisation 11:	02	DSSPC (MAFCRD)	Directorate of Special Projects and Donors Coordination	Table 2-4
Government organisation 12:	01	DWB (MOE)	Wetlands and Biodiversity	Table 2-4
Government organisation 13:	13	DWLC (MWLCT)	Directorate of Wild Life Conservation	Table 2-4
Government organisation 14:	10	DPP (MLHPP)	Directorate of Physical Planning	Table 2-4
Government organisation 15:	05	DAPRM (MLFI)	Directorate of Animal Production and Range Management	Table 2-4
Government organisation 16:	09	DLFRD (MLFI)	Directorate of Livestock and Fisheries Research Development	Table 2-4
Government organisation 17:	10	DEPD (MLFI)	Directorate of Extension and pastoralists Development	Table 2-4

Annex 6: Programmes' Profiles

Items	Reference/Description			
Government organisation 18:	06	DFAD (MLFI)	Directorate of Fisheries and Aquaculture Development	Table 2-4
Government organisation 19:	01	DPSD (MLFI)	Directorate of Planning, Statistics and Documentation	Table 2-4
Government organisation 20:	04	DIMS (MLFI)	Directorate of Investment, Marketing and Supplies	Table 2-4
Government organisation 21:	01	SSMS (MTRB)	South Sudan Metrological services	Table 2-4
Government organisation 22:	04	DSW	Directorate of Social Welfare	Table 2-4
Government organisation 23:	14	PASP	Planning (Aid & Sectoral Planning)	Table 2-4
Government organisation 24:	11	DI	Directorate of Industry	Table 2-4
Government organisation 25:	01	LC	Land Commission	Table 2-4
Government organisation 26:	14	NBS	National Bureau of Statistics	Table 2-4
Government organisation 27:	01	Academia	Universities	Table 2-4
Government organisation 28:	10	WRMA	Water Resources Management Authority	Table 2-4
Government organisation 29:	11	BWB	Basin Water Boards	Table 2-4
Government organisation 30:	15	IB	Irrigation Boards	Table 2-4
Government organisation 31:	12	CC	Catchment Committees	Table 2-4
Government organisation 32:	14	WUA	Water Users Association	Table 2-4
Government organisation 33:	01	SDWS	State Directorate of Water and Sanitation	Table 2-4
Government organisation 34:	01,02	SDALFF (SLMALFF)	State Directorate of Agriculture, Livestock, Fisheries and Forestry (SDALFF)	Table 2-4
Government organisation 35:	03	SDC/RD (SLMC/RD)	State Directorate of Cooperatives, Rural/Community Development	Table 2-4
Government organisation 36:	02	SDLS (SLMLS)	State Directorate of Land and Survey	Table 2-4
Government organisation 37:	01	CDWS (LG)	County Department of Water and Sanitation (CDWS)	Table 2-4
Government organisation 38:	-2	CDALFF (LG)	County Department of Agriculture, Livestock, Fisheries and Forestry (CDALFF)	Table 2-4
Government organisation 39:	03	CDC/RD	County Department of Cooperatives, Community/Rural Development	Table 2-4
(6) Other organisation 1:	01	PS	Private Sector	Table 2-4
Other organisation 2:	02	DP	Development Partners	Table 2-4
Other organisation 3:	09	NGO	Non-Governmental organizations	Table 2-4
Other organisation 4:	03	CBO	Community based organization e.g. a community development committee	Table 2-4
Other organisation 5:	04	F U	Farmers Union	Table 2-4
Other organisation 6:	05	PU	Pastoralists Union	Table 2-4
Other organisation 7:	06	CS	Cooperatives Society	Table 2-4
Other organisation 8:	07	FF	Fishing Folks	Table 2-4
Other organisation 9:	08	CS	Civil Society	Table 2-4
(7) Irrigation Potential Zone 1:	01	MZ	Mountainous zone	Table 2-5
Irrigation Potential Zone 2:	02	IZ	Intermittent zone	Table 2-5
Irrigation Potential Zone 3:	03	FZ	Flood plains zone	Table 2-5
Irrigation Potential Zone 4:	04	WRC	Wet lands and river corridors zone	Table 2-5
(8) Planning time horizon (start):	01, 02, 03, 04	PH1, PH2,PH3, PH4	Phase-1 (5 years), Phase-2 (5 years), Phase-3 (5 years), Phase-4 (10 years).	Table 2-6
(9) Objective time horizon:	01, 02, 03	ST, MT,LT	Short, Medium and long . term	Table 2-7
(10) Ownership:	05	C/LG	Community/ Local Government	Table 2-8
(11) Funding sources 1:	12	NDF	National Development Fund	Table 2-10
Funding sources 2:	22	SDF	State Development Fund	Table 2-10
Funding sources 3:	31	DPG	Development Partners Grant	Table 2-10
Funding sources 4:	51	NGG	NGO Grant	Table 2-10
Funding sources 5:	42	PSG	Private Sector Grant	Table 2-10
Funding sources 6:	53	CI/C	Community Investment/Contribution	Table 2-10
(12) Activity types 1:	202	SD-ME	Macroeconomic infrastructure Implementation	Table 2-11
Activity types 2:	102	ID- AD	Administrative capacity development	Table 2-11

Items	Reference/Description			
Activity types 3:	203	SD-EX	Extension and Training	Table 2-11
Activity types 4:	210	SD-SI	Social Infrastructure Development	Table 2-11
Activity types 5:	211	SD-OM	Construction, Operation and Maintenance	Table 2-11

Part 2: Programme description

2.1 Programme justification and rationale

(1) Justification and rationale:

(General rationale)

In the Republic of South Sudan (RSS), currently irrigated agriculture is practiced only on less than 5% of the cultivated land (Joint Baseline Survey Report on the Agriculture and Animal Resources in SS, Oct. 2010). The natural conditions of the RSS are diversified by region with annual rainfall ranging from 500 mm in the north to 1,800 mm in the south. Flood and drought occurs occasionally threatening national food security, for instance, grain production in the year 2010 was 70% of the national requirement (source: NBS). Further, fluctuation in annual production is significant due to the unstable climate. Under such circumstances, irrigation development is crucial in order to stabilize and utilize the water resources for agriculture to meet the national needs.

There has been less investment in irrigation sector in SS and even collapsed irrigation schemes have been left without rehabilitation except for a limited part of Aweil Rice Irrigation Scheme.

On the other hand, abundant irrigation development potential has been identified from water resources, land productivity, and socio-economy points of view.

(Why do we need Community (small holders) Irrigation Development)

- Poverty reduction.
- To increase households income.
- Job creation.
- Transformation from subsistence/ rain- fed farming to irrigation practise.

(2) Overall description including temporal and spatial extent of project:

The programme is to establish Communities Irrigation projects by State government/ counties.

The Programme covers the potential irrigation areas across the country.

The programme is basically capacity development of community to be able to establish small-scale irrigation area using available resources in their community. The Programme is to provide technical assistance to the community farmers for how to divert stream / river water into farmlands.

2.2 Objective

To promote innovative irrigated agriculture and other productive uses through effective, efficient and sustainable utilization and management of land, water and other related resources by communities

2.3 Outputs

- Small scale irrigation facilities rehabilitated/established
- small scale irrigated farmlands
- Enhanced agricultural production systems through irrigation
- Enhanced efficiency of water use for agricultural production
- Improved water and land conservation practices
- Improved flood control and drainage systems
- Increased agricultural production and productivity by communities
- Measures to mitigate seasonal and climate variability.
- Irrigated agricultural contribution to income of community members
- Productive associations, entrepreneurs and enterprises established.

2.4 Components/Projects/Activities Identified under the Programme

(1) Components/Projects/Activities under the Programme:

1. Provision, operation and maintenance of small scale irrigation facilities and systems for horticulture farming (vegetables and fruits production)
2. Provision, operation and maintenance of small scale irrigation facilities and systems for small scale sugarcane plantation (for direct consumption)
3. Provision, operation and maintenance of small scale irrigation facilities and systems for peri-urban horticulture farming (vegetables and fruits production)

Items	Reference/Description
	<p>4. Provision, operation and maintenance of small scale irrigation facilities and systems for maize crop in wet land and river corridors, after recede of floods (drawdown or recession irrigation)</p> <p>5. Provision, operation and maintenance of water for small scale aquaculture for communities who have no access to natural fishing opportunities</p> <p>6. Provision, operation and maintenance of irrigation facilities and systems for tea and coffee plantations within the greenbelt in collaboration with private sector</p> <p>7. Provision, operation and maintenance of irrigation facilities and systems in collaboration with private sector for rice production in lowlands/plains</p> <p>8. Provision, operation and maintenance of livestock watering points along cattle migratory routes within the rangelands.</p> <p>9. Some specific irrigation schemes/projects to be identified from high resolution assessment</p> <p>10. Provision of flood control and drainage infrastructure/facilities for farms and pasturelands</p> <p>11. Provision, operation and maintenance of irrigation facilities and systems in collaboration with private sector and communities for wheat production in semi-arid areas</p> <p>12. Nyimur multipurpose water resources management and development project of NELSAP on Aswa, Parjok Payam, Magwi County, Eastern Equatoria State</p> <p>13. Other irrigation schemes to be identified from high resolution assessment</p> <p>Remarks: All the programme components/projects/schemes will be implemented in short-, Medium- and Long-term</p>

2.5 Service providers and beneficiaries

(1) Description of service providers within the framework of the programme:	National, State and Local Governments; private sector; DPs; etc.
(2) Description of beneficiaries within the framework of the programme	Farmers, irrigation farms, private sector, local population, residents, etc.

2.6 Environmental and social impact, and mitigation measures

(1) Expected level of negative impact (select an indicator from the list in the right)	<table border="1"> <tbody> <tr> <td>b</td> <td> Programme a: is likely to have minimal or little impact on the environment and/or society b: may have an impact on the environment and/or society c: is likely to have a significant impact on the environment and/or society d: will have a significant impact on the environment and/or society </td> </tr> </tbody> </table>	b	Programme a: is likely to have minimal or little impact on the environment and/or society b: may have an impact on the environment and/or society c: is likely to have a significant impact on the environment and/or society d: will have a significant impact on the environment and/or society
b	Programme a: is likely to have minimal or little impact on the environment and/or society b: may have an impact on the environment and/or society c: is likely to have a significant impact on the environment and/or society d: will have a significant impact on the environment and/or society		
(2) Description of expected negative and/or positive environmental and social impact, and mitigation measures	<p>Negative impacts:</p> <ul style="list-style-type: none"> - Conflict over land and water use - Diversion of floods or drainage to other people land away from the schemes - Expected health hazards. - Voluntary/Involuntary migration <p>Mitigation Measures:</p> <ul style="list-style-type: none"> - Ensuring proper land allocation and ownership in line with land acts and through established land committee - Ensuring proper procedures in water allocation through basin boards, water users association, etc. - Health education and treatment centres. - Ensuring proper compensation procedures and actions - Ensuring of proper water control at the farm including provision of specific retaining areas for flood water and disposal of farms drainage 		

2.7 Monitoring and evaluation for impact measurement

(1) Measurable indicators and situation at a starting point:	Area irrigated (ha) Crop production (unit yield) Types of crops being grown Number of people employed (including self-employed)
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Items	Reference/Description
(2) Measurable indicators and situation at the end point:	Number of productive cooperative societies
	Number of schemes developed and rehabilitated
	Area irrigated (ha)
	Cultivation yield (ton/ha)
	Number of jobs created or people employed (including self-employment)
(3) Methods of measurement and sources of information:	Number of productive cooperative societies established
	Carryout assessments and field surveys; and use other sources of information such as: farms and cooperative societies documentation (e.g. to find out crops yields, cost of inputs, financial agreements, etc.).
(4) Responsible parties for the monitoring and evaluation:	Related government establishments and organizations as enumerated in 1.2 (5), including DPs, private sector, farmers/pastoralists union, cooperatives societies, fishing folks, civil societies, etc.

2.8 Required human resources

(1) Principle of human resources management:	<ul style="list-style-type: none"> - Technical assistance by the government, DPs, private sector, etc. - Voluntary and customary norms - Contracting for services
(2) Required human resources in the public sector (Positions, grades and numbers):	<p>Based on organizational hierarchy of government establishments above in section 1.2 (5) at county level, including:</p> <ul style="list-style-type: none"> • Position of directors: Grade 5 (Asst. D.); and grade 7 (Senior Inspector), grade 8 (inspector) and grade 9 (Asst. Inspector) at programme supervision, management, implementation and field levels; and • Position of technicians and sub-professionals: Grade (10-14) at programme support level.
(3) Required human resources in the private sector including consultants (positions, qualification and numbers):	Technical assistance for programme implementation is required (6 professionals) e.g. one irrigation engineer, one agricultural engineer, one electromechanical (facility engineer), one socio- economist, costs estimate specialist and one institutional specialist.

2.9 Outcomes, impacts and contributions to value added (i.e. economic growth)

(1) Outcomes and impacts:	<ul style="list-style-type: none"> • Improved land and crop productivity. • Improved food security; and reduction in levels of poverty among communities. • Reduction of risks and vulnerability of crops production to seasonal and climate variability. • Realized contribution by irrigated agriculture to community income. • Enabled productive cooperative societies
(2) EIRR and/or FIRR, and/or other economic analysis Economic Internal Rate of Return Financial Internal Rate of Return	(if applicable)

2.10 Risk assessment with respect to project objectives and resources to be applied

(1) Expected level of risk	L	L: Low	M: Medium	H: High	(select an indicator from the list)
(2) Explanation of expected risks	<ul style="list-style-type: none"> - Unforeseen circumstances which cannot be managed by the programme - Natural disaster (e.g. flood, drought) 				

2.11 Other special considerations and/or notes

(1) Other special considerations and/or notes	<ul style="list-style-type: none"> - Coordination between related government establishments and organizations above in section 1.2 (5), Private sector, DPs, NGOs, etc, at all levels. - The related government establishments in 1.2(5) must be maintained and sustained - Establishment and functionality of the structures in the draft water bill - Financial support either from government, development partners and private sector - Simultaneous implementation with Human Resources and Institutional Development for Irrigated Agriculture Programme, Irrigated Agriculture Extension Programme and relevant CAMP projects
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2.12 Routine operation and required resources after the completion of the programme

(1) Description of routine activities and outputs and required financial and	<ol style="list-style-type: none"> 1. Initiation and implementation of community irrigation farms 2. Implementation of priority projects 3. Extension of the implementation
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Annex 6: Programmes' Profiles

Items	Reference/Description
<p>human resources after the completion of the project. Description of the required resources can be done in an indicative manner.</p>	<p>4. Operation, maintenance, monitoring & evaluation of the irrigation farms 5. Coordination and collaboration with related ministries/institutions at all levels</p>

2.6 Private Sector Irrigation Investment Promotion Programme (PSIIPP)

Items	Reference/Description
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Part 1: Programme profile administration

1.1 Programme identification

(1) Element:	01 Policy, Legal and Regulatory Framework (PLRF)		
(2) Programme name:	Private Sector Irrigation Investment Promotion Programme (PSIIPP)		
(3) Programme ID:	0	6	
(4) Start and ending fiscal year:	Starting FY: 2015	Ending FY: 2040	Duration (years): 25
(5) Total investment:	SSP 2,333,000	USD 791,000	Note: Including recurrent cost
(6) Name of this file (automatic):	IDMP Programme Profile		

1.2 Programme classification scheme

	Code	Abbreviation	Description	Reference
(1) Development theme:	010203, 04, 05, 11, 12, 13.	FG, RR, FS, EGAT, EID, SID, EH.	Function of the Government (FG), Reconstruction and recovery (RR), Food and Nutrition Security (FNS), Economic and Income Growth (EG), Agricultural Sector Transformation (AT), Economic Infrastructure Development (EID), Social Infrastructure Development (SID), Education and Health (EH).	Table 2-1
(2) Element:	01	LRF	Policy, Legal and Regulatory Framework	Table 2-2
(3) CAADP Pillars:	01	CAADP-P1	Land and water management	Table 2-9
Other Initiatives:	06	NELSAP-MSI OA	Multi Sector Investment Opportunity Analysis (MSIOA), a Water resources development and management investment planning programme	Table 2-9
	07	ENTRO- MSIOA	Multi Sector Investment Opportunity Analysis (MSIOA), a Water infrastructure investment programme	Table 2-9
	09	IGAD-RWRP	IGAD Regional Water Resources Policy	Table 2-9
	11	NBI-IDP	Information disclosure policy	Table 2-9
	12	NBI-ESP	Environmental and Social Policy	Table 2-9
	13	NBI-WLMS	Wetland management strategy	Table 2-9
	14	NBI-CCS	Climate change strategy	Table 2-9
(4) Location :	00	RSS	The Republic of South Sudan(All States)	Table 2-3
Administrative Areas:	01	AA	Abyei and Pibor	Table 2-3
Others:	02			
(5) Government organisation 1:	02	DID (MEDIWR)	Directorate of Irrigation and Drainage	Table 2-4
Government organisation 2:	04	DPP (MEDIWR)	Directorate of Planning and Programming	Table 2-4
Government organisation 3:	03	DWRM (MEDIWR)	Directorate of Water Resources Management	Table 2-4
Government organisation 4:	07	PEG (MEDIWR)	Directorate of Power Engineering and Grid	Table 2-4
Government organisation 5:	05	DHS (MEDIWR)	Directorate of Hydrology and Survey	Table 2-4
Government organisation 6:	11	DAPES (MAFCRD)	Directorate of Agriculture production and Extension Services	Table 2-4
Government organisation 7:	13	DP (MAFCRD)	Directorate of Planning	Table 2-4
Government organisation 8:	05	DAPRM (MLFI)	Directorate of Animals Production and Range Management	Table 2-4
Government organisation 9:	13	DEPD (MLFI)	Directorate Extension and Pastoralists Development	Table 2-4
Government organisation 10:	14	DFAD (MLFI)	Directorate of Fisheries and Aquaculture Development	Table 2-4

Annex 6: Programmes' Profiles

Items	Reference/Description			
Government organisation 11:	15	DPSD (MLFI)	Directorate of Planning, Statistics and Documentation	Table 2-4
Government organisation 12:	04	DIMS (MLFI)	Directorate of Investment, Marketing and Supplies	Table 2-4
Government organisation 13:	03	DCD (MAFCRD)	Directorate of Cooperatives	Table 2-4
Government organisation 14:	08	DRD (MAFCRD)	Directorate of Rural Development	Table 2-4
Government organisation 15:	07	DF (MAFCRD)	Directorate of Forestry	Table 2-4
Government organisation 16:	01	SDWS (SLMRWS)	State Directorates of Water and Sanitation	Table 2-4
Government organisation 17:	01	CDWS(LG)	County Department of Water and Sanitation	Table 2-4
Government organisation 18:	01,02	SDAFLF(SLM AFLF)	State Directorate of Agriculture, forestry, Livestock and Fisheries	Table 2-4
Government organisation 19:	02		County Department of Agriculture, forestry, Livestock and Fisheries Industry	Table 2-4
Government organisation 20:	03	SDC/RD (SLMC/RD)	State Directorate of Cooperatives, Rural Development	Table 2-4
Government organisation 21:	02	SDLS (SLMLS)	State Directorate of Land and Survey	Table 2-4
Government organisation 22:	01	CDWS (LG)	County Department of Water and Sanitation (CDWS)	Table 2-4
Government organisation 23:	02	CDALFF (LG)	County Department of Agriculture, Livestock, Fisheries and Forestry (CDALFF)	Table 2-4
Government organisation 24:	03	CDC/RD	County Department of Cooperatives, Community/Rural Development	Table 2-4
Government organisation 25:	13	DWLC (MWLCT)	Directorate of Wild Life Conservation	Table 2-4
Government organisation 26:	11	DI ((MTII))	Directorate of Industry	Table 2-4
Government organisation 27:	14	DPASP (MFEP)	Directorate Planning (Aid & Sectorial Planning)	Table 2-4
Government organisation 28:	10	DPP (MLHPP)	Directorate of Physical Planning	Table 2-4
Government organisation 29:	01	MoJ	Ministry of Justice	Table 2-4
Government organisation 30:	04	DWB (MoE)	Wetlands and Biodiversity	Table 2-4
Government organisation 31:	04	DSW (MGCSW)	Ministry of Gender, Child and Social welfare	Table 2-4
Government organisation 32:	01	LC	Land Commission	Table 2-4
Government organisation 33:	16	SSBS	South Sudan Bureau of Standards	Table 2-4
Government organisation 34:	14	NBS	National Bureau of Statistic	Table 2-4
Government organisation 35:	01	Academia	Universities	Table 2-4
Government organisation 36:	11	BWB	Basin Water Boards	Table 2-4
Government organisation 37:	10	WRMA	Water Resources Management Authority	Table 2-4
Government organisation 38:	14	WUA	Water Users Association	Table 2-4
Government organisation 39:	12	CC	Catchment Committees	Table 2-4
Government organisation 40:	13	SCC	Sub- Catchment Committees	Table 2-4
(6) Other organisation 1:	01	PS	Private Sector	Table 2-4
Other organisation 2:	02	DP	Development Partners	Table 2-4
Other organisation 3:	09	NGO	Non-Governmental organizations	Table 2-4
Other organisation 4:	03	CBO	Community based organization e.g. a community development committee	Table 2-4
Other organisation 5:	04	F U	Farmers Union	Table 2-4
Other organisation 6:	05	PU	Pastoralists Union	Table 2-4
Other organisation 7:	06	CS	Cooperatives Society	Table 2-4
Other organisation 8:	07	FF	Fishing Folks	Table 2-4
Other organisation 9:	08	CS	Civil Society	Table 2-4
(7) Irrigation Potential Zone 1:	01	MZ	Mountainous Zone (MZ)	Table 2-5

Items	Reference/Description			
Irrigation Potential Zone 2:	02	IZ	Intermittent Zone (IZ)	Table 2-5
Irrigation Potential Zone 3:	03	PZ	Plains Zone (PZ)	Table 2-5
(8) Planning phases (start):	01, 02, 03, 04	PH1, PH2, PH3, PH4	Phase-1 (5 years), Phase-2 (5 years), Phase-3 (5 years), Phase-4 (10 years)	Table 2-6
(9) Objective time horizon:	01, 02, 03	ST MT LT	Short-term, Medium-term, Long-term	Table 2-7
(10) Ownership:	01	NPNI	National/state/County/Community Programme	Table 2-8
(11) Funding sources 1:	11	NNB	National/State/county budget	Table 2-10
Funding sources 2:	13	NEF	National Equity Financing	Table 2-10
Funding sources 3:	23	SLGEF	State and Local Government Equity Financing	Table 2-10
Funding sources 4:	32	DPL	Development Partners Loan	Table 2-10
Funding sources 5:	42	PSL	Private sector loan	Table 2-10
Funding sources 6:	54	PSI	Private Sector Investment	Table 2-10
Funding sources 7:	53	CI/C	Community Investment/Contribution	Table 2-10
Funding sources 8:			Others	Table 2-10
(12) Activity types 1:	103	ID-PP	Policy formulation and planning	Table 2-11
Activity types 2:	104	ID-IM	Implementation and Monitoring	Table 2-11
Activity types 3:	201	SD-IM	Data and information Analysis and Management	Table 2-11
Activity types 4:	202	SD-ME	Macroeconomic Policy Implementation	Table 2-11
Activity types 5:	205	SD-CR	Provision of Credit	Table 2-11
Activity types 6:	207	SD-PL	Granting of Permission and Licences	Table 2-11
Activity types 7:	209	SD- EI	Economic Infrastructure Development	Table 2-11
Activity types 8:	211	SD- OM	Construction, Operation and Maintenance	Table 2-11

Part 2: Programme description

2.1 Programme justification and rationale

(1) Justification and rationale:

(General rationale)

In the Republic of South Sudan (RSS), currently irrigated agriculture is practiced only on less than 5% of the cultivated land (Joint Baseline Survey Report on the Agriculture and Animal Resources in SS, Oct. 2010). The natural conditions of the RSS are diverse by region with annual rainfall ranging from less than 500 mm to around 1,500 mm. Flood and drought occur occasionally threatening national food security. Therefore, fluctuation in annual production is significant due to the seasonal and climate variability. Under such circumstances, irrigation development is crucial in order to stabilize food security situation in the country in utilizing available water resources for agricultural production, to meet the national needs.

There has been less investment in irrigation sector in SS and even the established irrigation schemes have been left without continuous operation, maintenance and rehabilitation except for a limited part of Aweil Rice Irrigation Scheme. While the Northern Upper Nile pumps irrigation schemes are not completely operational. An abundant irrigation development potential has been identified from water resources, land productivity, and socio-economy assessments under this master plan.

Private Sector Investment is therefore needed due to the following:

- Utilization of potential irrigable agricultural land using private investment promotion.
- Utilization of various sources of capital.
- Enhancement of entrepreneurship and establishment of enterprises in irrigated agriculture.
- Importance of regulating private sector investment, so as to control overexploitation and illegal use of natural resources, e.g. to prevent land grabbing.
- Protection of national interest while accommodating foreign investment, e.g. formulation of policies and regulations for private sector investment promotion is essential.
- Safeguarding of community interest while accommodating private sector investment.

Items	Reference/Description		
(2) Overall description including temporal and spatial extent of programme:	The programme will ensure that policy; laws, regulations, standards and guidelines are formulated for providing an enabling environment for private sector involvement in irrigated agriculture. The investment in irrigation by the private sector will be guided by this programme. The guiding documents and associated procedures will be periodically reviewed in line with the progress of the business enterprise in irrigation development.		
2.2 Objective	To establish investment environment for promoting private investment in irrigated agriculture and other productive uses		
2.3 Outputs	<ul style="list-style-type: none"> ▪ Specific regulation and procedures to safeguard private sector investment. ▪ Specific regulations and procedures to protect national interest while accommodating foreign investment. ▪ Specific regulation and procedures to safeguard Local/community while accommodating private sector investment. 		
2.4 Components/Projects/Activities identified under the Programme	<p>(1) Components/Projects/Activities under the Programme:</p> <ul style="list-style-type: none"> • Establishment of investment support and promotion system of irrigation development for private investors under the PPP laws of RSS • Establishment of investment support and promotion system of irrigation development for foreign investors under the PPP laws of RSS • Establishment of an incentive/attraction system for special types of investment intervention, e.g. Scarce Food Security, Labour Intensive, Cash Generating and Agro-industry Supporting Crops, for irrigation development by private, individual or smallholder groups • Provision and establishment of small scale irrigation facilities and systems for commercial horticulture farming (vegetables and fruits production) • Provision and establishment of small scale irrigation facilities and systems for peri-urban vegetables and fruits production for commercial purposes 		
2.5 Service providers and beneficiaries	<p>(1) Description of service providers within the framework of the programme:</p> <p>Government, private sector, DPs, etc.</p> <p>(2) Description of beneficiaries within the framework of the programme</p> <p>Private business enterprises, farmers, local population community, government, etc.</p>		
2.6 Environmental and social impact, and mitigation measures	<p>(1) Expected level of negative impact (select an indicator from the list in the right)</p> <table border="1"> <tr> <td>a</td> <td> Programme a: is likely to have minimal or little impact on the environment and/or society b: may have an impact on the environment and/or society c: is likely to have a significant impact on the environment and/or society d: will have a significant impact on the environment and/or society </td> </tr> </table> <p>(2) Description of expected negative environmental and social impact, and mitigation measures</p> <p>Expected negative impacts:</p> <ul style="list-style-type: none"> • Temptation to be biased towards certain category of investors. • Temptation to be discriminative in application of policies, laws and regulations. <p>Mitigation measures:</p> <ul style="list-style-type: none"> • Mitigation will be through regulatory boards e.g. irrigation boards that will have management and board of directors to oversee decision making process. • Ensuring access to justice (legal services) , including arbitration procedures 	a	Programme a: is likely to have minimal or little impact on the environment and/or society b: may have an impact on the environment and/or society c: is likely to have a significant impact on the environment and/or society d: will have a significant impact on the environment and/or society
a	Programme a: is likely to have minimal or little impact on the environment and/or society b: may have an impact on the environment and/or society c: is likely to have a significant impact on the environment and/or society d: will have a significant impact on the environment and/or society		
2.7 Monitoring and evaluation for impact measurement	<p>(1) Measurable indicators and situation at a starting point:</p> <p>Number of formulated policies, regulations, standards and guidelines at present. Number of formulated policies, regulations, standards and guidelines implemented. Existing justice systems</p> <p>(2) Measurable indicators and situation at the end point:</p> <p>Number of formulated policies, regulations, standards and guidelines. Number of formulated policies, regulations, standards and guidelines implemented. Number of trial cases</p>		

Items	Reference/Description
(3) Methods of measurement and sources of information:	Carry out assessment, Reports, Government websites, Irrigation schemes documentations Records of complaints address to the irrigation boards management or to the boards of directors Records of governing boards proceedings.
(4) Responsible parties for the monitoring and evaluation:	Related government establishments as enumerated in 1.2 (5), including MEDIWR Directorate of Irrigation and Drainage(DID); MEDIWR Directorate of Planning and Programmes; MAFCRD Directorate of Agriculture Production and Extension Services; DPs; private sector; etc.

2.8 Required human resources

(1) Principle of human resources management:	Based on public service manual and procedures (including secondment and loan of personal) <ul style="list-style-type: none"> ▪ - Contract employment and professional services
(2) Required human resources in the public sector (Positions, grades and numbers):	Based on organizational hierarchy of government establishments above in section 1.2 (5), Including: <ul style="list-style-type: none"> • Position of directors: Grade 2 (D. G.), 3 (Director), 4 (D.D.) and grade 5 (Asst. D.) at pprogram supervision and management level; • Position of inspectors: Grade 7 (Senior Inspector),8 (inspector) and grade 9 (Asst. Inspector) at Programme implementation and field level; and • Position of technicians and sub-professionals: Grade (10-14) at programme support level.
(3) Required human resources in the private sector and DPs including consultants (positions, qualification and numbers):	Technical assistance for implementation of the various components and activities of the Programme is required (5 professionals).

2.9 Outcomes, impacts and contributions to value added (i.e. economic growth)

(1) Outcomes and impact:s	<ul style="list-style-type: none"> ▪ Increased number of private or foreign investors exploiting potential irrigable agricultural land. ▪ Increased number of entrepreneurs and enterprises in irrigated agriculture and other productive uses. ▪ Increased contribution of private sector investment in irrigation to the national GDP (growth domestic products).
(2) EIRR and/or FIRR, and/or other economic analysis	(if applicable)

2.10 Risk assessment with respect to programme objectives and resources to be applied

(1) Expected level of risk	L	L: Low	M: Medium	H: High	(select an indicator from the list)
(2) Explanation of expected risks	<ul style="list-style-type: none"> ▪ unforeseen circumstances which are not covered by the guidelines ▪ Negligence from the implementers ▪ - Lack of proper enforcement of policies, regulations, standards, guidelines and procedures. 				

2.11 Other special considerations and/or notes

(1) Other special considerations and/or notes	<ul style="list-style-type: none"> - Coordination between related government establishments above in section 1.2 (5), including Ministries, Institutes, Public corporations, Water User Associations, Private sector, DPs, NGOs, etc, at all levels. - Establishment and functionality of the governance structures as envisioned in the draft water bill (Water resources management authority, river basin water boards, irrigation boards etc.). • Adoption of the IDMP as road map for irrigated agriculture development by the private sector. • Adaption of Environmental and social assessment to Large-scale private investment • Financial and Technical support for the private sector
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2.12 Routine operation/Activities and required resources after the completion of the programme

(1) Description of routine activities and outputs and required financial and human resources after the	<ul style="list-style-type: none"> - Dissemination of the policies, regulations, standards, guidelines and procedures. - Capacitating of the implementers/overseers. - Ensure that the policies, regulations, standards, guidelines and procedures are frequently reviewed and updated based on lessons learnt during the implementation.
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Items	Reference/Description
<p>completion of the project. Description of the required resources can be done in an indicative manner.</p>	<ul style="list-style-type: none"> - Supervision and monitoring of private sector irrigation development, operation and maintenance. - Administrative work for evaluating and licensing the private investment - Water fee collection from the private investors - Operating cost funds. - Evaluation and judgement for permitting the investment application. - Licensing and issuance of permits. - Identification of the areas to be allowed for private sector investment. - Public announcement and advertisement for private sector investment.

2.7 Human Resource and Institutional Development for Irrigation Programme (HRIDIP)

Items	Reference/Description
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Part 1: Programme Profile Administration

1.1 Programme identification

(1) IDMP Elements::	02 Institutions and Capacity Development (ICD)		
(2) Programme name:	Human Resource and Institutional Development for Irrigation Programme (HRIDIP)		
(3) Programme ID:	0	7	
(4) Start and ending fiscal year:	Starting FY: 2015	Ending FY: 2040	Duration (years): 25
(5) Total Cost:	SSP 39,849,000	USD 13,508,000	Note: Including recurrent cost
(6) Name of this file (automatic):	IDMP Programme profile		

1.2 Programme classification scheme

	Code	Abbreviation	Description	Reference
(1) Development theme:	01, 02, 03, 04, 05, 11, 13, 15,	FG, RR, FS, ED, AT, EID, EH, NR	Function of the Government (FG), Reconstruction and Recovery (RR), Food Nutrition Security (FS), Economic and income growth (ED), Agricultural Sector Transformation (AT), Economic Infrastructure Development (EID), Education and Health (EH), Natural Resources management (NR)	Table 2-1
(2) Element:	02	ICD	Institutions and Capacity Development	Table 2-2
(3) CAADP Pillars:	01	CAADP-P1	Land and water management	Table 2-9
Other Initiatives:	06	NELSAP-RATP	Regional Agriculture Trade and productivity	Table 2-9
	06	NELSAP-MSIO A	Multi Sector Investment Opportunity Analysis (MSIOA), a Water resources development and management investment planning programme	Table 2-9
	10	IGAD-INWRMP	Inland water resources management programme (INWRMP)	Table 2-9
	07	ENTRO-MSIOA	Multi Sector Investment Opportunity Analysis (MSIOA), a Water infrastructure investment programme	Table 2-9
(4) Location	00	RSS	The Republic of South Sudan (RSS)	Table 2-3
State(s):			All States of South Sudan	Table 2-3
Administrative Area(s):	01		Abyei and Pibor	Table 2-3
Others:	02			Table 2-3
(5) Government organisation 1:	02	DID (MEDIWR)	Directorate of Irrigation and Drainage	Table 2-4
Government organisation 2:	04	DPP (MEDIWR)	Directorate of Planning and Programming	Table 2-4
Government organisation 3:	03	DWRM (MEDIWR)	Directorate of Water Resources Management	Table 2-4
Government organisation 4:	06	RWSS (MEDIWR)	Directorate of Rural Water supply and Sanitation	Table 2-4
Government organisation 5:	07	HS (MEDIWR)	Directorate of Hydrology and Survey	Table 2-4
Government organisation 7:	07	DAPEG (MEDIWR)	Directorate of Power Engineering and Grid	Table 2-4
Government organisation 7:	12	DAPES (MAFCRD)	Directorate of Agricultural Production and Extension Services	Table 2-4
Government organisation 8:	10	DAET (MAFCRD)	Directorate of Agricultural Education and Training	Table 2-4
Government organisation 9:	13	DP, MAFCRD	Directorate of Planning and Agriculture Economics	Table 2-4
Government organisation 10:	06	ARDI (MAFCRD)	Amadi Rural Development Institute	Table 2-4
Government organisation 11:	03	DCD (MAFCRD)	Directorate of Cooperatives Development	Table 2-4

Annex 6: Programmes' Profiles

Items	Reference/Description			
Government organisation 12:	08	DRD (MFCRD)	Directorate of Rural Development	Table 2-4
Government organisation 13:	07	DF (MAFCRD)	Directorate of Forestry	Table 2-4
Government organisation 14:	05	DAPRM (MLFI)	Directorate of Animal Production and Range Management	Table 2-4
Government organisation 15:	10	DEPD (MLFI)	Directorate Extension and Pastoralists Development	Table 2-4
Government organisation 16:	06	DFAD (MLFI)	Directorate of Fisheries and Aquaculture Development	Table 2-4
Government organisation 17:	09	DLFRD (MLFI)	Directorate of Livestock and Fisheries Research Development	Table 2-4
Government organisation 18:	01	DPSD (MLFI)	Directorate of Planning, Statistics and Documentation	Table 2-4
Government organisation 19:	04	DIMS (MLFI)	Directorate of Investment, Marketing and Supplies	Table 2-4
Government organisation 20:	01	SDWS (SLMRWS)	State Directorates of Water and Sanitation	Table 2-4
Government organisation 21:	01	CDWS (LG)	County Department of Water and Sanitation	Table 2-4
Government organisation 22:	01,02	SDAFLF (SLMAFLF)	State Directorate of Agriculture, forestry, Livestock and Fisheries	Table 2-4
Government organisation 23:	03	SDC/RD (SLMC/RD)	State Directorate of Cooperatives, Rural/Community Development	Table 2-4
Government organisation 24:	02	CDAFLF (LG)	County Department of Agriculture, forestry, Livestock and Fisheries	Table 2-4
Government organisation 25:	03	CDC/RD	County Department of Cooperatives, Community/Rural Development	Table 2-4
Government organisation 26:	18	MoJ	Ministry of Justice	Table 2-4
Government organisation 27:	04	DWB (MoE)	Wetlands and Biodiversity	Table 2-4
Government organisation 28:	04	DSW (MGCSW)	Directorate of Social Welfare	Table 2-4
Government organisation 29:	17	MLP&HR	Ministry of Labour, Public service and Human Resources	Table 2-4
Government organisation 30:	01	Academia	Universities	Table 2-4
Government organisation 31:	10	WRMA	Water Resources Management Authority	Table 2-4
Government organisation 32:	11	BWB	Basin Water Board	Table 2-4
Government organisation 33:	12	CC	Catchment Committees	Table 2-4
Government organisation 34:	13	SCC	Sub- Catchment Committees	Table 2-4
Government organisation 35:	14	WUA	Water Users Association	Table 2-4
Government organisation 36:	15	IB	Irrigation Board	Table 2-4
(6) Other organisation 1:	01	PS	Private Sector	Table 2-4
Other organisation 2:	02	DP	Development Partners	Table 2-4
Other organisation 3:	09	NGO	Non-Governmental organizations	Table 2-4
Other organisation 4:	03	CBO	Community based organization e.g. a community development committee	Table 2-4
Other organisation 5:	04	F U	Farmers Union	Table 2-4
Other organisation 6:	05	PU	Pastoralists Union	Table 2-4
Other organisation 7:	06	CS	Cooperatives Society	Table 2-4
Other organisation 8:	07	FF	Fishing Folks	Table 2-4
(7) Irrigation Potential Zone 1:	01	MZ	Mountainous Zone (MZ)	Table 2-5
Irrigation Potential Zone 2:	02	IZ	Intermittent Zone (IZ)	Table 2-5
Irrigation Potential Zone 3:	03	PZ	Plains Zone (PZ)	Table 2-5
Irrigation Potential Zone 4:	04	WRCZ	Wetlands and river corridors Zone (WRCZ)	Table 2-5
(8) Planning Phases (start):	01, 02, 03, 04	PH1, PH2, PH3, PH4	Phase-1 (5 years), Phase-2 (5 years), Phase-3 (5 years), Phase-4 (10 years)	Table 2-6
(9) Objective time horizon:	01, 02, 03	ST MT LT	Short-term, Medium-term, Long-term	Table 2-7
(10) Ownership:	11	NNB/S/CB	National/State/county/Community/Programs	Table 2-10
(11) Funding sources 1:	11	NNB	National Budget	Table 2-10
Funding sources 2:	21	SSB	State Budget	Table 2-10
Funding sources 3:	31	DPG	Development Partners Grant	Table 2-10

Items	Reference/Description			
Funding sources 4:	51	NGG	NGOs Grant	Table 2-10
(12) Activity types 1:	101	ID-LI	Legal and institutional development	Table 2-11
Activity types 2:	103	ID-PP	Policy formulation and planning	Table 2-11
Activity types 3:	102	ID-AD	Administrative capacity development	Table 2-11
Activity types 4:	104	ID-IM	Implementation and Monitoring	Table 2-11
Activity types 5:	201	SD-IM	Data and Information management and analysis	Table 2-11
Activity types 6:	203	SD-EX	Extension and training	Table 2-11
Activity types :	204	SD-RE	Research and experiment	Table 2-11
Activity types 8:	207	SD-PL	Granting permit and Licences	Table 2-11
Activity types 9:	208	SD-PO	Parastatal Organisations	Table 2-11
Activity types 10:	209	SD-EI	Economic Infrastructure development	Table 2-11
Activity types 11:	211	SD-OM	Construction, operation and Maintenance	Table 2-11

Part 2: Programme Description

2.1 Programme justification and rationale

(1) Justification and rationale:

(General rationale)

In the Republic of South Sudan (RSS), currently irrigated agriculture is practiced only on less than 5% of the cultivated land (Joint Baseline Survey Report on the Agriculture and Animal Resources in SS, Oct. 2010). The natural conditions of the RSS are diverse by region with annual rainfall ranging from less than 500 mm to around 1,500 mm. Flood and drought occur occasionally threatening national food security. Therefore, fluctuation in annual production is significant due to the seasonal and climate variability. Under such circumstances, irrigation development is crucial in order to stabilize food security situation in the country in utilizing available water resources for agricultural production, to meet the national needs.

There has been less investment in irrigation sector in SS and even the established irrigation schemes have been left without continuous operation, maintenance and rehabilitation except for a limited part of Aweil Rice Irrigation Scheme. While the Northern Upper Nile pumps irrigation schemes are not completely operational. An abundant irrigation development potential has been identified from water resources, land productivity, and socio-economy assessments under this master plan.

Qualified engineers and extension workers will be one of the essential factors for the success of future irrigation development. MEDIWR, MAFCRD and most of the other key stakeholders related to irrigation development have already allocated officers required for irrigation development. However, based on the CNA survey conducted by the IDMP Task Team, it can be clarified that the majority of officers need to enhance their technical competencies in the fields of engineering and innovative agriculture for irrigation development, because they have got a limited opportunity of enhancement of their competencies.

Human Resource Development for Irrigation Programme (HRDIP) is therefore needed to tackle these challenges and utilize opportunities, in addressing human resource capacity development and related institutional building. This will encompass provision of appropriate skills, knowledge and tools/equipment to different cadre and institutions involved, including irrigation and drainage engineers/technicians, agronomists, governance personnel, farms, farmers, Water Users Association and other stakeholder.

(2) Overall description including temporal and spatial extent of project:

The programme will be nationally developed with stakeholders participation. Required training programme, necessary strengthening part of training centres, and institutions to collaborate with will be identified. The programme will strengthen training/research/education centres, governance institutions, etc. The emphasis being on creation of qualified work force and functional institutions for irrigated agriculture development and management, so as to enable delivery of operation and maintenance and extension/outreach services to farmers and farms.

2.2 Objective

(1) Programme Objective:

To promote capable human resource and institutions for effective and efficient irrigated agriculture and other productive uses development and management

Items	Reference/Description		
2.3 Outputs			
(1) Programme Outputs:	<ol style="list-style-type: none"> 1) Promoted innovative irrigated agriculture and other productive uses in RSS through appropriate technological choice and research. 2) Established training centers, for ensuring continuous human resource capacity development. 3) Strengthened capacity of engineers/technicians (at all levels); 4) Strengthened technical capacities for extension workers (at all levels); 5) Strengthening farmers' capacities (support to irrigation schemes/farms) ; 6) Established governance institutions e.g. water users associations and irrigation boards: 7) Strengthened organization capacities of Water Users Associations and irrigation boards 		
2.4 Projects/Components/Activities identified under the Programme			
(1) Projects/Components/Activities under the Programme:	<ol style="list-style-type: none"> 1) Identification and provision of training opportunities 2) Establishment of irrigation training centre project 3) Establishment of water users association and irrigation boards 4) Establishment of HRD monitoring and Feedback system 		
2.5 Service providers and beneficiaries			
(1) Description of service providers within the framework of the programme:	<p>Related government institutions, including Ministries, public authorities, etc. Private sector (through industrial attachments) Water Users Association DPs</p>		
(2) Description of beneficiaries within the framework of the programme	<p>Related government institutions, including Ministries, public authorities, etc. Farmers, Water user associations, Farmers' Unions, Irrigation schemes, private sector, etc.</p>		
2.6 Environmental and social impact, and mitigation measures			
(1) Expected level of negative impact (select an indicator from the list in the right)	<table border="1"> <tr> <td>a</td> <td> <p>Programme</p> <p>a: is likely to have minimal or little impact on the environment and/or society</p> <p>b: may have an impact on the environment and/or society</p> <p>c: is likely to have a significant impact on the environment and/or society</p> <p>d: will have a significant impact on the environment and/or society</p> </td> </tr> </table>	a	<p>Programme</p> <p>a: is likely to have minimal or little impact on the environment and/or society</p> <p>b: may have an impact on the environment and/or society</p> <p>c: is likely to have a significant impact on the environment and/or society</p> <p>d: will have a significant impact on the environment and/or society</p>
a	<p>Programme</p> <p>a: is likely to have minimal or little impact on the environment and/or society</p> <p>b: may have an impact on the environment and/or society</p> <p>c: is likely to have a significant impact on the environment and/or society</p> <p>d: will have a significant impact on the environment and/or society</p>		
(2) Description of expected negative and/or positive environmental and social impact, and mitigation measures	<p>Expected negative impacts:</p> <ul style="list-style-type: none"> • Imbalances created by the targeted training programmes and activities • Biasness towards different knowledge and skills including choice of technology • Biasness of governance institutions towards certain farmers/farms/crops <p>Mitigation measures: Possible mitigation could be to:</p> <ul style="list-style-type: none"> • Follow certain criteria, guidelines and procedures in implementing training and related capacity building programmes e.g. mainstreaming gender aspects, indiscriminate recruitment and training on the basis of literacy, etc. • Making use of traditional/indigenous knowledge. • Follow certain criteria, guidelines and procedures in taking decision in relation to provision of services, granting of permits and allocation of water rights to farmers/farms/crops. 		
2.7 Monitoring and evaluation for impact measurement			
(1) Measurable indicators and situation at a starting point:	<p>Number of training programmes and activities planned or implemented</p> <p>Number of institutions identified for capacity building</p> <p>Number of training and research centres established</p> <p>Number of existing institutions on governance issues.</p> <p>Existing criteria, guidelines and procedures in implementing training and related capacity building programmes.</p> <p>Number of existing or recruited staff.</p>		
(2) Measurable indicators and situation at the end point:	<p>Number of training programmes and activities planned or implemented</p> <p>Number of institutions/organisations capacitated</p> <p>Number of staff and other related personnel (unskilled labourers) trained.</p> <p>Number of training manuals and procedures developed</p> <p>Number of research reports and publication developed</p>		

Items	Reference/Description
(3) Methods of measurement and sources of information:	Carry out monitoring and evaluation assessments, Training Reports, Irrigation schemes documentations, MoUs, etc.
(4) Responsible parties for the monitoring and evaluation:	Related government establishments as enumerated in 1.2 (5) and DPs

2.8 Required human resources

(1) Principle of human resources management:	- Based on public service regulations and procedures (including secondment and loan of personnel) - Contract employment and professional services
(2) Required human resources in the public sector (Positions, grades and numbers):	Based on organizational hierarchy of government establishments above in section 1.2 (5), Including: <ul style="list-style-type: none"> • Position of directors: Grade 2(D. G.), 3(Director), 4 (D.D.) and grade 5 (Asst. D.) at programme supervision and management level; • Position of inspectors: Grade 7 (Senior Inspector),8 (inspector) and grade 9 (Asst. Inspector) at programme implementation and field level; and • Position of technicians and sub-professionals: Grade (10-14) at programme support level.
(3) Required human resources in the private sector and DPs including consultants (positions, qualification and numbers):	Technical assistance for programme implementation is required (5 professionals) e.g. one legal expert, one institutional development expert, one training programmer, one research programmer, one regulation expert, one socio- economic expert.

2.9 Outcomes, impacts and contributions to value added (i.e. economic growth)

(1) Outcomes and impacts:	Effective, efficient and sustainable development and management of the Irrigated schemes Expansion of the irrigated areas Improved agricultural productivity through water provision and management for crops, trees, livestock and fishers production Job creation
(2) EIRR and/or FIRR, and/or other economic analysis	(if applicable)

2.10 Risk assessment with respect to project objectives and resources to be applied

(1) Expected level of risk	L	L: Low	M: Medium	H: High	(select an indicator from the list)
(2) Explanation of expected risks	<ul style="list-style-type: none"> - Unforeseen circumstances which cannot be managed by the programme - Non-utilisation of knowledge, skills and capacities acquired for irrigation development and management due to market forces or any other externalities - Misallocation of human resources according to their qualifications - Interference or biasness in staffing institutions - High turnover of the qualified and trained staff due to market forces 				

2.11 Other special considerations and/or notes

(1) Other special considerations and/or notes	<ul style="list-style-type: none"> - Coordination between related government establishments above in section 1.2 (5), including Ministries, Institutes, Public corporations, Water User Associations, Private sector (through industrial attachment), DPs, NGOs, etc, at all levels. - Financial and technical support either from government, development partners and private sector - Availability and affordability of training providers - Continuation of the capacity development programme for irrigation engineers, irrigation agronomists, agricultural engineers, related authorities/regulators, etc. - Continuation of training, mentoring and coaching of extension workers, irrigation technicians, irrigation agronomists, agricultural engineers, farmers and other related staff (e.g. private investors/personnel). - Ensure that training, mentoring and coaching programmes are frequently reviewed and updated based on lessons learnt and arising needs. -Each national ministry and each state ministry have their own training systems; thus, this programme will be implemented by considering such systems. -Training institution is expected to become financially autonomous in the future; thus it is important to consider their self-reliant management system, such as their business plans/models.
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Items	Reference/Description
2.12 Routine operation and required resources after the completion of the programme	
(1) Description of routine activities and outputs and required financial and human resources after the completion of the project. Description of the required resources can be done in an indicative manner.	<ul style="list-style-type: none"> - Preparation of annual training and other capacity/institutional building programme, including budget and its implementation, monitoring and evaluation plan. - Training of trainers to upgrade the skills and knowledge of related institutions staff, so as to increase capacity and number of experts in irrigated agriculture implementation, operations and governance, e.g. irrigation technicians, agricultural engineers and irrigation engineers. - Training, mentoring and coaching of related personnel in irrigated agriculture implementation, operations and governance - Provision of advance education opportunities for officers - Recruitment of competent engineers and agronomists in the fields of irrigation development - Designing irrigation development projects as on-the-job training opportunities, which should be clearly mentioned in the agreements and/or the technical specifications of the engineering services by consulting/engineering firms, construction firms, equipment providers and manufacturers - Continuous issuance and reviewing of permits to farmers, farms, private investors, etc. - Working out MoUs, cost aspects and enrolment requirements with other research and training centres.

2.8 Irrigated Agriculture Extension Programme (IAEP)

Items	Reference/Description
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Part 1: Programme profile administration

1.1 Programme identification

(1) IDMP Element:	02 Institutions and Capacity Development (ICD)		
(2) Programme name:	Irrigated Agriculture Extension Programme (IAEP)		
(3) Programme ID:	0	8	
(4) Start and ending fiscal year:	Starting FY: 2015	Ending FY: 2040	Duration (years): 25
(5) Total Cost:	SSP 9,366,000	USD 3,175,000	Note: Including recurrent cost
(6) Name of this file (automatic):	IDMP Programme Profile		

1.2 Programme classification scheme

	Code	Abbreviation	Description	Reference
(1) Development theme:	01, 02, 03, 04, 05, 11, 13,15	FG, RR,FS, EG, AT, EID, EH, NR	Function of Government (FG), , Reconstruction and Recovery(RR), Food and Nutrition Security (FNS), Economic and income growth (EG), Agriculture Sector Transformation (AT), Economic Infrastructure Development (EID), Education and Health (EH), Natural Resources management (NR)	Table 2-1
(2) Element:	02	ICD	Institutions and Capacity Development (ICD)	Table 2-2
(3) CAADP Pillars:	01	CAADP P1	Land and water management	Table 2-9
	06	NELSAP-RAT P	Regional Agriculture Trade and productivity	Table 2-9
Other Initiatives:	06	NELSAP-MSI OA	Multi Sector Investment Opportunity Analysis (MSIOA), a Water resources development and management investment planning programme	Table 2-9
	10	IGAD-INWRM P	Inland water resources management programme (INWRMP)	Table 2-9
	08	ENTRO-MSIO A	Multi Sector Investment Opportunity Analysis (MSIOA), a Water infrastructure investment programme	Table 2-9
(4) Location	00	RSS	The Republic of South Sudan(RSS)	Table 2-3
State(s):	00		All states of South Sudan	
Administrative Area(s):	01	AA	Abyei and Pibor	Table 2-3
Others:	02			Table 2-3
(5) Government organisation 1:	02	DID (MEDIWR)	Directorate of Irrigation and Drainage	Table 2-4
Government organisation 2:	12	DAPES, (MAFCRD)	Directorate of Agriculture Production and Extension Services:	Table 2-4
Government Organisation 3:	07	DF (MAFCRD)	Directorate of Forestry	Table 2-4
Government Organisation 4:	10	DAET (MAFCRD)	Directorate of Agricultural Education and Training	Table 2-4
Government Organisation 5:	03	DCD (MAFCRD)	Directorate of Cooperatives Development	Table 2-4
Government Organisation 6:	13	DP (MAFCRD)	Directorate of Planning and Agriculture Economics	Table 2-4
Government Organisation 7:	04	DPP (MEDIWR)	Directorate of Planning and Programmes	Table 2-4
Government Organisation 8:	08	DRD (MAFCRD)	Directorate of Rural Development	Table 2-4
Government Organisation 9:	05	DAPRM (MLFI)	Directorate of Animal Production and Range Management	Table 2-4
Government Organisation 10:	09	DLFRD (MLFI)	Directorate of Livestock and Fisheries Extension	Table 2-4
Government Organisation 11:	10	DEPD (MLFI)	Directorate of Extension and pastoralists	Table 2-4

Annex 6: Programmes' Profiles

Items		Reference/Description		
			Development	
Government Organisation 12:	06	DFAD (MLFI)	Directorate of Fisheries and Aquaculture Development	Table 2-4
Government Organisation 13:	04	DIMS (MLFI)	Directorate of Investment, Marketing and Supplies	Table 2-4
Government Organisation 14:	01	SDWS (SLMWS)	State Directorate of Water and Sanitation (SDWS)	Table 2-4
Government Organisation 15:	01,02	SDALFF (SLMALFF)	State Directorate of Agriculture, Livestock, Fisheries and Forestry (SDALFF)	Table 2-4
Government Organisation 16:	01	CDWS (LG)	County Department of Water and Sanitation (CDWS)	Table 2-4
Government Organisation 17:	02	CDALFF (LG)	County Department of Agriculture, Livestock, Fisheries and Forestry (CDALFF)	Table 2-4
Government Organisation 18:	03	SDC/RD (SLMC/RD)	State Directorate of Cooperatives, Rural/Community Development	Table 2-4
Government Organisation 19:	02	SDLS (SLMLS)	State Directorate of Land and Survey	Table 2-4
Government Organisation 20:	03	CDC/RD	County Department of Cooperatives, Community/Rural Development	Table 2-4
Government Organisation 21:	06	ARDI (MAFCRD)	Amadi Rural Development Institute	Table 2-4
Government Organisation 22:	01	Academia	Universities	Table 2-4
Government Organisation 23:	17	MLP&HR	Ministry of Labour, Public service and Human Resources	Table 2-4
Government Organisation 24:	14	WUA	Water Users Association	Table 2-4
Government Organisation 25:	15	IB	Irrigation Boards	Table 2-4
Government Organisation 26:	11	BWB	Basin Water Boards	Table 2-4
Government Organisation 27:	12	CC	Catchment Committees (CC)	Table 2-4
Government Organisation 28:	13	SCC	Sub- Catchment Committees (SCC)	Table 2-4
(6) Other organisation 1:	01	PS	Private Sector	Table 2-4
Other organisation 2:	02	DP	Development Partners	Table 2-4
Other organisation 3:	09	NGO	Non-Governmental organizations	Table 2-4
Other organisation 4:	03	CBO	Community based organization e.g. a community development committee	Table 2-4
Other organisation 5:	04	F U	Farmers Union	Table 2-4
Other organisation 6:	05	PU	Pastoralists Union	Table 2-4
Other organisation 7:	06	CS	Cooperatives Society	Table 2-4
Other organisation 8:	07	FF	Fishing Folks	Table 2-4
Other organisation 9:	08	CS	Civil Society	Table 2-4
(7) Irrigation Potential zones 1:	01	MZ	Mountainous Zone	Table 2-5
Irrigation Potential Zone 2:	02	IZ	Intermittent Zone (IZ)	Table 2-5
Irrigation Potential Zone 3:	03	FZ	Flood plains Zone (FZ)	Table 2-5
Irrigation Potential Zone 4:	04	WRC	Wetlands and river corridors Zone (WRCZ)	Table 2-5
(8) Planning phases (start):	01, 02, 03, 04	PH1, PH2, PH3, PH4	Phase 1(5 years), Phase-2 (5 years), Phase-3 (5 years), Phase-4 (10 years)	Table 2-6
(9) Objective time horizon:	01, 02, 03	ST, MT, LT	Short-term, Medium-term, Long-term	Table 2-7
(10) Ownership:	01, 02, 03	NPNI, NPSI, SPSI	National/State/County/Community Programme	Table 2-8
(11) Funding sources 1:	11	NNB	National Budget	Table 2-10
Funding sources 2:	21	SSB	State Budget/local government	Table 2-10
Funding sources 4:	31	DPG	Development Partners Grant	Table 2-10
Funding sources 5:	51	NGG	NGOs Grant	Table 2-10
(12) Activity types 1:	209	SD-EI	Economic Infrastructure development	Table 2-11
Activity types 2:	211	SD-OM	Construction, Operation and Maintenance	Table 2-11
Activity types 3:	201	SD-IM	Data and information analysis and management	Table 2-11
Activity types 4:	104	ID-IM	Implementation and monitoring	Table 2-11

Items	Reference/Description			
Activity types 5:	203	SD- EXT	Extension and Training	Table 2-11
Activity types 6:	204	SD-RE	Research and Experiment	Table 2-11
Activity types 7:	102	ID-AD	Administrative Capacity Development	Table 2-11
Activity types 8:	103	ID-PP	Policy formulation and planning	Table 2-11

Part 2: Programme description

2.1 Programme justification and rationale

(1) Justification and rationale:

(General rationale)

In the Republic of South Sudan (RSS), currently irrigated agriculture is practiced only on less than 5% of the cultivated land (Joint Baseline Survey Report on the Agriculture and Animal Resources in SS, Oct. 2010). The natural conditions of the RSS are diverse by region with annual rainfall ranging from less than 500 mm to around 1,500 mm. Flood and drought occur occasionally threatening national food security. Therefore, fluctuation in annual production is significant due to the seasonal and climate variability. Under such circumstances, irrigation development is crucial in order to stabilize food security situation in the country in utilizing available water resources for agricultural production, to meet the national needs.

There has been less investment in irrigation sector in SS and even the established irrigation schemes have been left without continuous operation, maintenance and rehabilitation except for a limited part of Aweil Rice Irrigation Scheme. While the Northern Upper Nile pumps irrigation schemes are not completely operational. An abundant irrigation development potential has been identified from land productivity, socio-economic and water resources assessments under this master plan.

Irrigated Agriculture Extension Programme is therefore needed due to the fact that:

- Most of the farmers are practicing rain-fed farming, and they are not familiar with irrigated agriculture practices, operation and management.
- Proper adoption of on-farm land and water management, including irrigation methods and techniques is critical, to realize maximum benefits from irrigation development.
- Irrigation extension services therefore contribute to capacity of farmers and enhance national objectives of improving food security, job creation and economic development

(2) Overall description including temporal and spatial extent of programme:

The Programme is to develop extension programme for irrigated agriculture, to disseminate innovative farming methods to farmers with regards to irrigation and drainage.

This programme focuses on the capacity development of farmers for ~~on-farm irrigation~~ on-farm irrigation+. The agriculture extension workers, irrigation technicians, irrigation agronomists, agricultural engineers and irrigation engineers will train farmers in operating and maintaining irrigation facilities attached to the farmland and in managing on-farm irrigation systems/methods such as furrow, basin, border, sprinkler, drip, etc. The programme will ensure provision of knowledge on plant growth requirements as well as provision of skills in operation and maintenance of the irrigation facilities and application of on-farm irrigation techniques to farmers. This will enable diversification of crops and improve productivities through good land and water management practices.

This extension programme will be implemented according to the IDMP planning phases and objective time horizons in short-, medium- and long-term.

2.2 Program Objective

(1) Objective:

To provide skills and knowledge in operation and maintenance of water delivery and control facilities at crop/fish farms and pasturelands

2.3 Outputs

(1) Outputs:

- 1) Enhanced skills and knowledge of trainers
- 2) Extension workers and irrigation (water control) technicians trained
- 3) Enhanced skills and knowledge of members of WUAs
- 4) Farmers and farms reached with extension and outreach services
- 5) Irrigation and drainage technical manuals produced
- 6) Innovative irrigation techniques introduced
- 7) Operation manuals for water harvesting and storage facilities

Items	Reference/Description		
2.4 Projects/Components/Activities Identified under the Programme			
(1) Projects/Components/Activities under the Programme:	1) Development of manuals for irrigated agriculture and farms drainage practices 2) Training of trainers for extension workers; irrigation (water control) technicians; and agricultural/irrigation engineers. 3) On-farm training to farmers and other beneficiaries/workers (WUAs) at each developed/rehabilitated irrigation scheme, on water management: <ul style="list-style-type: none"> - At water facilities - For water saving irrigation, and - For water distribution systems. 4) Training of trainers for operation and maintenance		
2.5 Service providers and beneficiaries			
(1) Description of service providers within the framework of the programme:	Related Government establishments, including Ministries, institutes, etc. Public corporations, Water User Associations, etc Private sector (through industrial attachment) DPs NGOs		
(2) Description of beneficiaries within the framework of the programme	Farmers, Irrigation schemes, Private sector, Water Users Association, etc.		
2.6 Environmental and social impact, and mitigation measures			
(1) Expected level of negative impact (select an indicator from the list in the right)	<table border="1" style="width: 100%;"> <tr> <td style="width: 30px; text-align: center;">a</td> <td> Programme a: is likely to have minimal or little impact on the environment and/or society b: may have an impact on the environment and/or society c: is likely to have a significant impact on the environment and/or society d: will have a significant impact on the environment and/or society </td> </tr> </table>	a	Programme a: is likely to have minimal or little impact on the environment and/or society b: may have an impact on the environment and/or society c: is likely to have a significant impact on the environment and/or society d: will have a significant impact on the environment and/or society
a	Programme a: is likely to have minimal or little impact on the environment and/or society b: may have an impact on the environment and/or society c: is likely to have a significant impact on the environment and/or society d: will have a significant impact on the environment and/or society		
(2) Description of expected <i>negative</i> environmental and social impact, and mitigation measures	(1) Expected negative impacts: <ul style="list-style-type: none"> - Imbalances created by the targeted extension programmes and activities - Biasness towards different knowledge and skills - generating disparity between irrigation farmers and rain-fed farmers Mitigation measures: Possible mitigation could be: <ul style="list-style-type: none"> - To follow certain criteria, guidelines and procedures in implementing extension and outreach programme e.g. mainstreaming gender aspects, indiscriminate training on the basis of literacy, indiscriminate training on the basis of type of crop or size of farm, etc. - Making use of traditional/indigenous knowledge 		
2.7 Monitoring and evaluation for impact measurement			
(1) Measurable indicators and situation at a starting point:	Number of extension services training programmes and activities planned or implemented Number of institutions identified for extension services training programmes Number of existing or recruited extension workers Existing criteria, guidelines and procedures in implementing extension services related trainings		
(2) Measurable indicators and situation at the end point:	Knowledge and skills gained by farmers e.g. number of farmers practicing irrigated agriculture, on-farm water use efficiency, etc Number of extension services training programmes and activities planned or implemented Number of extension workers, farmers and other related personnel (unskilled labourers) trained Criteria, guidelines and procedures in implementing extension services related trainings		
(3) Methods of measurement and sources of information:	Carry out monitoring and evaluation assessments, Reports, Planning and reviewing workshops, etc		
(4) Responsible parties for the monitoring and evaluation:	Related government establishments as enumerated in 1.2 (5), including MEDIWR Directorate of Irrigation and Drainage(DID); MEDIWR Directorate of Planning and Programmes; MAFCRD Directorate of Agriculture Production and Extension Services; DPs; private sector; etc.		
2.8 Required human resources			
(1) Principle of human	- Based on Public services regulations, and procedures		

Items	Reference/Description
resources management:	- - Contract employment and professional services
(2) Required human resources in the public sector (Positions, grades and numbers):	- Based on organizational hierarchy of government establishments above in section 1.2 (5), Including: <ul style="list-style-type: none"> • Position of directors: Grade 2 (D. G.), 3 (Director), 4 (D.D.) and grade 5 (Asst. D.) at program supervision and management level; • Position of inspectors: Grade 7 (Senior Inspector), 8 (inspector) and grade 9 (Asst. Inspector) at programme implementation and field level; and • Position of technicians and sub-professionals: Grade (10-14) at program support level.
(3) Required human resources in the private sector and DPs, including consultants (positions, qualification and numbers):	Technical assistance and consultant services for the programme implementation are required (5 professions) e.g. (2 Irrigation agronomist, 1 agricultural extension specialist, 2 irrigation engineer)

2.9 Outcomes, impacts and contributions to value added (i.e. economic growth)

(1) Outcomes and impacts	- Effective, efficient and sustainable management of the Irrigation schemes/farms - extending the irrigated area by efficient use of water in crop production - Improved agricultural productivity through water management for crops, trees, livestock and fisheries - mitigating water conflict among farms water users by enlightening and training farmers on on-farm water management - Job creation - Income generation through increased crops production
(2) EIRR and/or FIRR, and/or other economic analysis Economic Internal Rate of Return Financial Internal Rate of Return	(if applicable)

2.10 Risk assessment with respect to project objectives and resources to be applied

(1) Expected level of risk	L: Low M: Medium H: High (select an indicator from the list)
(2) Explanation of expected risks	- Manmade instability - Natural disaster (e.g. flood, drought) - Misallocation of human resources according to their qualifications - Unforeseen circumstances which cannot be managed by the programme - Non-utilisation of knowledge, skills and capacities acquired for irrigated agriculture due to market forces or any other externalities e.g. high turnover of extension workers due to emergence of new lucrative industries

2.11 Other special considerations and/or notes

(1) Other special considerations and/or notes	- Financial and technical support either from government, development partners and private sector - Coordination between related government establishments above in section 1.2 (5), including Ministries, Institutes, Public corporations, Water User Associations, Private sector (through industrial attachment), DPs, NGOs, etc, at all levels. - Continuation of the capacity development programme for irrigation engineers, irrigation agronomists, agricultural engineers. - Continuation of training, mentoring and coaching of extension workers, irrigation technicians, farmers and other related personnel. - Ensure that the required extension services for irrigated agriculture are frequently reviewed and updated based on lessons learnt and arising needs.
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2.12 Routine operation and required resources after the completion of the programme

(1) Description of routine activities and outputs and required financial and human resources after the completion of the project. Description of the required	- Preparation of Annual Plan of extension services including budget and its implementation, monitoring and evaluation plans. - Training of trainers to upgrade the skills of irrigation engineers, irrigation agronomists, agricultural engineers, etc, so as to increase knowledge and the number of experts in irrigated agriculture. - Training, mentoring and coaching of extension workers, irrigation (water control)
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Annex 6: Programmes' Profiles

Items	Reference/Description
resources can be done in an indicative manner.	technicians, farmers and other related personnel.

2.9 Information Network System Establishment Programme (INSEP)

Items	Reference/Description
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Part 1: Programme Profile Administration

1.1 Programme identification

(1) IDMP Element:	03 Irrigation Facilities Development and Management (IFDM)		
(2) Programme name:	Information Network System Establishment Programme (INSEP)		
(3) Programme ID:	0	9	
(4) Start and ending fiscal year:	Starting FY: 2015	Ending FY: 2040	Duration (years): 25
(5) Total investment:	SSP 211,707,000 (include Topo. Map development)	USD 71,765,000 (include Topo. Map development)	Note: Including recurrent cost
(6) Name of this file (automatic):	IDMP Programmes Profile		

1.2 Programme classification scheme

	Code	Abbreviation	Description	Reference
(1) Development theme:	01, 02, 03,05,11, 15	GF, RR, FS, AT, EI, NR	Government Function (GF), Reconstruction and Recovery (RR), Food and Nutrition Security (FNS), Agricultural Transformation(AT), Economic infrastructure (EI), Natural resources management	Table 2-1
(2) Element:	03	IFDM	Irrigation facilities development and management (IFDM)	Table 2-2
(3) CAADP Pillars:	01	CAADP P1	Land and water management	Table 2-9
Other Initiatives:	05	IGAD-HYCO S	Support to national hydro-meteorological services	Table 2-9
	06	NELSAP-MS IOA of NBI	Multi Sector Investment Opportunity Analysis (MSIOA), a Water resources development and management investment planning programme	Table 2-9
	07	ENTRO-MSI OA of NBI	Multi Sector Investment Opportunity Analysis (MSIOA), a Water infrastructure investment programme	Table 2-9
	08	NBI- RH	NBI- Regional Hydromet	Table 2-9
(4) Location:	00	RSS	The Republic of South Sudan	Table 2-3
State(s):			All state of South Sudan	Table 2-3
Administrative areas:	01		Abyei and Pibor	Table 2-3
Other:	02			Table 2-3
(5) Government organisation 1:	05	DHS (MEDIWR)	Directorate of Hydrology and Survey (DHS)	Table 2-4
Government organisation 2:	04	DPP (MEDIWR)	Directorate of Planning and Programmes (DPP)	Table 2-4
Government organisation 3:	03	DWRM (MEDIWR)	Directorate of Water Resources Management (DWRM)	Table 2-4
Government Organisation 4:	02	DID (MEDIWR)	Directorate of Irrigation and Drainage (DID)	Table 2-4
Government Organisation 5:	12	DAPES (MAFCRD)	Directorate of Agriculture Production and Extension Services (DAPES)	Table 2-4
Government Organisation 6:	07	DF (MAFCRD)	Directorate of Forestry (DF)	Table 2-4
Government Organisation 7:	01	MWLCT	Directorate of Wild Life Conservation	Table 2-4
Government Organisation 8:	11	DB (MTRB)	Directorate of Bridges (DB)	Table 2-4
Government Organisation 9:	09	DRT (MTRB)	Directorate of River Transport (DRT)	Table 2-4
Government Organisation 10:	05	DAPRM (MAFCRD)	Directorate of Animal Production and Range Management (DAPRM)	Table 2-4
Government Organisation 11:	06	DFAD (MLFI)	Directorate of Fisheries and Aquaculture Development (DFAD)	Table 2-4
Government Organisation 12:	01	SDWS (SMIP)	State Directorate of Water and Sanitation (SDWS)	Table 2-4
Government Organisation 13:	01,02	SDALFF	State Directorate of Agriculture, Livestock,	Table 2-4

Items	Reference/Description			
Government Organisation 14:	01	(SMAF) CDWS (LG)	Fisheries and Forestry (SDALFF) County Department of Water and Sanitation (CDWS)	Table 2-4
Government Organisation 15:	02	CDALFF (LG)	County Department of Agriculture, Livestock, Fisheries and Forestry (CDALFF)	Table 2-4
Government Organisation 16:	01	SSMD,SSC A,(MTRB)	South Sudan Meteorological Department (SSMD)	Table 2-4
Government Organisation 17:	04	DWB (MoE)	Wetlands and Biodiversity	Table 2-4
Government Organisation 18:	14	NBS	National Bureau of Statistics	Table 2-4
Government Organisation 19:	01	Academia	Universities	Table 2-4
Government Organisation 20:	11	BWB	Basin Water Boards	Table 2-4
Government Organisation 21:	12	CC	Catchment Committees	Table 2-4
Government Organisation 22:	13	SCC	Sub- Catchment Committees	Table 2-4
(6) Other organisation 1:	01	PS	Private Sector	Table 2-4
Other organisation 2:	02	DP	Development Partners	Table 2-4
Other organisation 3:	09	NGO	Non-Governmental organizations	Table 2-4
Other organisation 4:	03	CBO	Community based organization e.g. a community development committee	Table 2-4
Other organisation 5:	04	F U	Farmers Union	Table 2-4
Other organisation 6:	05	PU	Pastoralists Union	Table 2-4
Other organisation 7:	06	CS	Cooperatives Society	Table 2-4
Other organisation 8:	07	FF	Fishing Folks	Table 2-4
Other organisation 9:	08	CS	Civil Society	Table 2-4
(6) Irrigation potential zones 1:	01	MZ	Mountainous zone (MZ)	Table 2-5
Irrigation Potential Zone 2:	02	IZ	Intermittent zone (IZ)	Table 2-5
Irrigation Potential Zone 3:	03	PZ	Plains zone (PZ)	Table 2-5
Irrigation Potential Zone 4:	04	WRCZ	Wetlands and river corridors zone (WRCZ)	Table 2-5
(7) Planning Phases (start):	01, 02, 03, 04	PH1, PH2, PH3, PH4	Phase-1 (5 years), Phase-2 (5 years), Phase-3 (5 years), Phase-4 (10 years)	Table 2-6
(8) Objective time horizon:	01, 02, 03	ST, MT and LT	Short-term (ST), Medium-term (MT), Long-term (LT)	Table 2-7
(9) Ownership:	01	NPNI	National Programme (NPNI)	Table 2-8
(10) Funding sources 1:	11	NNB	National/State/County budget (NNB)	Table 2-10
Funding sources 2:	31	DPG	Development Partners Grant (DPG)	Table 2-10
Funding sources 3:	42	PSG	Private Sector Grant	Table 2-10
(11) Activity types 1:	209	SD-EI	Economic infrastructure development (SD-EI)	Table 2-11
Activity types 2:	211	SD-OM	Construction, Operation and Maintenance (SD-OM)	Table 2-11
Activity types 3:	201	SD-IM	Data and Information analysis and management (SD-IM)	Table 2-11
Activity types 4:	204	SD-RE	Research and experiment (SD-RE)	Table 2-11

Part 2: Programme Description

2.1 Programme justification and rationale

(1) Justification and rationale:

(General rationale)

In the Republic of South Sudan (RSS), currently irrigated agriculture is practiced only on less than 5% of the cultivated land (Joint Baseline Survey Report on the Agriculture and Animal Resources in SS, Oct. 2010). The natural conditions of RSS are diverse and vary by region, with annual rainfall ranging from less than 500 mm to around 1,500 mm. Flood and drought occurs occasionally, threatening national food security: therefore, fluctuation in annual production is significant due to seasonal and climate variability. Under such circumstances, irrigation development is crucial, in order to stabilize food security situation in the country, in utilizing available water resources for agricultural production and contribute to the national needs.

There has been less investment in irrigated agriculture in SS, even the established irrigation schemes have been left without continuous operation, maintenance and rehabilitation, except for a limited part of Aweil Rice Scheme. The Northern Upper Nile

Items	Reference/Description
(2) Overall description including temporal and spatial extent of Programme	<p><i>pumps irrigation schemes are not completely operational. Abundant irrigation development potential has been identified from water resources, land productivity, and socio-economy assessment.</i></p> <p>Hydromet-information system (HIS) is therefore needed as national Programme due to the following:</p> <ul style="list-style-type: none"> • The current Hydro-information measurement stations are few, hence the recording of contemporary hydro-information is very limited. This programme is for measuring and updating the nationwide water resources information for irrigation development, among others. It is necessary to install the hydro-information measuring stations at appropriate points across the country. Also there is absence of automatic data recording and transmission system, to transfer the data and information to the centralized station for analysis and decision making. • Water Resources involved regional/international agreements on trans-boundary river basins and aquifers; in addition to coordination for awareness raising on related global concerns, including climate change. <ul style="list-style-type: none"> - The national government is responsible for allocation of water according to availability across the country at all levels of government. <p>The programme is to establish Hydromet-Information System and Facilities by the National Government for hydro-meteorological monitoring. Hydromet-information/data measuring stations will be installed at appropriate locations within the river basins and centralized system to manage data from all the stations will be established. The Programme includes short-term, medium-term and long term time frames.</p>
2.2 Objective (1) Objective:	To establish a functional centralized information network system for effective and efficient development and management of water and land resources for irrigated agriculture and other productive uses
2.3 Outputs (1) Outputs:	<ol style="list-style-type: none"> 1. Installed, rehabilitated and functioning hydromet information measuring stations 2. Observed real time and near real time water resources information/data (e.g. forecasts) 3. Centralized Hydromet and water use/abstraction information management system 4. Unified hydromet system for public and private sectors 5. Standardized data format 6. Accumulated long time historical Hydromet and water use/abstraction data/information 7. Nationwide high resolution map
2.4 Projects/Components/Activities Identified under the Programme (1) Projects/Components/Activities under the Programme:	<p>(A) Bahr el-Jebel Basin Hydromet Information System (HIS) (B) Bahr el-Ghazal Basin Hydromet information system (HIS) (C) River Sobat Basin Hydromet information system(HIS) (D) White Nile Basin Hydromet information system (HIS) (E) Groundwater monitoring system (G)Other rivers/watersheds Hydromet information system, e.g. Kenttei (H)Regional Nile Basin Hydromet Services and a National Water Resources Monitoring System for South Sudan (I) IGAD-HYCOS (J) Rehabilitation of river monitoring measurement network with support of Egyptian government (K) NB-DSS (L) Mainstreaming groundwater considerations into integrated management of the River Nile (M) Nationwide high resolution map development</p>
2.5 Service providers and beneficiaries (1) Description of service providers within the	Related Government institutions including Ministries, public authorities, etc. Private sector

Items	Reference/Description
framework of the programme:	Water Users Association DPs
(2) Description of beneficiaries within the framework of the programme	Research institutions, Private Sector, NGOs, Farmers, Irrigation schemes, Water Users Association, etc.

2.6 Environmental and social impact, and mitigation measures

(1) Expected level of negative impact (select an indicator from the list in the right)	a Programme a: is likely to have minimal or little impact on the environment and/or society b: may have an impact on the environment and/or society c: is likely to have a significant impact on the environment and/or society d: will have a significant impact on the environment and/or society
(2) Description of expected negative environmental and social impact, and mitigation measures	<p>Expected negative impacts:</p> <ul style="list-style-type: none"> - Safety and risks hazards for gauge readers - Limited displacement due to occupation of certain lands - Limited disturbance to ecosystems <p>Mitigation measures:</p> <ul style="list-style-type: none"> - Provision of safety kits to involved personnel(e.g. Gumboot) - Ensuring proper land acquisition in line with land act and through communal procedures - Ensuring proper compensation/Resettlement procedures and actions - Ensuring proper sites selection to avoid interference with sensitive ecosystem

2.7 Monitoring and evaluation for impact measurement

(1) Measurable indicators and situation at a starting point:	Number of metrological monitoring stations established Number of river gauges stations established Number of river discharge measurement stations established Number of groundwater monitoring stations established Available information management system or database
(2) Measurable indicators and situation at the end point:	Number of functional hydromet information measuring stations A functional centralized hydromet and water use/abstraction information management system Accumulated long time historical hydromet and water use/abstraction data/information Observed real time and near real time water resources information (e.g. forecasts)
(3) Methods of measurement and sources of information:	River, groundwater, water abstraction and waste water disposal monitoring data record sheets/forms; Direct information from the automatic stations data analysis results; Reports; database; and etc.
(4) Responsible parties for the monitoring and evaluation:	Related government establishments as enumerated in 1.2 (5), including Statesq Directorates of Water and Sanitation; MEDIWR Directorate of Irrigation and Drainage(DID); MEDIWR Directorate of Planning and Programmes; MAFCRD Directorate of Agriculture Production and Extension Services; DPs; private sector; independent body/consultant, etc.

2.8 Required human resources

(1) Principle of human resources management:	-Based on public service manual and procedures (including secondment and loan of personal) - Contract employment and professional services
(2) Required human resources in the public sector (Positions, grades and numbers):	- Based on organizational hierarchy of government establishments above in section 1.2 (5), Including: ~Position of directors: Grade 2 (D. G.), 3 (Director), 4 (D.D.) and grade 5 (Asst. D.) at programme supervision and management level; ~Position of inspectors: Grade 7 (Senior Inspector),8 (inspector) and grade 9 (Asst. Inspector) at programme implementation and field level; and ~Position of technicians and sub-professionals: Grade (10-14) at programme support level.
(3) Required human resources in the private sector and DPs including consultants (positions, qualification and numbers):	Technical assistance for programme implementation and management is required (5 professionals), e.g. one Hydrologist, one Meteorologist, one ITC professional, one water quality analyst and programme experts.

2.9 Outcomes, impacts and contributions to value added (i.e. economic growth)

Items	Reference/Description
(1) Outcomes and impacts:	Avail information on water resources, to inform water users and managers, including basin boards, water users associations, etc. in taking informed decisions Avail information for early warning in case of disaster (e.g. drought and flood forecasting) Avail information, to informed climate change adaptation programmes/projects/activities More accurate water resources assessment results More efficient use of water resources Avail information to protect the social and economic infrastructures Available information to be used in IDMP review
(2) EIRR and/or FIRR, and/or other economic analysis Economic Internal Rate of Return Financial Internal Rate of Return	(if applicable)

2.10 Risk assessment with respect to programme objectives and resources to be applied

(1) Expected level of risk	L	L: Low	M: Medium	H: High	(select an indicator from the list)
(2) Explanation of expected risks	- Manmade disaster - Vandalism - Occupational hazards - Technological limitation (breakdown or non-functionality)				

2.11 Other special considerations and/or notes

(1) Other special considerations and/or notes	- Continuation Financial support either from government or development partners or private sector - Continuation of government establishment - The related government establishments in 1.2(5) must be maintained and sustained - Capacitating of the related government personal and institutions through training and provision of equipment - IT system to transmit hydromet information to all the institutions concerned, and etc.
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2.12 Routine operation and required resources after the completion of the programme

(1) Description of routine activities and outputs and required financial and human resources after the completion of the project. Description of the required resources can be done in an indicative manner.	- The government establishments above in section 1.2 (5), must be maintained and sustained. - Sustainable operation and maintenance of the hydromet monitoring stations. - Accumulation and management of data/information to be obtained from each station - Continuation of the human resources capacity development - Generation of income from data and information released to users - Updating of nationwide high resolution map to reflect different land uses.
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3. PROGRAMMES' PROFILES REFERENCE

3.1 Adopted CAMP Programme and Project Profile Framework

CAMP - Programme and project profile format Part 1 and 2 v.1 (6 June 2014)

Programme/project name:

Programme/project ID:

Items	Information
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Part 1: Programme or project profile administration

1.1 Programme or project identification

(1) Programme or project:		Code: 1: Programme 2: Project
(2) Programme or project name:		
(3) Programme or project ID:		File name: PP profile format v1.docx

1.2 Programme or project classification scheme

	Code	Abbreviation	Description	Reference
(1) Development theme:				Table 2-1
(2) Subsector:				Table 2-2
(3) CAADP Pillars:				Table 2-9
(4) State:				Table 2-3
(do):				Table 2-3
(do):				Table 2-3
(do):				Table 2-3
(do):				Table 2-3
(5) Government organisation:				Table 2-4
(6) Agro-ecological Zone:				Table 2-5
(7) Planning time horizon (start):				Table 2-6
(8) Objective time horizon:				Table 2-7
(9) Ownership:				Table 2-8
(10) Funding sources:				Table 2-10
(do):				Table 2-10
(do):				Table 2-10
(do):				Table 2-10
(11) Activity types:				Table 2-11
(12) Development actors:				Table 2-12
(do):				Table 2-12

Part 2: Programme or project description

2.1 Programme or project justification and rationale

(1) Justification and rationale:	
(2) Overall description including temporal and spatial extent of programme or project:	

2.2 Programme or project component and activity structure

(1) Component and activity structure:	Component 1: Technical capacity development of national forest management Activity 1.1: Preparation of materials Activity 1.2: Procurement of trainers of trainers Component 2: xxxxxx Activity 2.1: xxxx Activity 2.2: xxx xxx xxx
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2.3 Objectives

(1) Objectives:	
(2) Component objectives:	Component 1: Technical capacity development of national forest management Component 2: xxxxxx
(3) Activity objectives:	(if it is applicable) Activity 1.1: Preparation of materials Activity 1.2: Procurement of trainers of trainers Activity 2.1: xxxx Activity 2.2: xxx xxx xxx

2.4 Outputs

(1) Outputs:	
(2) Component outputs:	Component 1: Component 2:
(3) Activity outputs:	Activity 1.1: Activity 1.2:

Programme/project name:

Programme/project ID:

Items	Information
	Activity 2.1: Activity 2.2:

2.5 Outcomes, impact and contributions to value added (i.e. economic growth)

(1) Outcomes and impact:

(2) Outcomes and impact of components:

2.6 Required resources: Time (Final version should be consistent with Part 3 Cost and revenue estimation)

(1) Start and ending fiscal year: Starting FY: Ending FY:

(2) Duration (years):

(3) Allocation of time (years):

2.7 Required resources: Financial resources (Final version should be consistent with Part 3 Cost and revenue estimation)

(1) Fund allocation principle:

(2) Financial arrangement for resource mobilization and application:

(3) Total budget and revenue:

(4) Annual allocation of budget and revenue

(SSP)					
FY	2015/16	2016/17	2017/18	2018/19	2019/20
Expenditure	1,000,000	1,000,000	1,000,000	1,000,000	1,000,000
Revenue	600,000	800,000	800,000	1,000,000	1,100,000
Profit/loss	-400,000	-400,000	-200,000	0	100,000

(5) Summary of economic or financial analysis (e.g. EIRR and/or FIRR): (If it is applicable)

2.8 Required resources: Human resources (Final version should be consistent with Part 3 Cost and revenue estimation)

(1) Principle of human resources management:

(2) Required human resources in the public sector (Positions, grades and numbers):

(3) Required human resources in the private sector including consultants (positions, qualification and numbers):

2.9 Monitoring and evaluation for impact measurement

(1) Measurable indicators and situation at a starting point:

(2) Measurable indicators and situation at the end point:

(3) Methods of measurement and sources of information:

(4) Responsible parties for the monitoring and evaluation:

2.10 Monitoring and evaluation for operational performance and efficiency measurement

(1) Measurable indicators and situation at a beginning of each fiscal year:

(2) Measurable indicators and situation at the end of each fiscal year:

(3) Methods of measurement and sources of information:

(4) Responsible parties for the monitoring and evaluation:

2.11 Other special arrangements and/or notes

(1) Other special arrangements and/or notes

3.2 IDMP Programme and Project Classification

3.2.1 Development Themes

Table 3.2.1 Development Themes

Code	Abbreviation	Development Theme
Specific IDMP development themes		
01	FG	Function of government
02	RR	Reconstruction and recovery
03	FS	Food and nutrition security
04	ED	Economic and income growth
05	AT	Agricultural sector transformation
General development themes		
11	EID	Economic infrastructure development
12	SID	Social infrastructures development
13	EH	Education and Health
14	SW	Social Welfare
15	NR	Natural Resources Management

3.2.2 IDMP Elements

Table 3.2.2 Elements

Code	Abbreviation	Element
01	PLRF	Policy, legal and regulatory framework
02	ICD	Institutions and capacity development
03	IFDM	Irrigation facilities development and management
00	AL	All elements

3.2.3 States

Table 3.2.3 States

Code	Abbreviation	State Name
71	UNS	Upper Nile State
72	JS	Jonglei State
73	US	Unite State
81	WS	Warrap State
82	NBGS	Northern Bahr el Ghazal State
83	WBGS	Western Bahr el Ghazal State
84	LS	Lakes State
91	WES	Western Equatorial State
92	CES	Central Equatorial State
93	EES	Eastern Equatorial state
00	RSS	Republic of South Sudan
01	AA	Administrative areas
02		Others

3.2.4 Government Organizations related to IDMP

Table 3.2.4 Government Organizations related to IDMP

Ministry of Electricity Dam, Irrigation and Water Resources (MEDIWR)			
Ministry/Institution	Code	Abbreviation	Name of the Directorate
MEDIWR	01	DAF	Directorate of Administration and Finance
MEDIWR	02	DID	Directorate of Irrigation and Drainage
MEDIWR	03	DWRM	Directorate of Water Resources Management
MEDIWR	04	DPP	Directorate of Planning and programming
MEDIWR	05	DHS	Directorate of Hydrology and Survey
MEDIWR	06	DRWS	Directorate of Rural Water and Sanitation
MEDIWR	07	DEG	Directorate of Engineering and Grid
MEDIWR	08	DDIU	Directorate of Dams Implementation Unit
MEDIWR	09	DOS	Directorate of Organization System
Water Bill	10	WRMA	Water Resources Management Authority
Water Bill	11	BWB	Basin Water Boards
Water Bill	12	CC	Catchment Committees
Water Bill	13	SCC	Sub-catchment Committees
Water Bill	14	WUA	Water Users Association
Water Bill	15	IB	Irrigation Board
Ministry of Agriculture, Forestry Cooperatives and Rural Development (MAFCRD)			
Ministry	Code	Abbreviation	Name of Directorate
MAFCRD	01	DAF	Directorate of Administration and Finance
MAFCRD	02	DR	Directorate of Research
MAFCRD	03	DCD	Directorate of Cooperatives Development
MAFCRD	06	ARDI	Directorate of Amadi Rural Development institute
MAFCRD	07	DF	Directorate of forestry
MAFCRD	08	DRD	Directorate of Rural Development
MAFCRD	09	DPP	Directorate of Plant Production
MAFCRD	10	DAET	Directorate of Agricultural Education and Training
MAFCRD	12	DAPES	Directorate of Agriculture Production and Extension Services
MAFCRD	13	DPAE	Directorate of Planning and Agriculture Economics
Ministry of Livestock and Fisheries Industries (MLFI)			
Ministry	Code	Abbreviation	Name of Directorate
MLFI	01	DP	Directorate of Planning, Statistics and Documentation
MLFI	02	DSCSP	Directorate of States and Special Projects Coordination
MLFI	03	DAFHRD	Directorate of Administration, Finance and Human Resource Development
MLFI	04	DIMS	Directorate of Investment , Marketing and Supplies
MLFI	05	DAPRM	Directorate of Animal Production and Range Management
MLFI	06	DFAD	Directorate of Fisheries and Aquaculture Development
MLFI	07	DVS	Directorate Veterinary Services
MLFI	08	DLFE	Directorate of Livestock and Fisheries Extension
MLFI	09	DAFRD	Directorate of Livestock and Fisheries Research Development
MLFI	10	DEPD	Directorate of Extension and pastoralists Development
Ministry of Transport, Road and bridges (MTRB)			
Ministry	Code	Abbreviation	Name of Directorate
MTRB	01	SSMS	South Sudan Metrological services
MTRB	02	DRBC	Directorate of Roads and Bridges & PMT (construction)
MTRB	03	DRBM	Directorate of Roads and Bridges & PMT (maintenance)
MTRB	04	DRBP	Directorate of Roads and Bridges & PMT (policy)
MTRB	05	DRBT	Directorate of Roads and Bridges & PMT (technical)
MTRB	06	SSRA	South Sudan Roads Authority
MTRB	07	DAT	Directorate of Air Transport
MTRB	08	DR	Directorate of Railways
MTRB	09	DRT	Directorate of River Transport
MTRB	10	DRS	Directorate of Road Safety

MTRB	11	DB	Directorate of Bridges
Ministry of Gender, Child and Social Welfare (MGCSW)			
Ministry	Code	Abbreviation	Name of Directorate
MGCSW	01	DCW	Directorate of Child Welfare
MGCSW	02	DG	Directorate of Gender
MGCSW	03	DP	Directorate of Planning
MGCSW	04	DSW	Directorate of Social Welfare
Ministry of Environment (MoE)			
Ministry	Code	Abbreviation	Name of Directorate
MoE	01	DEEI	Environmental Education and Information
MoE	02	DEM	Environmental Management
MoE	03	DEPRT	Environmental Planning, Research and Training
MoE	04	DWB	Wetlands and Biodiversity
Ministry of Finance and Economic planning (MoFEP)			
Ministry	Code	Abbreviation	Name of Directorate
MoFEP	01	DC-OF	Directorate of Customs - Organised Forces
MoFEP	02	DC-PS	Directorate of Customs - Public Service
MoFEP	03	DT	Directorate of Taxation
MoFEP	04	MP	Macroeconomic Planning
MoFEP	05	PR	Petroleum Revenue
MoFEP	06	PU	Petroleum Unit
MoFEP	07	PI	Planning (Investment)
MoFEP	08	DB	Budget Directorate
MoFEP	09	DA	Directorate of Accounts
MoFEP	10	GATC	Government Accountancy Training Centre (GATC)
MoFEP	11	IA	Internal Audit
MoFEP	12	PRO	Procurement
MoFEP	13	DAF	Directorate of Administration & Finance
MoFEP	14	PASP	Planning (Aid & Sectoral Planning)
Ministry of Health (MoH)			
Ministry/Institution	Code	Abbreviation	Name of Directorate
MoH	01	CPH	Community & Public Health
MoH	02	DN	Department of Nutrition
MoH	03	DHIVS	Directorate of HIV (Services)
MoH	04	DHIV	Directorate of HIV (Surveillance)
MoH	05	DPHCC	Directorate of PHC (Child)
MoH	06	DPHCP	Directorate of PHC (Primary)
MoH	07	DPMDC	Directorate of Preventative Medicine (disease control)
MoH	08	DPMRS	Directorate of Preventative Medicine (response systems)
MoH	09	MC	Medical Commission
MoH	10	HPP	Health Policies and Programmes
MoH	11	DEA	Directorate of External Assistance
MoH	12	DRHSD	Directorate of Research and Health System Development
MoH	13	PC	Planning & Coordination
MoH	14	DHRD	Directorate of HRD
MoH	15	TPD	Training & Professional Development
The other Ministries/Institutions related to IDMP			
Ministry/Institution	Code	Abbreviation	Name of Ministry/Institution/Directorate
MLH&PP	10	DPP	Directorate of Physical Planning
MTI&I	11	DI	Directorate of Industry
MFA&IC	12	DMB	Directorate for Multilateral/Bilateral
MWLC&T	13	DWLC	Directorate of Wildlife Conservation
NBS	14	NBS	National Bureau of Statistics
FSC	15	FSC	Food Security Council
SSBS	16	SSBS	South Sudan Bureau of Standard
MLP&HR	17	MLP&HR	Ministry of Labor, Public Service and Human Resources
MoJ	18	MoJ	Ministry of Justice
State Ministry of Physical Infrastructures (SMPI)			
Ministry	Code	Abbreviation	Name of Directorate
SMPI	01	DWS	Directorate of Water and Sanitation

SMPI	02	DLS	Directorate of land survey
State Ministry of Agricultures and Forestry (SMAF)			
Ministry	Code	Abbreviation	Name of Directorate
SMAF	01	SDA	Directorate of Agriculture/Animal Resource
SMAF	02	SDF	Directorate of Forestry
SMAF	03	SDC/RD	State Directorate of Cooperatives, Community/Rural Development
State Ministry of Animal Resources and Fisheries (SMARF)			
Ministry	Code	Abbreviation	Name of Directorate
SMARF	01	SDAR	Directorate of Animals Resources
SMARF	02	SDF	Directorate of Fisheries
Local Government/County Authority			
Institution	Code	Abbreviation	Name of Directorate
LG	01	CDWS	County Department of Water and Sanitation
LG	02	CDAFL	County Department of Agriculture, forestry, Livestock and Fisheries
LG	03	CDC/RD	County Department of Cooperatives, Community/Rural Development
Land Commission (LC)			
Ministry	Code	Abbreviation	Name of Directorate
LC	01	LPLP	Land Policy and Law (Policy)
LC	02	LPLR	Land Policy and Law (Research)
LC	03	MA	Mediation and Arbitration
Other Organizations related to IDMP			
Organization	Code	Abbreviation	Name of Directorate
PS	01	PS	Private Sector
DP	02	DP	Development Partners
CBO	03	CBO	Community Based Organization e.g. a community development committee
FU	04	FU	Farmers Union
PU	05	PU	Pastoralists Union
CS	06	CS	Cooperatives Society
FF	07	FF	Fishing Folks
CS	08	CS	Civil Society

3.2.5 Irrigation Potential Zones

Table 3.2.5 Irrigation Potential Zones

Code	Abbreviation	Irrigation Potential Zones
01	MZ	Mountainous zone
02	IZ	Intermittent zone
03	PZ	Plain zone
04	WRCZ	Wetland and River Corridor zone

3.2.6 Planning Phases and Time Horizons

Table 3.2.6 Planning Phases and Time Horizons

Code	Abbreviation	Phase	Planning Horizon Duration
01	PH1	Phase I	2015/16-20/21 5 years
02	PH2	Phase ii	2020/21-25/26 5 years
03	PH3	Phase iii	2025/26-30/31 5 years
04	PH4	Phase iv	2030/31-39/40 10 years

3.2.7 Programme and Project Objectives

Table 3.2.7 Programme/Project Objectives

Code	Abbreviation	Programme/Project	Planning Horizon	Development Theme	Duration
01	ST-PP	Programmes and projects with quick win objectives	Short-term	Function of government, economic and income growth, food and nutrition security, agricultural sector transformation, reconstruction and recovery, economic infrastructure development and social infrastructures development	Less than 5 years
02	MT-PP	Programmes and projects with medium-term objectives	Medium-term	Function of government, economic and income growth, food and nutrition security, agricultural sector transformation, reconstruction and recovery, economic infrastructure development and social infrastructures development	5 to 10 years
03	LT-PP	Programmes and projects with long-term objectives	Long-term	Function of government, economic and income growth, food and nutrition security, agricultural sector transformation, reconstruction and recovery, economic infrastructure development , social infrastructures development	More than 10 years

3.2.8 Programme and Project Implementation Responsibility

Table 3.2.8 Programme and Project Implementation Roles/Responsibilities

Code	Type of programme/project	Roles and Responsible Organizations				
		National Government/DPs	State Government/DPs	County or LG/DPs	Community/DPs	Private Sector
01	National programme/project (Nationally planned and nationally implemented)	- Planning - Financing - Implementation - M&E	- Coordination - M&E	- Coordination - M&E	- Contribution - Coordination - M&E	
02	National-State programme/project (Jointly planned and implemented by national and state governments)	- Planning - Financing - Implementation - M&E	- Planning - Financing - Implementation - M&E	- Coordination - M&E	- Contribution - Coordination - M&E	
03	State programme/project (Planned and implemented by state government)	- Technical support - Coordination - M&E	- Planning - Financing - Implementation - M&E	- Coordination - M&E	- Contribution - Coordination - M&E	
04	State-County programme/project (Jointly planned and implemented by state and local governments)	- Technical support - Coordination - M&E	- Planning - Financing - Implementation - M&E	- Planning - Financing - Implementation - M&E	- Contribution - Coordination - M&E	
05	County programme/project (Planned and implemented by local government)	- Technical support - Coordination - M&E	- Technical support - Coordination - M&E	- Planning - Financing - Implementation - M&E	- Contribution - Coordination - M&E	
06	County-Community programme/project (Jointly planned & implemented by local government & community)	- Technical support - Coordination - M&E	- Technical support - Coordination - M&E	- Planning - Financing - Implementation - M&E	- Initiative - Identification - Planning - Financing - Implementation - M&E	
07	Community programme/project (Planned and implemented by community)	- Technical support - Coordination - M&E	- Technical support - Coordination - M&E	- Technical support - Coordination - M&E	- Initiative - Identification - Financing - Implementation	

Code	Type of programme/project	Roles and Responsible Organizations				
		National Government/DPs	State Government/DPs	County or LG/DPs	Community/DPs	Private Sector
					- M&E	
08	Private sector project (Initiated and implemented by private sector)	- Coordination - Facilitation - Supervision - M&E	- Coordination - Facilitation - Supervision - M&E	- Coordination - Facilitation - Supervision - M&E	- Coordination - Contribution - M&E	- Planning - Financing - Implementation - M&E

Note: 1) For private sector project national and state government's responsibilities are included in National and National-State programmes, and State projects.

Note refer to code 02: The role of national is identification, planning, programming, financing, Implementation, Irrigation facilities, O&M, capacity building, supervision, management system; access to market, employment opportunity for all RSS citizens with prioritization of local communities.

The role of state is to allocate and approve the scheme site, which agreed by the sides, state authority and community profit sharing is a beneficiaries linked between the national and state that is based on the percentages.

3.2.9 Other Relevant National, Regional and International Initiatives

Table 3.2.9 Relevant CAADP Pillars and Other Initiatives/Programmes/Projects Targets

Code	Abbreviation	Pillars/Targets	Objective
01	CAADP-P1	Pillar 1: Land and Water Management <i>Land productivity</i> <i>Water resources potentiality</i>	<ul style="list-style-type: none"> É To extend the area under sustainable land management and reliable water control systems É Promotion of irrigated agriculture. É Ensure water efficiencies and sustainable irrigation management system
03	CAADP-P3	Pillar 3: Food supply and hunger <i>Irrigable size</i>	<ul style="list-style-type: none"> É To increase food supply and reduce hunger across the region by raising smallholder productivity and improving responses to food emergencies expansion of irrigated areas and improvement productivity
04	CAADP-P4	Agricultural research <i>Technical training</i>	<ul style="list-style-type: none"> É To improve agricultural research and systems in É Order to disseminate appropriate new technologies to improve skills and knowledge of the staff, Engineers and Technician. through capacity building and training
05	IGAD-HYCOS	Support to national hydro meteorological services	<ul style="list-style-type: none"> É Promote sustainable and integrated water resources development and management in the IGAD region; É Enhance regional cooperation for the collection, analysis, dissemination and exchange of hydrological and hydro-meteorological data and information for water related decision making.
06	NELSAP-MSIOA	Water resources development and management planning	<ul style="list-style-type: none"> É To develop a regional water investment strategy for the NEL region that broadly supports socioeconomic development, poverty reduction, and the reversal of environmental degradation
07	ENTRO-MSIOA	Water infrastructure investment Programme	<ul style="list-style-type: none"> É To develop a regional water investment strategy for the EN region that broadly supports socioeconomic development, poverty reduction, and the reversal of environmental degradation
08	NBI- RH	NBI- Regional Hydromet	<ul style="list-style-type: none"> É To strengthen the Knowledge-based analysis of transboundary options for cooperative planning and

Code	Abbreviation	Pillars/Targets	Objective
			management of Nile Basin shared water resources
09	IGAD-RWRP	IGAD Regional Water Resources Policy	É To promote closer cooperation in the equitable, sustainable and coordinated utilization, protection and management of transboundary/shared water resources in the IGAD region for poverty eradication, socio-economic development, regional integration, environmental sustenance and peaceful coexistence
10	IGAD- INWRMP	Inland water resources management programme (INWRMP)	É to assist its member states to address the water issues, by strengthening of national and regional capacities and their links to provide water, on a sustainable basis, for household, food, agriculture, and environment, municipal and industrial services; and to develop regional co-operation and collaboration in sustainable water resources management
11	NBI-IDP	Information disclosure policy	É To bring about broader stakeholder participation and provide an overarching framework for the disclosure of information across the NBI, consistent with the legal provisions of the NBI centres and the best practices of international river basin organizations
12	NBI-ESP	Environmental and Social Policy	É To: <ol style="list-style-type: none"> 1. Provide a set of principles and fields of action for the integration of environmental and social concerns in NBI programs; 2. Provide guidance for managing transboundary environmental and social impacts of national activities; 3. Provide support to Nile Basin Countries for the protection and conservation of critical Nile Basin environmental resources; and 4. Demonstrate commitment of the NBI and Nile countries to international best practices with regards to environmental and social management of development activities.
13	NBI-WLMS	Wetland management strategy	É To: <ol style="list-style-type: none"> 1. Strengthen the Knowledge base on wetland of transboundary importance in the Nile basin to support basin-wide conservation, management, planning and restoration efforts; 2. Raise awareness and undertake advocacy efforts to build consciousness around the important role of wetlands and their ecosystem functions for basin development; 3. Develop and promote a basin-wide approach for the sustainable and cooperative management of wetlands taking into account the full variety of wetland users; 4. Strengthen national policies and institutional capacities for the effective management of wetlands with basin-wide importance; and 5. Strengthen basin-wide access to finance for wetland management and the capacity for development of feasible projects in the Nile

Code	Abbreviation	Pillars/Targets	Objective
			basin
14	NBI-CCS	Climate change strategy	É To: <ol style="list-style-type: none"> 1. Strengthen the Knowledge base to enhance common understanding of climate change risks and its impacts on the water resources, ecosystems and the socio- economic system of the Nile Basin; 2. Strengthen long-term capacities for addressing climate risks and uncertainty in the Nile Basin at national and transboundary levels; 3. Support climate change resilient planning and implementation, addressing climate risks and uncertainty in NBI programs; 4. Promote Scalable low carbon development through enhanced transboundary cooperation in areas such as protection of wetlands as well as clean energy use and development; and 5. Strengthen basin-wide climate finance access and the capacity for development of feasible projects in Nile basin.

3.2.10 Funding Sources

Table 3.2.10 Funding Sources

Code	Abbreviation	Organization	Funding Source
11	NNB	National government	National budget
12	NDF	National government	National development fund
13	NEF	National government	Equity financing
21	SSB	State local government	State budget
22	SDF	State local government	State development fund
23	SEF	State local government	Equity financing
31	DPG	Development partners	Grant
32	DPL	Development partners	Loan
42	PSG	Private sector	Grant
42	PSL	Private sector	Loan
51	NGG	NGO	Grant
52	NGL	NGO	Loan
53	CI/C	Community	Investment/Contribution
54	PSI	Private sector	Investment

3.2.11 Programme and Project Activity Types

Table 3.2.11 Programme and Project Activity Types

Code	Abbreviation	Activity Group	Activity Type
101	ID-LI	Institutional development	Legal and Institutional Development
102	ID-AD	Institutional development	Administrative capacity development
103	ID-PP	Institutional development	Policy formulation and planning
104	ID-IM	Institutional development	Implementation and monitoring
201	SP-IM	Service delivery/infrastructure development Economic infrastructure	Information management and analysis
202	SD-ME	Service delivery/infrastructure development	Macroeconomic policy implementation

Code	Abbreviation	Activity Group	Activity Type
		Economic infrastructure	
203	SD-EX	Service delivery/infrastructure development Economic infrastructure	Extension and training
204	SD-RE	Service delivery/infrastructure development Economic infrastructure	Research and experiment
205	SD-CR	Service delivery/infrastructure development Economic infrastructure	Provision of credit
206	SD-LU	Service delivery/infrastructure development Economic infrastructure	Provision of subsidy
207	SD-PL	Service delivery/infrastructure development Economic infrastructure	Granting permissions and licenses
208	SD-PO	Service delivery/infrastructure development Economic infrastructure	Parastatal organization and public forests and parks
209	SD-EI	Service delivery/infrastructure development Economic infrastructure	Economic infrastructures development
210	SD-SI	Service delivery/infrastructure development Economic infrastructure	Social infrastructures development
301	PS-PR	Private sector	Production
302	PS-MF	Private sector	Manufacturing
303	PS-TR	Private sector	Trade
304	PS-FI	Private sector	Financing
999	OTR	Other group	Other programme/project type

3.2.12 Development Actors and Instruments

Table 3.2.12 Development Actors and Instruments

(Continued)

Code	Actors				Note
	L 1	L 2	L 3	L 4	
02	Private sector				
02.01	Household				
02.01.01	Subsistence household				
02.01.01.01	Returnees and internally displaced person				Person without means of production
02.01.01.02	Agriculture				Engaged in production and manufacturing livelihood
02.01.01.03	Pastoralism and nomadism				Engaged in production and manufacturing livelihood
02.01.01.04	Forestry				Engaged in production and manufacturing livelihood
02.01.01.05	Fisheries				Engaged in production and manufacturing livelihood
02.01.02	Commercial production household				Progressive agricultural household
02.01.02.01	Agriculture				Engaged in production, manufacturing and trading livelihood
02.01.02.02	Pastoralism and nomadism				Engaged in production, manufacturing and trading livelihood
02.01.02.03	Forestry				Engaged in production, manufacturing and trading livelihood
02.01.02.04	Fisheries				Engaged in production, manufacturing and trading livelihood
02.01.02.05	Commerce				Engaged in trading livelihood
02.01.02.06	Finance				Engaged in commerce, trading, and money lending livelihood
02.01.02.07	Agricultural labour				Engaged in labour for commercial and non-commercial farmers
02.02	Enterprise				
02.02.01	Small, medium, and large enterprise				
02.02.01.01	Agriculture				Engaged in production, manufacturing and trading business
02.02.01.02	Livestock				Engaged in production, manufacturing and trading business
02.02.01.03	Forestry				Engaged in production, manufacturing and trading business
02.02.01.04	Fisheries				Engaged in production, manufacturing and trading business
02.02.01.05	Commerce				Engaged in trading and sales business
02.02.01.06	Finance				Engaged in financial business targeting enterprises and individuals
02.02.02	Cooperative and business association				
02.02.02.01	Agricultural producer organisation				
02.02.02.02	Small-scale producer organisation				
02.02.02.03	Enterprise organisation				
03	Market and resources				Markets and natural resources as instruments of development
03.01	Market				
03.01.01	Intra-household transaction				
03.01.01.01	Labour market				
03.01.01.02	Capital and factor market				
03.01.01.03	Product market				
03.01.02	Local market				Category of "rural" by definition of National Bureau of Statistics
03.01.02.01	Labour market				
03.01.02.02	Capital and factor market				Including formal and informal sector
03.01.02.03	Product market				Including formal and informal sector
03.01.03	Domestic market				Category of "urban" by definition of National Bureau of Statistics
03.01.03.01	Labour market				
03.01.03.02	Capital and factor market				Including only formal sector entities
03.01.03.03	Product market				Including only formal sector entities
03.01.04	Regional market				Markets of surrounding countries
03.01.04.01	Labour market				
03.01.04.02	Capital and factor market				
03.01.04.03	Product market				
03.01.05	International market				
03.01.05.01	Labour market				
03.01.05.02	Capital and factor market				
03.01.05.03	Product market				
03.02	Natural resources				
03.02.01	Land and forest resources				
03.02.01.01	Land resources				
03.02.01.02	Forest resources				
03.02.02	Fisheries resources				
03.02.02.01	Fisheries resources				
03.02.03	Environmental and biodiversity resources				
03.02.03.01	Environmental and biodiversity resources				
03.02.04	Water resources				
03.02.04.01	Surface water				
03.02.04.02	Ground water				
03.02.05	Other resources				
03.02.05.01	Oil resources				

(Continued)					Note
Code	Actors				
	L 1	L 2	L 3	L 4	
03.03	Intellectual property				
03.03.01	Public financial management system				
03.03.01.01	Integrated financial management system				
03.03.01.02	Administrative and legal affairs				
03.03.01.03	Human affairs and human resources development				
03.03.01.04	Monitoring and evaluation				
03.03.02	Agricultural technology				
03.03.02.01	(TBD)				
03.03.02.02	(TBD)				
03.03.03	Livestock technology				
03.03.03.01	(TBD)				
03.03.03.02	(TBD)				
03.03.04	Forestry and forest products technology				
03.03.04.01	Forestry management plan development method				
03.03.04.02	Silvicultural technology				
03.03.04.03	Forest products technology				
03.03.04.04	Minor forest products technology				
03.03.04.05	Forest engineering and machinery				
03.03.05	Fisheries technology				
03.03.05.01	(TBD)				
03.03.05.02	(TBD)				

3.3 Public Financial Management System

3.3.1 Revenue and Expenditure Classifications

Table 3.3.1 Revenue and Expenditure Classifications

2012/2013 Revenue classifications			
Chapter	Item	Sub-item	Code Description
11			11 Taxes
	111		111 Taxes on income and profits
		11100	11100 Income Tax Withheld by companies / NGOs
		11101	11101 Income Tax Withheld for government employees
		11102	11102 Income Tax paid by individuals
		11103	11103 Business Profit Tax
	112		112 Taxes on payroll and workforce
		11200	11200 Taxes on payroll and workforce
	113		113 Taxes on property
		11300	11300 Property tax
		11301	11301 Land tax
		11302	11302 Taxes on financial and capital transactions
	114		114 Taxes on goods and services
		11400	11400 Sales taxes
		11401	11401 Value added tax
		11402	11402 Turnover and other general taxes on goods and services
		11403	11403 Excise duty
		11404	11404 Taxes on specific services
		11405	11405 Motor vehicle tax
		11406	11406 Tax on use of other goods
	115		115 Taxes on international trade and transactions
		11500	11500 Customs and other import duties
		11501	11501 Taxes on exports
		11502	11502 Exchange profits
		11503	11503 Exchange taxes
	116		116 Other taxes
		11600	11600 Unclassified taxes
		11601	11601 Social service tax
12			12 Social security contributions
	121		121 Pension contributions
		12100	12100 Employee contributions
		12101	12101 Employer contributions
13			13 Grants
	131		131 From foreign governments
		13100	13100 Grants from foreign governments - Current
		13101	13101 Grants from foreign governments - Capital
	132		132 Transfers Current From Other Government Units
		13200	13200 Grants Current - Salaries
		13201	13201 Grants Current - Operating
		13202	13202 Grants Current - Block
	133		133 Transfers Capital
		13300	13300 Grants Capital - conditional
		13301	13301 Grants Capital - county development
	134		134 Transfers Other Oil
		13400	13400 2% Oil transfer
		13401	13401 3% Oil transfer
	135		135 Transfers from International Organizations
		13500	13500 Grants from international organizations - Current
		13501	13501 Grants from international organizations - Capital
14			14 Other revenue
	141		141 Property income
		14100	14100 Interest
		14101	14101 Dividends
		14102	14102 Withdrawals from income of quasi-corporations
		14103	14103 Royalties, land rights, forestry, fishing and grazing rights
		14104	14104 Other Rent

(Continued)

Chapter	Item	Sub-item	Code	Description
	142		142	Sales of goods and services
		14200	14200	Sales by utility corporations
		14201	14201	Airport and Seaport fees
		14202	14202	Other market Sales
		14203	14203	Tourism license
		14204	14204	Driving licenses
		14205	14205	Work permits
		14206	14206	Receipt from other licenses
		14207	14207	Registration of Co. and NGOs
		14208	14208	Other administrative fees
		14209	14209	Incidental sales
	143		143	Fines and Penalties
		14300	14300	Traffic fines
		14301	14301	Fines and penalties judiciary
		14302	14302	Other fines
	144		144	Sale of Fixed Assets
		14400	14400	Sale of buildings and structures
		14401	14401	Sale of equipment
		14402	14402	Sale of furniture
		14403	14403	Sale of Livestock
	145		145	Oil Revenue
		14500	14500	Export oil sales
		14501	14501	Local oil sales
		14502	14502	Area rentals (to be paid annually)
		14503	14503	Signing bonus (when contracts signed)
		14504	14504	Production bonus
		14505	14505	Scholarship bonus
	146		146	Other revenue
		14600	14600	Unclassified receipts
		14601	14601	Return of previous year expenditure

2012/2013 Expense classifications

21		21	Wages and salaries
	211	211	Wages and salaries
		21100	21100 Base salary
		21101	21101 Allowances - payroll
		21102	21102 Allowances - other
	212	212	Incentives and Overtime
		21200	21200 Incentives
		21201	21201 Overtime
	213	213	Pension contributions
		21300	21300 Employer pension contribution
	214	214	Social benefits
		21400	21400 Rent for staff accommodation
		21401	21401 Terminal Benefits
		21402	21402 Death Benefits& Funeral Expense
		21403	21403 Medical benefits
		21404	21404 Other social benefits
22		22	Use of Goods and services
	221	221	Travel
		22100	22100 Allowance - Domestic
		22101	22101 Allowance - International
		22102	22102 Travel - Domestic
		22103	22103 Travel - International
	222	222	Staff training and other staff costs
		22200	22200 Training (domestic)
		22201	22201 Training (abroad)

(Continued)

Chapter	Item	Sub-item	Code	Description
		22202	22202	Tuition Fees
		22203	22203	Workshop, Seminar, Conferences
		22204	22204	Staff Relocation/Repatriation cost
223		223		Contracted services
		22300	22300	Casual Labour
		22301	22301	Contracted Tech/Prof Services
		22302	22302	Contracted Security& Cleaning
		22303	22303	Printing and Publishing
		22304	22304	Advertisement, Media Campaign
		22305	22305	Management Fees
		22306	22306	Vehicle Rental (car, bus & charter plane)
		22307	22307	Non-residential Rent
		22308	22308	Hire - Equip, Plant, Machinery
		22309	22309	Transport/Storage Charges
		22310	22310	Trade Show or Exhibition
224		224		Repairs and Maintenance
		22400	22400	Vehicle Maintenance
		22401	22401	Maintenance of Other Transport Equip
		22402	22402	Equip, Plant, Machinery Maintenance
		22403	22403	Maintenance of Buildings
		22404	22404	Maintenance - Roads& Bridges
		22405	22405	Civil Works Maintenance- Power, Water
225		225		Utilities and Communications
		22500	22500	Water and Sewerage Charges
		22501	22501	Electricity
		22502	22502	Telecommunication
		22503	22503	Postage & courier costs
226		226		Supplies, Tools and materials
		22600	22600	Medical/Vet Supply- drug, dressing
		22601	22601	Agriculture, Workshop& Lab Supplies
		22602	22602	Education & Library Supp. (Books &c)
		22603	22603	Security Costs
		22604	22604	Uniforms
		22605	22605	Food & Rations
		22606	22606	Sports Equipment
		22607	22607	Other Specialised Supplies
		22608	22608	Office Supplies (stationery &c)
		22609	22609	HW & SW Supplies for ICT, Copier
		22610	22610	Office Water, Tea, Soft Drinks
		22611	22611	Fuels& Lubricants for Transport
		22612	22612	Fuels& Lubricants for Equip/Prod
227		227		Other operating expenses
		22700	22700	Building Insurance
		22701	22701	Equip, Plant, Machinery Insurance
		22702	22702	Vehicle/Transport Equip Insurance
		22703	22703	Penalties and Court Fines
		22704	22704	License or Registration Fee
		22705	22705	Other Loss (Cash, Write-off)
		22706	22706	Bank Charges
		22707	22707	Subscription- Paper, Periodical
		22708	22708	Visitor Housing & Entertainment
		22709	22709	Constitutional post holders advance
		22710	22710	Reimbursable advance
228		228		Oil production costs
		22800	22800	Transit fees

(Continued)

Chapter	Item	Sub-item	Code	Description
23			23	Transfers
	231		231	Transfers Conditional Salaries
		23100	23100	Grants Current - Salaries
	232		232	Transfers Operating
		23200	23200	Grants Current - Operating
		23201	23201	Grants Current - Block
		23202	23202	Grants Current - Block Advance
	233		233	Transfers Capital
		23300	23300	Grants Capital - conditional
		23301	23301	Grants Capital - county development
		23302	23302	Constituency Development Fund
	234		234	Transfers Other Oil
		23400	23400	2% Oil transfer
		23401	23401	3% Oil transfer
	235		235	Transfers to International Organizations
		23500	23500	Grants to international organizations - Current
		23501	23501	Grants to international organizations - Capital
	236		236	Transfers to Service Delivery Units
		23600	23600	Grant Current
		23601	23601	Grants Capital
24			24	Other expenditure
	241		241	Interest
		24100	24100	Foreign loans
		24101	24101	Domestic loans
	242		242	Subsidies
		24200	24200	University Subsidies
		24201	24201	Other Institution Subsidies
	243		243	Grants and Loans to Businesses
		24300	24300	Grants to Business Enterprise
		24301	24301	Loans to Business Enterprise
	244		244	Social assistance benefits
		24400	24400	Donations to private individuals
		24401	24401	Donations to private organizations
		24402	24402	Student benefits
		24403	24403	Other social assistance benefits
28			28	Capital Expenditure
	281		281	Infrastructure and land
		28100	28100	Roads and Bridges
		28101	28101	Water Supply: Drain, Bore, Sewer
		28102	28102	Power Supply
		28103	28103	Airstrip, Airport/Port/ Harbour
		28104	28104	Residence Buildings: Government Officials
		28105	28105	Non-residence Buildings Admin and Office
		28106	28106	Non-Residence Buildings -Hospitals, Schools etc.
		28107	28107	Feasibility Study: Capital Works
		28108	28108	Engineering/Design/Architect Plans
		28109	28109	Supervision of Capital Works
		28110	28110	Land
	282		282	Vehicles
		28200	28200	Motorbikes
		28201	28201	Cars
		28202	28202	Bus or Minibus
		28203	28203	Lorry
		28204	28204	Other Transport Equipment

(Continued)

Chapter	Item	Sub-item	Code	Description
	283		283	Specialized Equipment
		28300	28300	Communications Equipment
		28301	28301	Generator, Boiler, Fridge, Irrigation
		28302	28302	Tractor, Dozer, Tipper, Excavator
		28303	28303	Medical& Veterinary Equipment
		28304	28304	Agriculture, Lab & Workshop Equipment
		28305	28305	Tents & Impermanent Structures
		28306	28306	Other Specialised Equipment
		28307	28307	Office Furnishing, Furniture, Air conditioner.
		28308	28308	Computer, Copier, ICT Equipment
31			31	Assets
	311		311	Treasury Single Account
		31100	31100	6919/02 Block/Consolidated
		31101	31101	6919/03 Payment/Operating Account
		31102	31102	6919/22 Salary Account
		31103	31103	6919/09 Non-oil Revenue Account
		31104	31104	6919/13 Personal Income Tax
		31105	31105	6919/21 Reserve Account
		31106	31106	6919/16 Pension Account
	312		312	Foreign currency accounts
		31200	31200	6921/07 USD Currency Account
		31201	31201	6921/07/03 GBP Sterling
		31202	31202	6921/7/26 Euro Currency Account
		31203	31203	Stanbic USD 0240080087601
		31204	31204	Stanbic EU 7040080087601
		31205	31205	Stanbic KES 0140080087601
		31206	31206	6921/24/23 Sterling Reserve
		31207	31207	USD Citibank Account
		31208	31208	Euro Citibank Account
		31209	31209	Sterling Citi Account
		31210	31210	KCB NBO Trvl PermAc
	313		313	Investment accounts
		31300	31300	ORSA
		31301	31301	Future Generations
		31302	31302	Investments
		31303	31303	Stanbic Marginal LC Account
		31304	31304	Investment in public and mixed enterprises and banks
		31305	31305	Investment in private enterprises
	314		314	Accounts receivable
		31400	31400	Other receivable
		31401	31401	Loans to government employees
		31402	31402	Other loans
41			41	Liabilities
	411		411	Accounts payables
		41100	41100	Suppliers
		41101	41101	Employee Pension Contribution
		41102	41102	Employer Pension Contribution
		41103	41103	Trade Union Deduction
		41104	41104	PIT (State level Only)
		41105	41105	Health insurance
		41106	41106	Student support deductions
	412		412	Loans
		41200	41200	Loans - domestic
		41201	41201	Loans - foreign
		41202	41202	Short Term Borrowings
51			51	Retained earnings
	511		511	Retained earnings
		51100	51100	Retained earnings current year
		51101	51101	Prior period retained earnings

3.3.2 National Budget Structure

Table 3.3.2 National Budget Structure for MEDIWR 2013-2014

DIRECTORATE OF ADMINISTRATION AND FINANCE, MINISTER'S OFFICE				2013 DIRECTORATE OF PLANNING AND PROGRAMMES				
Item	Budget 2012/13	New Budget 2013/14	Item	Budget 2012/13	New Budget 2013/14	Item	Budget 2012/13	New Budget 2013/14
21 Wages and Salaries	1,946,287	2,154,629	21 Wages and salaries	650,566	737,901	21 Wages and Salaries	577,599	664,776
211 Wages and Salaries	1,576,194	1,708,950	211 Wages and Salaries	577,599	664,776	2110 Basic Salaries & Wages - Permanent Employee	577,599	664,776
21100 Basic Salaries & Wages - Permanent Employee	1,576,194	1,708,950	2111 Allowances - Payroll			2111 Allowances - Payroll		
21101 Allowances - Payroll			2112 Allowances - Other			2112 Allowances - Other		
21102 Allowances - Other			212 Incentives and Overtime			212 Pension contribution	72,967	73,125
212 Incentives and Overtime			21200 Incentives		0	2120 Pension	72,967	73,125
21200 Incentives		0	213 Pension contribution	197,593	187,985	212 Incentives and Overtime		
213 Pension contribution	197,593	187,985	21300 Pension contribution	197,593	187,985	21200 Incentives		0
21300 Pension contribution	197,593	187,985	214 Social benefits	172,500	257,694	214 Social benefits	0	0
214 Social benefits	172,500	257,694	21400 Other Employee Costs			21400 Other Employee Costs	0	0
21400 Other Employee Costs			21400 Rent for Staff Accommodation	0	0	21400 Rent for Staff Accommodation	0	0
21401 Terminal Benefits			21401 Terminal Benefits			21401 Terminal Benefits		0
21402 Death Benefits & Funeral Expense			21402 Death Benefits & Funeral Expense			21402 Death Benefits & Funeral Expense		0
21403 Medical Benefits			21403 Medical Benefits			21403 Medical Benefits		0
21404 Other Social Benefits	172,500	257,694	21404 Other Social Benefits	172,500	257,694	21404 Other Social Benefits		0
22 Use of Goods and Services (Operating)	2,801,841	4,409,500	22 Use of Goods and Services (Operating)	226,250	200,000	22 Use of Goods and Services (Operating)	226,250	200,000
221 Travel	250,000	500,000	221 Travel	100,000	100,000	221 Travel	100,000	100,000
22100 Allowances - Domestic		150,000	22100 Allowances - Domestic	100,000	40,000	22100 Allowances - Domestic	100,000	40,000
22101 Allowance - International		0	22101 Allowance - International		0	22101 Allowance - International		0
22102 Travel - Domestic	250,000	350,000	22102 Travel - Domestic		60,000	22102 Travel - Domestic		60,000
22103 Travel - International		0	22103 Travel - International		0	22103 Travel - International		0
222 Staff Training and Other Staff Costs	0	0	222 Staff Training and Other Staff Costs	0	0	222 Staff Training and Other Staff Costs	0	0
22200 Training (domestic)		0	22200 Training (domestic)		0	22200 Training (domestic)		0
22201 Training (abroad)		0	22201 Training (abroad)		0	22201 Training (abroad)		0
22202 Tuition Fees		0	22202 Tuition Fees		0	22202 Tuition Fees		0
22203 Workshop, Seminar, Conferences		0	22203 Workshop, Seminar, Conferences		0	22203 Workshop, Seminar, Conferences		0
22204 Staff Relocation/Repatriation Cost		0	22204 Staff Relocation/Repatriation Cost		0	22204 Staff Relocation/Repatriation Cost		0
223 Contracted Services	745,996	1,050,000	223 Contracted Services	126,250	100,000	223 Contracted Services	126,250	100,000
22300 Casual Labour		100,000	22300 Casual Labour		0	22300 Casual Labour		0
22301 Contracted Tech/Prof Services	366,496	250,000	22301 Contracted Tech/Prof Services	75,000	20,000	22301 Contracted Tech/Prof Services	75,000	20,000
22302 Contracted Security & Cleaning		50,000	22302 Contracted Security & Cleaning		0	22302 Contracted Security & Cleaning		0
22303 Printing and Publishing		100,000	22303 Printing and Publishing		30,000	22303 Printing and Publishing		30,000
22304 Advertisement, Media Campaign	34,500	50,000	22304 Advertisement, Media Campaign	51,250	50,000	22304 Advertisement, Media Campaign	51,250	50,000
22305 Management Fees		0	22305 Management Fees		0	22305 Management Fees		0
22306 Vehicle Rental (car, bus & charter plane)		100,000	22306 Vehicle Rental (car, bus & charter plane)		0	22306 Vehicle Rental (car, bus & charter plane)		0
22307 Non-residential Rent	345,000	300,000	22307 Non-residential Rent		0	22307 Non-residential Rent		0
22308 Hire - Equip, Plant, Machinery		50,000	22308 Hire - Equip, Plant, Machinery		0	22308 Hire - Equip, Plant, Machinery		0
22309 Transport/Storage Charges		50,000	22309 Transport/Storage Charges		0	22309 Transport/Storage Charges		0
22310 Trade Show or Exhibition		0	22310 Trade Show or Exhibition		0	22310 Trade Show or Exhibition		0
224 Repairs and Maintenance	691,665	900,000	224 Repairs and Maintenance	0	0	224 Repairs and Maintenance	0	0
22400 Vehicle Maintenance	346,665	600,000	22400 Vehicle Maintenance		0	22400 Vehicle Maintenance		0
22401 Maintenance of other transport equipment	345,000	0	22401 Maintenance of other transport equipment		0	22401 Maintenance of other transport equipment		0
22402 Equip, Plant, Machinery Maint.		100,000	22402 Equip, Plant, Machinery Maint.		0	22402 Equip, Plant, Machinery Maint.		0
225 Utilities and Communication	69,000	250,000	225 Utilities and Communication	0	0	225 Utilities and Communication	0	0
22500 Water and Sewerage	34,500	50,000	22500 Water and Sewerage		0	22500 Water and Sewerage		0
22501 Electricity		25,000	22501 Electricity		0	22501 Electricity		0
22502 Telecommunication	34,500	150,000	22502 Telecommunication		0	22502 Telecommunication		0
22503 Postage & Courier		25,000	22503 Postage & Courier		0	22503 Postage & Courier		0
226 Supplies, Tools and Materials	1,045,180	1,225,000	226 Supplies, Tools and Materials	0	0	226 Supplies, Tools and Materials	0	0
22604 Uniforms		50,000	22604 Uniforms		0	22604 Uniforms		0
22607 Other Specialised Supplies	34,500	25,000	22607 Other Specialised Supplies		0	22607 Other Specialised Supplies		0
22608 Office Supplies	345,000	250,000	22608 Office Supplies		0	22608 Office Supplies		0
22610 Office Water, Tea, Soft Drinks		150,000	22610 Office Water, Tea, Soft Drinks		0	22610 Office Water, Tea, Soft Drinks		0
22611 Fuels & Lubricants for Transport	665,680	750,000	22611 Fuels & Lubricants for Transport		0	22611 Fuels & Lubricants for Transport		0
22612 Fuels & Lubricants for Equip/Prod		-	22612 Fuels & Lubricants for Equip/Prod		0	22612 Fuels & Lubricants for Equip/Prod		0
227 Other Operating Expenses	307,000	484,500	227 Other Operating Expenses	0	0	227 Other Operating Expenses	0	0
22702 Vehicle/Transport Equip Insurance	172,500	200,000	22702 Vehicle/Transport Equip Insurance		0	22702 Vehicle/Transport Equip Insurance		0
22706 Bank Charges		40,000	22706 Bank Charges		0	22706 Bank Charges		0
22707 Subscription- Paper, Periodical		10,000	22707 Subscription- Paper, Periodical		0	22707 Subscription- Paper, Periodical		0
22708 Visitor Housing & Entertainment	100,000	200,000	22708 Visitor Housing & Entertainment		0	22708 Visitor Housing & Entertainment		0
22711 Committee Operating Costs	34,500	34,500	22711 Committee Operating Costs		0	22711 Committee Operating Costs		0
Transfers	0	0	Transfers	4,543,290	24,543,290	Transfers	4,543,290	24,543,290
231 Transfers Conditional Salaries	0	0	231 Transfers Conditional Salaries	3,526,740	7,830,186	231 Transfers Conditional Salaries	3,526,740	7,830,186
23100 Grants Current - Salaries to States	0	0	23100 Grants Current - Salaries to States	3,526,740	3,526,740	23100 Grants Current - Salaries to States	3,526,740	3,526,740
23100 Grant Current - Salaries to States	0	0	23100 Grant Current - Salaries to States	0	4,303,446	23100 Grant Current - Salaries to States	0	4,303,446
23100 Grant Current - Salaries to Counties	0	0	232 Transfers Operating	1,016,550	6,713,126	232 Transfers Operating	1,016,550	6,713,126
232 Transfers Operating	0	0	23200 Grants Current - Operating to States	1,016,550	1,016,550	23200 Grants Current - Operating to States	1,016,550	1,016,550
23200 Grants Current - Operating to States	0	0	23201 Grants Current - Operating to Counties	0	5,696,576	23201 Grants Current - Operating to Counties	0	5,696,576
23201 Grants Current - Operating to Counties	0	0	233 Transfers Capital	0	9,999,978	233 Transfers Capital	0	9,999,978
Capital Expenditure	6,022,549	5,292,182	Capital Expenditure	0	0	Capital Expenditure	0	0
28 Infrastructure and Land			28 Infrastructure and Land	0	0	28 Infrastructure and Land	0	0
2801 Water Supp: Drain, Bore, Sewer			2801 Water Supp: Drain, Bore, Sewer		0	2801 Water Supp: Drain, Bore, Sewer		0
2805 Non-residence Bldg Admin and Office	6,022,549	5,292,182	2805 Non-residence Bldg Admin and Office		0	2805 Non-residence Bldg Admin and Office		0
2807 Feasibility Study: Capital Wks			2807 Feasibility Study: Capital Wks		0	2807 Feasibility Study: Capital Wks		0
2808 Engineering/Design/Architect Plans			2808 Engineering/Design/Architect Plans		0	2808 Engineering/Design/Architect Plans		0
282 Vehides	0	0	282 Vehides	0	0	282 Vehides	0	0
28200 Motorbikes		0	28200 Motorbikes		0	28200 Motorbikes		0
28201 Cars		0	28201 Cars		0	28201 Cars		0
28202 Bus or Minibus		0	28202 Bus or Minibus		0	28202 Bus or Minibus		0
28203 Lorry		0	28203 Lorry		0	28203 Lorry		0
28204 Other Transport Equipment		0	28204 Other Transport Equipment		0	28204 Other Transport Equipment		0
283 Specialized Equipment	0	0	283 Specialized Equipment	0	0	283 Specialized Equipment	0	0
28306 Other Specialised Equipment		0	28306 Other Specialised Equipment		0	28306 Other Specialised Equipment		0
TOTAL	10,770,677	11,856,311	TOTAL	5,420,106	25,481,191	TOTAL	5,420,106	25,481,191

RSS, MEDIWR, Water Sector, Irrigation Development Master Plan (IDMP)

2013 DIRECTORATE OF IRRIGATION AND DRAINAGE			
Item	Budget 2012/13	New Budget 2013/14	
21 Wages and Salaries	1,940,119	1,605,092	
211 Wages and Salaries	1,367,376	1,446,930	
2110 Basic Salaries & Wages - Permanent Employee	1,367,376	1,446,930	
2111 Allowances - Payroll			
2112 Allowances - Other			
213 Pension contribution	172,743	159,162	
2120 Pension	172,743	159,162	
212 Incentives and Overtime			
21200 Incentives			
214 Social benefits	0	0	
21404 Other Employee Costs	0	0	
21400 Rent for Staff Accommodation	0	0	
21401 Terminal Benefits			
21402 Death Benefits & Funeral Expense			
21403 Medical Benefits			
21404 Other Social Benefits			
22 Use of Goods and Services (Operating)	1,904,130	650,350	
221 Travel	40,000	40,000	
22100 Allowances - Domestic	40,000	10,000	
22101 Allowance - International			
22102 Travel - Domestic		30,000	
22103 Travel - International			
222 Staff Training and Other Staff Costs		0	
22200 Training (domestic)		0	
22201 Training (abroad)		0	
22202 Tuition Fees		0	
22203 Workshop, Seminar, Conferences		0	
22204 Staff Relocation/Repatriation Cost		0	
223 Contracted Services	257,850	410,350	
22300 Casual Labour		0	
22301 Contracted Tech/Prof Services	75,000	200,000	
22302 Contracted Security & Cleaning		0	
22303 Printing and Publishing		0	
22304 Advertisement, Media Campaign	10,350	10,350	
22305 Management Fees		0	
22306 Vehicle Rental (car, bus & charter plane)		0	
22307 Non-residential Rent		0	
22308 Hire - Equip, Plant, Machinery	172,500	200,000	
22309 Transport/Storage Charges		0	
22310 Trade Show or Exhibition		0	
224 Repairs and Maintenance	980,000	100,000	
22400 Vehicle Maintenance		0	
22401 Maintenance of other transport equipment		0	
22402 Equip, Plant, Machinery Maint.	980,000	100,000	
22403 Maintenance of Buildings		0	
22404 Maintenance - Roads & Bridges		0	
22405 Civil Works Maint- Power, Water		0	
225 Utilities and Communication	0	0	
22500 Water and Sewerage		0	
22501 Electricity		0	
22502 Telecommunication		0	
22503 Postage & Courier		0	
226 Supplies, Tools and Materials	626,280	100,000	
22607 Other Specialised Supplies	345,000	0	
22608 Office Supplies		0	
22609 HW & SW Supplies for ICT, Copier		0	
22610 Office Water, Tea, Soft Drinks		0	
22611 Fuels & Lubricants for Transport		0	
22612 Fuels & Lubricants for Equip/Prod	281,280	100,000	
227 Other Operating Expenses		-	
22701 Equip, Plant, Machinery Insurance		-	
22702 Vehicle/Transport Equip Insurance		-	
22703 Penalties and Court Fines		-	
22704 License or Registration Fee		-	
22705 Other Loss (Cash, Write-off)		-	
22706 Bank Charges		0	
22707 Subscription- Paper, Periodical		0	
22708 Visitor Housing & Entertainment		0	
22709 Constitutional Post Holders Advance		0	
22710 Reimbursable Advance		0	
22711 Committee Operating Costs		0	
Transfers	0	0	
231 Transfers Conditional Salaries	0	0	
23100 Grants Current - Salaries to States	0	0	
23100 Grant Current - Salaries to Counties	0	0	
232 Transfers Operating	0	0	
23200 Grants Current - Operating to States	0	0	
23201 Grants Current - Operating to Counties	0	0	
233 Transfers Capital	0	0	
23300 Grants Capital - Conditional	0	0	
23301 Grants Capital - County Development	0	0	
Capital Expenditure	13,677,110	13,677,110	
28 Infrastructure and Land	0	13,677,110	
2801 Water Supp: Drain, Bore, Sewer		13,677,110	
2805 Non-residence Bldg Admin and Office		0	
2807 Feasibility Study: Capital Wks		0	
2808 Engineering/Design/Architect Plans		0	
2809 Supervision of Capital Works		0	
2810 Land		0	
282 Vehicles	0	0	
28200 Motorbikes		0	
28201 Cars		0	
28202 Bus or Minibus		0	
28203 Lorry		0	
28204 Other Transport Equipment		0	
283 Specialized Equipment	0	0	
28306 Other Specialised Equipment		0	
TOTAL	3,444,249	15,933,552	

2013 DIRECTORATE OF HYDROLOGY AND SURVEY			
Item	Budget 2012/13	New Budget 2013/14	
21 Wages and Salaries	1,144,135	1,275,906	
211 Wages and Salaries	1,014,831	1,149,465	
2110 Basic Salaries & Wages - Permanent Employee	1,014,831	1,149,465	
2111 Allowances - Payroll			
2112 Allowances - Other			
213 Pension contribution	129,304	126,441	
2120 Pension	129,304	126,441	
212 Incentives and Overtime			
21200 Incentives		0	
214 Social benefits	0	0	
21404 Other Employee Costs	0	0	
21400 Rent for Staff Accommodation	0	0	
21401 Terminal Benefits		0	
21402 Death Benefits & Funeral Expense		0	
21403 Medical Benefits		0	
21404 Other Social Benefits		0	
22 Use of Goods and Services (Operating)	210,000	180,000	
221 Travel	100,000	60,000	
22100 Allowances - Domestic	100,000	20,000	
22101 Allowance - International		0	
22102 Travel - Domestic		40,000	
22103 Travel - International		0	
222 Staff Training and Other Staff Costs		0	
22200 Training (domestic)		0	
22201 Training (abroad)		0	
22202 Tuition Fees		0	
22203 Workshop, Seminar, Conferences		0	
22204 Staff Relocation/Repatriation Cost		0	
223 Contracted Services	110,000	60,000	
22300 Casual Labour		0	
22301 Contracted Tech/Prof Services	100,000	50,000	
22302 Contracted Security & Cleaning		0	
22303 Printing and Publishing		0	
22304 Advertisement, Media Campaign	10,000	10,000	
22305 Management Fees		0	
22306 Vehicle Rental (car, bus & charter plane)		0	
22307 Non-residential Rent		0	
22308 Hire - Equip, Plant, Machinery	0	0	
22309 Transport/Storage Charges		0	
22310 Trade Show or Exhibition		0	
224 Repairs and Maintenance	0	10,000	
22400 Vehicle Maintenance		0	
22401 Maintenance of other transport equipment	0	10,000	
22402 Equip, Plant, Machinery Maint.	0	0	
22403 Maintenance of Buildings		0	
22404 Maintenance - Roads & Bridges		0	
22405 Civil Works Maint- Power, Water		0	
225 Utilities and Communication	0	0	
22500 Water and Sewerage		0	
22501 Electricity		0	
22502 Telecommunication		0	
22503 Postage & Courier		0	
226 Supplies, Tools and Materials	0	50,000	
22608 Office Supplies		0	
22609 HW & SW Supplies for ICT, Copier	0	50,000	
227 Other Operating Expenses	0	-	
22700 Building Insurance		-	
22701 Equip, Plant, Machinery Insurance		-	
22702 Vehicle/Transport Equip Insurance		-	
22703 Penalties and Court Fines		-	
22704 License or Registration Fee		-	
22705 Other Loss (Cash, Write-off)		-	
22706 Bank Charges		0	
22707 Subscription- Paper, Periodical		0	
22708 Visitor Housing & Entertainment		0	
22709 Constitutional Post Holders Advance		0	
22710 Reimbursable Advance		0	
22711 Committee Operating Costs		0	
Transfers	0	0	
231 Transfers Conditional Salaries	0	0	
23100 Grants Current - Salaries to States	0	0	
23100 Grant Current - Salaries to Counties	0	0	
232 Transfers Operating	0	0	
23200 Grants Current - Operating to States	0	0	
23201 Grants Current - Operating to Counties	0	0	
233 Transfers Capital	0	0	
23300 Grants Capital - Conditional	0	0	
23301 Grants Capital - County Development	0	0	
Capital Expenditure	0	100,000	
28 Infrastructure and Land	0	-	
2800 Roads and Bridges		0	
2801 Water Supp: Drain, Bore, Sewer		0	
2802 Power Supply		0	
2803 Airstrip/Airport/Port/ Harbour		0	
2804 Residence Bldgs: Gov Officials		0	
2805 Non-residence Bldg Admin and Office		0	
2806 Non-Residence Bldg-Hospitals, Schools etc		0	
2807 Feasibility Study: Capital Wks		0	
2808 Engineering/Design/Architect Plans		0	
2809 Supervision of Capital Works	0	-	
2810 Land		0	
282 Vehicles	0	0	
28200 Motorbikes		0	
28201 Cars		0	
28202 Bus or Minibus		0	
28203 Lorry		0	
28204 Other Transport Equipment		0	
283 Specialized Equipment	0	100,000	
28306 Other Specialised Equipment	0	100,000	
TOTAL	1,354,135	1,555,906	

Annex 6: Programmes' Profiles

2013 DIRECTORATE OF WATER RESOURCES MANAGEMENT			
Item	Budget 2012/13	New Budget 2013/14	
21 Wages and Salaries	790,779	959,866	
211 Wages and Salaries	700,107	864,744	
2110 Basic Salaries & Wages - Permanent Employee	700,107	864,744	
2111 Allowances - Payroll			
2112 Allowances - Other			
213 Pension contribution	90,672	95,122	
2120 Pension	90,672	95,122	
212 Incentives and Overtime			
21200 Incentives			
214 Social benefits	0	0	
21404 Other Employee Costs	0	0	
21400 Rent for Staff Accommodation	0	0	
21401 Terminal Benefits		0	
21402 Death Benefits & Funeral Expense		0	
21403 Medical Benefits		0	
21404 Other Social Benefits		0	
22 Use of Goods and Services (Operating)	114,250	1,291,645	
221 Travel	50,000	100,000	
22100 Allowances - Domestic	50,000	40,000	
22101 Allowance - International		0	
22102 Travel - Domestic		60,000	
22103 Travel - International		0	
222 Staff Training and Other Staff Costs		0	
22200 Training (domestic)			
22201 Training (abroad)			
22202 Tuition Fees			
22203 Workshop, Seminar, Conferences			
22204 Staff Relocation/Repatriation Cost			
223 Contracted Services	64,250	1,151,645	
22300 Casual Labour			
22301 Contracted Tech/Prof Services	50,000	150,000	
22302 Contracted Security & Cleaning			
22303 Printing and Publishing			
22304 Advertisement, Media Campaign	14,250	14,250	
22305 Management Fees	0	987,395	
22306 Vehicle Rental (car, bus & charter plane)			
22307 Non-residential Rent			
22308 Hire - Equip, Plant, Machinery	0	0	
22309 Transport/Storage Charges			
22310 Trade Show or Exhibition			
224 Repairs and Maintenance	0	0	
22400 Vehicle Maintenance			
22401 Maintenance of other transport equipment	0	0	
22402 Equip, Plant, Machinery Maint.	0	0	
22403 Maintenance of Buildings			
22404 Maintenance - Roads & Bridges			
22405 Civil Works Maint- Power, Water			
225 Utilities and Communication	0	0	
22500 Water and Sewerage			
22501 Electricity			
22502 Telecommunication			
22503 Postage & Courier			
226 Supplies, Tools and Materials	0	40,000	
22604 Uniforms			
22607 Other Specialised Supplies	0	40,000	
22608 Office Supplies		0	
22609 HW & SW Supplies for ICT, Copier		0	
22610 Office Water, Tea, Soft Drinks		0	
22611 Fuels & Lubricants for Transport		0	
22612 Fuels & Lubricants for Equip/Prod	0	0	
227 Other Operating Expenses	0	-	
22700 Building Insurance		-	
22701 Equip, Plant, Machinery Insurance		-	
22702 Vehicle/Transport Equip Insurance		-	
22703 Penalties and Court Fines		-	
22704 License or Registration Fee		-	
22705 Other Loss (Cash, Write-off)		-	
22706 Bank Charges		0	
22707 Subscription- Paper, Periodical		0	
22708 Visitor Housing & Entertainment		0	
22709 Constitutional Post Holders Advance		0	
22710 Reimbursable Advance		0	
22711 Committee Operating Costs		0	
TOTAL	905,029	2,251,511	

2013 DIRECTORATE OF RURAL WATER SUPPLY AND SANITATION			
Item	Budget 2012/13	New Budget 2013/14	
21 Wages and Salaries	996,682	1,117,263	
211 Wages and Salaries	885,534	1,006,545	
2110 Basic Salaries & Wages - Permanent Employee	885,534	1,006,545	
2111 Allowances - Payroll			
2112 Allowances - Other			
213 Pension contribution	111,148	110,720	
2120 Pension	111,148	110,720	
212 Incentives and Overtime			
21200 Incentives			
214 Social benefits	0	0	
21404 Other Employee Costs	0	0	
21400 Rent for Staff Accommodation	0	0	
21401 Terminal Benefits			
21402 Death Benefits & Funeral Expense			
21403 Medical Benefits			
21404 Other Social Benefits			
22 Use of Goods and Services (Operating)	206,250	316,250	
221 Travel	94,000	124,000	
22100 Allowances - Domestic	94,000	44,000	
22101 Allowance - International		0	
22102 Travel - Domestic		80,000	
22103 Travel - International		0	
222 Staff Training and Other Staff Costs		0	
22200 Training (domestic)		0	
22201 Training (abroad)		0	
22202 Tuition Fees		0	
22203 Workshop, Seminar, Conferences		0	
22204 Staff Relocation/Repatriation Cost		0	
223 Contracted Services	112,250	142,250	
22300 Casual Labour		0	
22301 Contracted Tech/Prof Services	75,000	75,000	
22302 Contracted Security & Cleaning		0	
22303 Printing and Publishing		0	
22304 Advertisement, Media Campaign	37,250	67,250	
22305 Management Fees		-	
22306 Vehicle Rental (car, bus & charter plane)		0	
22307 Non-residential Rent		0	
22308 Hire - Equip, Plant, Machinery	0	0	
22309 Transport/Storage Charges		0	
22310 Trade Show or Exhibition		0	
224 Repairs and Maintenance	0	0	
22400 Vehicle Maintenance			
22401 Maintenance of other transport equipment	0	0	
22402 Equip, Plant, Machinery Maint.	0	0	
22403 Maintenance of Buildings		0	
22405 Civil Works Maint- Power, Water		0	
225 Utilities and Communication	0	0	
22500 Water and Sewerage			
22501 Electricity			
22502 Telecommunication			
22503 Postage & Courier			
226 Supplies, Tools and Materials	0	50,000	
22607 Other Specialised Supplies	0	50,000	
22608 Office Supplies			
22609 HW & SW Supplies for ICT, Copier			
22610 Office Water, Tea, Soft Drinks			
22611 Fuels & Lubricants for Transport			
22612 Fuels & Lubricants for Equip/Prod	0	0	
227 Other Operating Expenses	0	-	
22700 Building Insurance			
22711 Committee Operating Costs			
Transfers	0	0	
231 Transfers Conditional Salaries	0	0	
23100 Grants Current - Salaries to States	0	0	
23100 Grants Current - Salaries to Counties	0	0	
232 Transfers Operating	0	0	
23200 Grants Current - Operating to States	0	0	
23201 Grants Current - Operating to Counties	0	0	
233 Transfers Capital	0	0	
23300 Grants Capital - Conditional			
23301 Grants Capital - County Development			
Capital Expenditure	-	16,830,009	
28 Infrastructure and Land	-	16,830,009	
2800 Roads and Bridges		-	
2801 Water Supp: Drain, Bore, Sewer		16,830,009	
2802 Power Supply		-	
2803 Airstrip/Airport/Port/ Harbour		-	
2807 Feasibility Study: Capital Wks		-	
2808 Engineering/Design/Architect Plans		-	
TOTAL		18,263,524	

3.4 Strategic Plans and Donor Supported Programmes/Projects

3.4.1 Two-year Strategic Plan of the MEDIWR

Table 3.4.1 Two-year Strategic Plan of MEDIWR (Annual Work-Plan/Action Plan for 2013-14)

Strategic Objectives	Activities including location	Outcome	Performance indicators	Target	July – Dec 2013	Jan-June 2014	Annual cost in SSP	Responsibilities Center	Key Partners
To facilitate, support and coordinate effective and efficient implementation of programmes and projects	Funded under RSS Budget								
	Tracking and supporting of staff movement, recruitment, appointments, promotions, dues, service schemes, procurement, financial and assets management, and enforcement of the code of conduct etc	Increased staff performance and financial management in the ministry.	No. of staff recruited No. of staff promoted Procurement of goods & services on schedule Including staff salaries		10 26	10 26	5,060,629	Directorate of Administration And Finance	MoFCIE P
	Insurance and maintenance of vehicles and other mobile assets and buildings	Ministry's assets are secured from losses and damages. Ministry's vehicles perform longer	No. of vehicles maintained No. of motorcycles No. buildings blocks maintained	38 26 3	38 26 3	38 26 3	1,384,500	Directorate of Administration And Finance	MoFCIE P
	Safety provisions for assets and personnel	Ministry's assets and personnel are secure.	Security provisions for Ministry assets & personnel in place	1	1	1	34,500	Directorate of Administration And Finance	MoL
	Completion of Office Construction in Torit, Aweil, Bor, Juba and Rumbek (Retention) and construction of new off. Block in Bentue	States' Directorates of Water and Sanitation have ample workplace.	No. of office blocks constructed	6	4	2	5,292,182	Directorate of Administration And Finance	MoFCIE P
	Development of Ministry's organizational structure and compilation of job descriptions (supported by GIZ)	Staff performance is enhanced.	Ministry's organizational structure developed and implemented	1		1	10,000	Directorate of Administration And Finance	MoL
	Organizing a retreat for Ministry	Teamwork spirit among ministry staff is enhanced.	Resolutions from retreat implemented	1	1		74,500	Directorate of Administration And Finance	
	Total						11,856,311		

Annex 6: Programmes' Profiles

Strategic Objectives	Activities including location	Outcome	Performance indicators	Target	July – Dec 2013	Jan-Jun e 2014	Annual cost in SSP	Responsibilities Center	Key Partners
To increase sustainable access to safe water supply and sanitation facilities and promote hygiene education for all	Funded under RSS Budget								
	Salaries						1,117,265	Directorate of Rural Water Supply and Sanitation	MoFCIEP, MoL
	Installation of small water distribution systems; CES, JS, EES, LS,&UNS	Over 25,000 people will access safe drinking water that will reduce incidences of water related diseases	No. water distribution systems constructed	5	2	3	5,142,730	Directorate of Rural Water Supply and Sanitation	MoFCIEP, States
	Drilling of Boreholes, and water supply system; NBGS, UNS, WS,WES & WBGS	Over 19000 people will access safe drinking water that will reduce incidences of water related diseases	No. of bore holes and SWDS drilled & constructed respectively	20bh, 5SWDs	10bh 2SWDs	10bh 2 SWDs	1,465,025	Directorate of Rural Water Supply and Sanitation	MoFCIEP, States
	Completion of Drilling (15) boreholes and rehabilitation of (25) existing boreholes in (CE/EE/JS/UNS)	Over 7500 people will access safe drinking water that will reduce incidences of water related diseases	No. of boreholes drilled and rehabilitated respectively	15bh 25 Reh.	10bh 20 Reh.	5bh 5 Reh	477,966	Directorate of Rural Water Supply and Sanitation	MoFCIEP, States
	Water Provision to the all other towns not covered as well as all rural areas. The project includes resource development, bulk and reticulation supply (for boreholes in all the 10 states)	10,000 people will access safe drinking water & reduce incidences of water related diseases	No. of points constructed	10	5	5	2,500,000	Directorate of Rural Water Supply and Sanitation	MoFCIEP, States
	Construction of 5 ablution blocks in emerging towns	Reduce open defecation and diseases related to it in those areas	No. of Blocks constructed	5	2	3	2,181,788	Directorate of Rural Water Supply and Sanitation	MoFCIEP, States
	Supply of 10 water quality testing kits	Conformity of water plants to standards	No. water quality tests carried out	5	2	3	562,500	Directorate of Rural Water Supply and Sanitation	MoFCIEP, States
	Sanitation Provision to the all other towns not covered as well as all rural areas. The project provides mainly for onsite Sanitation options, no provision is made for major treatment facilities (for oxidation ponds in Kapoata, Raja and Renk)	Oxidation ponds constructed	No. of Oxidation ponds	3	1	2	4,500,000	Directorate of Rural Water Supply and Sanitation	MoFCIEP, States
	Subtotal Capital Expenditure						16,830,009		
	Supervision and Monitoring of capital works	Monitoring and supervision reports	No. of reports produced	4	2	2	124,000	Directorate of Rural Water Supply and Sanitation	MoFCIEP, States
	Translation of IEC materials/posters into 5 local languages	Awareness creation	No of IEC material produced in 5 languages	5	5	5	17,250	Directorate of Rural Water Supply and Sanitation	
	Carrying out of hygiene promotion campaigns in 10 States	Awareness creation	No. of hygiene promotion campaigns carried out	10	5	5	20,000	Directorate of Rural Water Supply and Sanitation	Media
Carrying out of Community Led Total Sanitation (CLTS) sensitization sessions	Awareness created to reduce open defecation and related diseases	No. of villages covered under CLTS	100	50	50	10,000	Directorate of Rural Water Supply and Sanitation	Media	
Strengthening of water	Operational water	No.	100	50	50	10,000	Directorate	Local	

Strategic Objectives	Activities including location	Outcome	Performance indicators	Target	July – Dec 2013	Jan-Jun e 2014	Annual cost in SSP	Responsibilities Center	Key Partners
	management committees on water facilities in all states	facilities	committees in place					of Rural Water Supply and Sanitation	Government structures
	Strengthening management of sanitation facilities in the 10 States	Operational Sanitation facilities for the community	No. of Committees	100	50	50	10,000	Directorate of Rural Water Supply and Sanitation	Local Government structures
	Dissemination of IEC materials to the 10 States	Awareness creation	No. of States	10	5	5	10,000	Directorate of Rural Water Supply and Sanitation	Local Government structures
	Subtotal salary & Operational costs						316,250		

Strategic Objectives	Activities including location	Outcome	Performance indicators	Target	July – Dec 2013	Jan-Jun e 2014	Annual cost in SSP	Responsibilities Center	Key Partners
To coordinate staff training, planning process and evaluate the implementation of programmes/projects	Funded under RSS Budget								
	Salaries/ contracted staff						837,901	Directorate of Planning and Programmes	MoFCIEP, MoL
	Supervision of various programmes such as the enhancement of Juba Urban Water Supply system (by JICA); and Yei Town urban water and sanitation utility (by GIZ)	Increased access to portable water supply by x% in Yei and Juba	# of supervision and monitoring reports discussed in senior management	4	2	2	10,000	Directorate of Planning and Programmes	JICA, GIZ
	Monitoring and Evaluation of performance of water and sanitation projects with respect to stipulated National and international targets and other projects/activities	Increased performance of the national project in meeting targets	# of supervision and monitoring reports discussed in senior management	4	2	2	20,000	Directorate of Planning and Programmes	
	Preparation of ministry's performance report, including production of brochures and booklets	Improved public understanding on ministry's functions	No. of performance Reports produced and discussed in senior management	2	1	1	20,000	Directorate of Planning and Programmes	
	Carry out staff training needs assessment	Improved staff performance in service delivery	No. of staff trained on various fields. Needs assessment report and implemented	?? 1	1		30,000	Directorate of Planning and Programmes	MoL
	Guide mainstreaming of gender aspects into programmes, projects and activities	Improved project designs to empower disadvantaged groups	Gender mainstreaming guideline produced and implemented	1	1		10,000	Directorate of Planning and Programmes	
	Compilation of reports and preparation of Ministry's Integrated Annual Work plan	Enhanced the ministry's integrated reporting system	Annual integrated work plan prepared and implemented	1	1		10,000	Directorate of Planning and Programmes	SSEC and SSUWC
TOTAL						937,901			

Annex 6: Programmes' Profiles

Strategic Objectives	Activities including location	Outcome	Performance indicators	Target	July – Dec 2013	Jan-June 2014	Annual cost in SSP	Responsibilities Center	Key Partners
To coordinate the formulation of policies, strategies, and regulations pertaining to Water, Sanitation and Hygiene (WASH) and its dissemination	Funded under RSS Budget								
	Salaries including contract services						1,109,866	Directorate of Water Resources Management	MoFCIE P, MoL
	Drafting and enactment of sector and subsector regulatory documents and laws	Sustained services and accelerated supply of services, improved management of water resources	Subsector regulation and laws being implemented	Numbers of regulations and laws			10,000	Directorate of Water Resources Management	MoJ
	Coordination of national, trans-boundary, inter-governmental and international water sanitation and hygiene (WASH) sector meetings	Improved level of participation and involvement, experiences and knowledge sharing	No. of reports produced	3 events and conferences	1	2	20,000	Directorate of Water Resources Management	
	Dissemination of sector policy, regulations, laws and subsector Strategies	Increased awareness on WASH sector policy, regulations, laws and subsector Strategies	No. of Dissemination campaigns carried out	3 workshops	2	3	35,000	Directorate of Water Resources Management	
	Finalization of the WASH Sector overall institutional and legal framework, including formation of the envisaged South Sudan Water Council, Water Resources Management Authority, etc	Sustained water resources management, defined roles and responsibilities, improved water resources management	WASH legal frame work finalized and implemented	3	1	2	30,000	Directorate of Water Resources Management	MoJ
	Coordinate the development of water resources management sub-sector strategy investment and action plans	Improved Planning for WASH Activities and understanding on information sharing	Subsector strategic investment and action plan produced	1		1	30,000	Directorate of Water Resources Management	
	Coordinate the Nile Basin Initiatives (NBI) programmes, projects and activities	Improved collaboration and cooperation, experiences and knowledge sharing, lesson learnt from other countries, identification of right projects	No. of initiatives coordinated under NBI	NELSAP, ENTRO, any projects under NBI			14,250	Directorate of Water Resources Management	NBI Partners
	Carry out water resources regulation processes and enforcement	Improved water resources management	Water resource regulations implemented (water act)	1		1	10,000	Directorate of Water Resources Management	
Contribution / membership for NBI and AMCOW	Membership					987,395	Directorate of Water Resources Management	NBI Partners	
	Total					2,251,511			

Strategic Objectives	Activities including location	Outcome	Performance indicators	Target	July – Dec 2013	Jan-June 2014	Annual cost in SSP	Responsibilities Center	Key Partners	
To construct and sustainably manage irrigation, water harvesting/storage facilities and flood control structures.	Funded under RSS Budget							Directorate of Irrigation and Drainage		
	Salaries						2,016,442	Directorate of Irrigation and Drainage	MoFCIEP, MoL	
	Water harvesting /storage constructions and flood control works (haffirs, pans, barriers and dykes)	Haffirs, Barriers and Dykes constructed	No. of facilities constructed	4	1	3	10,677,110	Directorate of Irrigation and Drainage	States, Local Gov	
	Water harvesting /storage constructions and flood control works (haffirs, pans, barriers and dykes): For embankment of dykes in Twic East county, Jonglei State	Length of dykes embarked, storage facilities constructed	No. storage facilities constructed Length of dykes embarked	5 10km	2 3	3 7	3,000,000	Directorate of Irrigation and Drainage	States, Local Gov	
	Supervise rehabilitation of water control infrastructure of the Aweil Rice Scheme	Infrastructure development at Aweil Rice Scheme runs as per schedule	No. of monitoring visits made	2	1	1	40,000	Directorate of Irrigation and Drainage	States, Local Gov	
	Operational costs for running the schemes in terms of servicing, fueling, Hire of equipment and plants	Operational schemes and equipment	No. of schemes functioning	2	1	1	260,000	Directorate of Irrigation and Drainage		
	Funded by Development partner (Specify)									
	Carrying out, in partnership with MAF and JICA the South Sudan Irrigation Development Master Plan	New agricultural schemes implemented according to Master Plan	South Sudan Irrigation Development master plan in place	1		1	Funded by JICA	Directorate of Irrigation and Drainage	MAF, JICA	
Total						15,933,552				

Annex 6: Programmes' Profiles

Strategic Objectives	Activities including location	Outcome	Performance indicators	Target	July – Dec 2013	Jan-June 2014	Annual cost in SSP	Responsibilities Center	Key Partners
To establish data bank on water resources potentials for sustainable management and utilization through research	Funded under RSS Budget							Directorate of Hydrology and Survey	
	Wages and salaries	Staff motivated					1,335,906	Directorate of Hydrology and Survey	MoFCIEP, MoL
	Operation, updating and upgrading of the Management Information System (MIS)	WASH information are readily produced	Monthly updates	12	6	6	30,000	Directorate of Hydrology and Survey	
	Continuation with the collection and inventory of water and sanitation information/data	Water and Sanitation data per location are known	Monthly basis	12	6	6	25,000	Directorate of Hydrology and Survey	States, Local Gov.
	Continuation with compilation of the finalized surveys/studies pertaining to water and sanitation facilities/services.	Survey and studies reports and Documents are available for execution of water and sanitation projects	Quarterly basis	12	6	6	5,000	Directorate of Hydrology and Survey	
	Gathering and inventory of the existing professionalism, technical know-how, expertise, skills within WASH sector in South Sudan	Ability to know the human resources for the water sector	Monthly basis	12	6	6	5,000	Directorate of Hydrology and Survey	WASH Partners
	Provision of equipment, establishment and operationalization of water and sanitation hubs in the States	WASH information are made available at State level	Operational water & sanitation hubs in 10 States	10	5	5	20,000	Directorate of Hydrology and Survey	
	Carry out assessment to identify available benchmarks for rehabilitation and installation of new ones	Improved rehabilitation of old water pumps and installation of new ones	Assessment Reports for 10 States available	10	5	5	20,000	Directorate of Hydrology and Survey	
	Carrying out survey works (irrigation layouts, canals and dykes alignment, river reaches profiles, gauging station stages, water harvesting and storage capacities, etc.)	Survey and assessment information are availed	Survey Reports				20,000	Directorate of Hydrology and Survey	
	Installation and operationalization of river measurement, rainfall and ground water level monitoring equipment in partnership with Egyptians and the IGAD-HYCOS project	Hydrological Data for South Sudan are availed	Monthly river measurement, rainfall and ground water level monitoring reports	12	6	6	60,000	Directorate of Hydrology and Survey	IGAD-HY COS, Egypt
	Collection and analysis of data to avail hydrological information such as early warning systems among others	Indicators for early warning are availed	Monthly reports on hydrological information	12	6	6	45,000	Directorate of Hydrology and Survey	
Funded by Development Partner (Specify)									
Carrying out in partnership the studies and clearance of the blocked water courses by Egyptians and the Dutch.	Studies for clearance of the blocked water courses are made available	No. of study reports produced						Directorate of Hydrology and Survey	Egypt, Dutch
Carry out in partnership with IAEA projects for mainstreaming ground water concentration into the integrated Nile River Basin	Ground water potentials for in South Sudan made available	Report produced				10		Directorate of Hydrology and Survey	IAEA

3.4.2 Five-year Strategic Plan of the Former MAFCRD

Table 3.4.2 Five-year Strategic Plan of the Former MAFCRD

ACTIVITY-BASED STRUCTURE		
Min	CD	Directorate <u>Key priority area</u> <i>Strategic objectives</i> <i>Strategies</i> <i>Key activities/output/results</i>
MAF	01	DIRECTORATE OF ADMINISTRATION AND FINANCE
MAF	0100	(Not defined)
MAF	010001	Strategic Objective 1: To strengthen efficient and effective delivery of services in the ministry
MAF	01000101	Provide overall management of financial resources of the Ministry
MAF	0100010101	Implement government financial regulations
MAF	0100010102	Develop and update internal financial controls
MAF	0100010103	Coordinate the budgeting process
MAF	0100010104	Lobby and mobilize financial resources
MAF	0100010105	Prepare timely financial reports
MAF	01000102	Strengthen procurement management and disposal of government property / assets
MAF	0100010201	Develop and update procurement plan
MAF	0100010202	Build capacity of procurement committee and technical staff
MAF	0100010203	Implement property and assets management policy
MAF	0100010204	Strengthen stores management procedures
MAF	01000103	Enhance Human Resource management
MAF	0100010301	Restructure the Ministry
MAF	0100010302	Implement Public service rules and regulations
MAF	0100010303	Rationalize recruitment and selection of staff
MAF	01000104	Capacity Development
MAF	0100010401	Strengthen staff welfare management system
MAF	0100010402	Facilitate training needs assessment
MAF	0100010403	Conduct induction training
MAF	0100010404	Implement performance management system
MAF	0100010405	Train staff on performance management
MAF	0100010406	Conduct staff training and development programs
MAF	01000105	Strengthen information and records management systems
MAF	0100010501	Develop ICT Policy
MAF	0100010502	Setup and maintain local area networks (LAN) and intercom telephone system
MAF	0100010503	Maintain and update ministry's website and internet services
MAF	0100010504	Establish and maintain central and departmental registry
MAF	0100010505	Develop capacity of Ministry's staff to use of ICT and records management
MAF	01000106	Develop the necessary physical infrastructure
MAF	0100010601	Equip staff with necessary tools and equipment
MAF	0100010602	Provide additional transport facilities
MAF	0100010603	Purchase office tools and equipment
MAF	0100010604	Facilitate construction of office block
MAF	0100010605	Purchase office furniture
MAF	010002	Strategic Objective 2: Developing effective internal and external communication
MAF	01000201	Enhance access to information
MAF	0100020101	Develop a communication strategy
MAF	0100020102	Liaise with the media to publicize the activities of the ministry
MAF	0100020103	Produce ministry's newsletters, Magazine and documentaries
MAF	0100020104	Establish and maintain a ministerial and State libraries/ information centres
MAF	010003	Strategic Objective 3: To mainstream cross cutting issues in all programs and activities of the ministry
MAF	01000301	Promote gender mainstreaming
MAF	0100030101	Domesticate the gender mainstreaming policy
MAF	0100030102	Implement the gender mainstreaming policy
MAF	01000302	Mainstreaming HIV/AIDS
MAF	0100030201	Develop a ministerial work place policy on HIV/AIDS
MAF	0100030202	Mainstream HIV/AIDS programs in the ministry
MAF	0100030203	Establish networks with HIV/AIDS Commission and other stakeholders
MAF	02	DIRECTORATE OF RESEARCH
MAF	0201	Key Priority Area 1: Capacity building
MAF	020101	Strategic Objective 1: Strengthening capacity of staff
MAF	02010101	Enhance staff and institutional performances
MAF	0201010101	Facilitate staff training
MAF	0201010102	Facilitate staff recruitment
MAF	0201010103	Implement performance management system
MAF	0201010104	Coordinate supervisory technical back up

(Continued)

ACTIVITY-BASED STRUCTURE

Min	CD	Directorate
		Key priority area
		Strategic objectives
		Strategies
		Key activities/output/results
MAF	02	DIRECTORATE OF RESEARCH
MAF	0201	Key Priority Area 1: Capacity building
MAF	020101	Strategic Objective 1: Strengthening capacity of staff
MAF	02010101	Enhance staff and institutional performances
MAF	0201010101	Facilitate staff training
MAF	0201010102	Facilitate staff recruitment
MAF	0201010103	Implement performance management system
MAF	0201010104	Coordinate supervisory technical back up
MAF	020102	Strategic Objective 2: Strengthening institutional capacity
MAF	02010201	Provide inputs and facilities for efficient running of research, basic seed centres, laboratories and seeds inspect
MAF	0201020101	Facilitate provision of office equipment, furniture, seeds and tools
MAF	0201020102	Facilitate construction of seed storage facilities at Halima and Renk basic seed centres
MAF	0201020103	Facilitate rehabilitation of Halima Research Station
MAF	0201020104	Facilitate rehabilitation of Yambio Research Station
MAF	0201020105	Facilitate provision of field testing equipment for basic seed centres
MAF	0201020106	Publishing of Research findings and dissemination
MAF	0202	Key Priority Area 2: Collaboration and partnership
MAF	020201	Strategic Objective 1: Consolidate and strengthen working relations with farmers, regional and international
MAF	02020101	Identification of research problems
MAF	0202010101	Identify agricultural research problems
MAF	02020102	Development of value chain
MAF	0202010201	Identify and prioritize Value chain development
MAF	0202010202	Verify and disseminate Value chain development
MAF	02020103	Technology validation and transfer
MAF	0202010301	Identify demand driven appropriate technologies
MAF	0202010302	Identify locations for technology validation
MAF	0202010303	Facilitate appropriate technology transfer
MAF	0203	Key Priority Area 3: Seed production
MAF	020301	Strategic Objective 1: Strengthen local seeds industries
MAF	02030101	Facilitate Basic seeds maintenance
MAF	0203010101	Facilitate sourcing of basic seeds for appropriate released varieties
MAF	0203010102	Provide basic seeds for certified seeds production
MAF	0203010103	Supervise production and certification of seeds
MAF	0203010104	Supervise production and certification of seeds
MAF	0203010105	Supervise production and certification of seeds
MAF	02030102	Genetic resources collection, conservation and utilization
MAF	0203010201	Collect local genetic resources
MAF	0203010202	Characterize and document local genetic resources
MAF	0203010203	Develop new crop varieties
MAF	0203010204	Participate in seed variety selection
MAF	0203010205	Maintain collected genetic resources
MAF	020302	Strategic Objective 2: Mobilize resources for research
MAF	02030201	Explore external and internal funding sources
MAF	0203020101	Write proposal for competitive regional and international research grants
MAF	0203020102	Lobby for research funding in Regional and International forums
MAF	0203020103	Initiate income generating projects
MAF	0204	Key Priority Area 4: Policy and regulatory mechanisms
MAF	020401	Strategic Objective 1: Put in place mechanism to guarantee locally and imported seeds meet the regional s
MAF	02040101	Strengthen regulatory capacity
MAF	0204010101	Facilitate deployment of staff in the 10 states
MAF	0204010102	Facilitate deployment of staff at border posts
MAF	0204010103	Develop guide lines for seeds handlings
MAF	0204010104	Inspect imported seeds
MAF	0205	Key Priority Area 5: Enhance operation efficiency of research
MAF	020501	Strategic Objective 1: Autonomy of research sector and moving to Ministry of Sciences and Technology
MAF	02050101	Strengthen Research Work Efficiencies in Service Delivery
MAF	0205010101	Lobby for passage of research policy by parliament
MAF	0205010102	Re-structure the Research according to policy document
MAF	02050102	Strengthening seeds and varieties inspection and release
MAF	0205010201	* Formation of seed inspection committee* Formation of varieties release committee

(Continued)

ACTIVITY-BASED STRUCTURE

Min CD	Directorate <u>Key priority area</u> <i>Strategic objectives</i> <i>Strategies</i> <i>Key activities/output/results</i>
MAF 03	DIRECTORATE OF COOPERATIVE DEVELOPMENT
MAF 0301	<u>Key Priority Area 1: Policy and legal framework</u>
MAF 030101	<i>Strategic Objective 1: To formulate cooperative development policy and legal frame work</i>
MAF 03010101	Develop policy and legal frame work
MAF 0301010101	Draft national policy for cooperative development
MAF 03010102	Develop policy and legal frame work
MAF 0301010201	Review Cooperative Regulations to the Cooperative Societies Act 2011
MAF 03010103	Develop policy and legal frame work
MAF 0301010301	Review Model By-Laws
MAF 0302	<u>Key Priority Area 2: Capacity building</u>
MAF 030201	<i>Strategic Objective 1: To improve capacity of cooperative movement</i>
MAF 03020101	Enhance the capacity of the staff and cooperative movement
MAF 0302010101	Facilitate Internal Training of trainers
MAF 0302010102	Facilitate external training in neighboring Cooperative institutions
MAF 0302010103	Conduct training needs assessment
MAF 0302010104	Facilitate training of Cooperatives Leaders
MAF 0302010105	Create Cooperative awareness through Radio Program
MAF 04	DIRECTORATE OF COOPERATIVE DEVELOPMENT
MAF 0401	<u>Key Priority Area 1: Support to cooperative development</u>
MAF 040101	<i>Strategic Objective 1: To improve capacity of cooperative movement</i>
MAF 04010101	Enhance development and growth of Cooperatives
MAF 0401010101	Facilitate disbursement of grants to Cooperatives Projects
MAF 0401010102	Facilitate disbursement of Capital to Cooperative Ministries/Departments in the States
MAF 0401010103	Facilitate construction of storage facilities
MAF 0401010104	Facilitate formation of Cooperatives and member controlled economic associations
MAF 0401010105	Develop manuals on standard procedure for registration, supervision, accounting, inquiries, liquidation and audit
MAF 0401010106	Facilitate registration of viable Cooperatives
MAF 0401010107	Facilitate supervision of Cooperatives
MAF 0401010108	Facilitate auditing of Cooperatives
MAF 0401010109	Facilitate Monitoring of Cooperative activities
MAF 05	DIRECTORATE OF COOPERATIVE COLLEGE
MAF 0501	<u>Key Priority Area 1: Establishment of Cooperative College</u>
MAF 050101	<i>Strategic Objective 1: To establish and operationalized the Cooperative College</i>
MAF 05010101	Establish Cooperative College
MAF 0501010101	Develop policy and regulations for cooperative College
MAF 0501010102	Facilitate registration of Cooperative College
MAF 0501010103	Acquire Land for Construction of Cooperative College
MAF 0501010104	Construct Cooperative College.
MAF 0501010105	Develop Cooperative Structure
MAF 0501010106	Facilitate recruitment of professional tutors and transfer of staff from training Department to the college
MAF 0501010107	Develop practical curriculum for Cooperative courses
MAF 0502	<u>Key Priority Area 2: Capacity building</u>
MAF 050201	<i>Strategic Objective 1: To develop capacity for cooperative officers and cooperators</i>
MAF 05020101	Strengthening staff capacity
MAF 0502010101	Train Cooperative Officers.
MAF 0502010102	Train Fresh Cooperative officers, leaders and members
MAF 06	DIRECTORATE OF AMADI RURAL DEVELOPMENT INSTITUTE (ARDI)
MAF 0601	<u>Key Priority Area 1: Institutional capacity building</u>
MAF 060101	<i>Strategic Objective 1: To rehabilitate physical facilities</i>
MAF 06010101	Improve infrastructure
MAF 0601010101	Assess the physical facilities
MAF 0601010102	Rehabilitate physical facilities
MAF 0601010103	Make proposals for funding
MAF 06010102	Build staff capacity
MAF 0601010201	Conduct Training Need assessment
MAF 0601010202	Develop staff capacity building plan
MAF 0601010203	Conduct staff training
MAF 0601010204	Conduct Monitoring of training
MAF 06010103	Provision of Assets
MAF 0601010301	Conduct asset audit
MAF 0601010302	Develop the procurement plan
MAF 0601010303	Facilitate Purchase of the assets

(Continued)

		ACTIVITY-BASED STRUCTURE
Min	CD	Directorate
		<u>Key priority area</u>
		<i>Strategic objectives</i>
		Strategies
		Key activities/output/results
MAF	06010104	Improve infrastructure
MAF	0601010401	Assess the 15 Km access road
MAF	0601010402	Tender for Access road construction
MAF	0601010403	Construct access road
MAF	0602	<u>Key Priority Area 2: Policy and regulatory framework</u>
MAF	060201	<i>Strategic Objective 1: To develop policy and regulatory framework</i>
MAF	06020101	Formulate legal framework bills
MAF	0602010101	Develop policy, legal frame work document and structures
MAF	0602010102	Implement policies, procedures and structures
MAF	0603	<u>Key Priority Area 3: Provision of training and outreach</u>
MAF	060301	<i>Strategic Objective 1: Improve academic standard</i>
MAF	06030101	Raise academic standards
MAF	0603010101	Review current curriculum and programs
MAF	0603010102	Establish curriculum review committee
MAF	0603010103	Conduct training needs assessment for clients
MAF	0603010104	Develop new curriculum in light of reviews and needs assessment
MAF	0603010105	Conduct training programmes
MAF	06030102	Staff development and accreditation of the certificates
MAF	0603010201	Conduct opinion survey among former graduates and potential trainees
MAF	0603010202	Introduce Diploma Courses
MAF	0603010203	Register with the Ministry of Higher Education, Science and Technology
MAF	0603010204	Train staff up to Master Degree level
MAF	06030103	Acquisition of land for outreach centres
MAF	0603010301	Select three greater states for establishment of OLCs
MAF	0603010302	Lease and construct space for OLCs
MAF	0603010303	Introduce Distance learning programmes and short courses
MAF	06030104	Recruit qualified academic staff
MAF	0603010401	Fill establishment staff positions
MAF	0603010402	Increase establishment to meet the demand
MAF	06030105	Develop demand driven courses
MAF	0603010501	Continuous review of courses
MAF	0603010502	Initiate new specializations
MAF	0603010503	Mainstream of ICT,HIV & management of CBOs in the academic programmes,
MAF	06030106	Strengthen research department
MAF	0603010601	Create the position of Research Coordinator in establishment
MAF	0603010602	Solicit research fund
MAF	0603010603	Establish research unit
MAF	06030107	Expand extension services
MAF	0603010701	Establish effective extension services to communities
MAF	0603010702	Establish IGA projects
MAF	0603010703	Follow up and monitor
MAF	07	DIRECTORATE OF FORESTRY
MAF	0701	<u>Key Priority Area 1: Afforestation and natural forests conservation</u>
MAF	070101	<i>Strategic Objective 1: Protection, conservation and preservation of forests and woodlands</i>
MAF	07010101	Protection, conservation and preservation of forests and woodlands
MAF	0701010101	Establish forest Plantations and agro forestry programs
MAF	0701010102	Protect the existing and established plantations/woodlands
MAF	0701010103	Train forest guards Patrolling and fire lines demarcation/ Clearance
MAF	0701010104	Demarcate and survey plantations and natural forest/woodlands
MAF	0701010105	Conduct Extension/sensitization programmes on forestry principles and Agroforestry
MAF	0701010106	Develop vegetation maps by identifying tree species and categorizing natural forests and woodlands
MAF	0701010107	Develop a taxonomical tree species booklet
MAF	0702	<u>Key Priority Area 2: Capacity building</u>
MAF	070201	<i>Strategic Objective 1: Strengthen staffing capacity</i>
MAF	07020101	Development of staffing capacity
MAF	0702010101	Recruit forestry staff e.g. forest guards and technicians
MAF	0702010102	Conduct training needs assessment
MAF	0702010103	Train staff, community leaders
MAF	0702010104	Train farmers on agro- forestry practices(tree intercropping/nurseries)
MAF	07020102	Equip forest departments with necessary tool/equipment
MAF	0702010201	Purchase forestry equipment and tools

(Continued)

ACTIVITY-BASED STRUCTURE

Min	CD	Directorate
		Key priority area
		Strategic objectives
		Strategies
		Key activities/output/results
MAF	0703	Key Priority Area 3: Forest products
MAF	070301	Strategic Objective 1: Promote quality production and marketing of timber and non timber forest products
MAF	07030101	Marketing of timber and non timber products
MAF	0703010101	Train communities on Production and marketing of timber and non timber forest products
MAF	07030102	Promote commercial timber production
MAF	0703010201	Establish saw mills to train farmers on timber production
MAF	0703010202	Support development of Model production/training sawmills
MAF	0703010203	Carry out timber and non timber supply and demand surveys
MAF	08	DIRECTORATE OF RURAL DEVELOPMENT
MAF	0801	Key Priority Area 1: Policy development
MAF	080101	Strategic Objective 1: To formulate an enabling policy framework and legal environment for Rural developr
MAF	08010101	Develop Policy and legal Framework
MAF	0801010101	Draft national policy for Rural Development.
MAF	0802	Key Priority Area 2: Capacity building
MAF	080201	Strategic Objective 1: To strengthen capacity of CDOs, community leaders, CBOs, women/youth groups, s
MAF	08020101	Enhance Capacity of CDOs, AEOs, Community Leaders, CBOs, Women/Youth Groups, Smallholder Farmers &
MAF	0802010101	Conduct training needs assessment
MAF	0802010102	Facilitate the Development of the training programmes.
MAF	0802010103	Monitoring need assessment and Training programmes Activities
MAF	0802010104	Evaluation of need and training programmes activities
MAF	0802010105	Conduct study tours
MAF	0802010106	Facilitate the construction of Rural Development centre in west Mundri.
MAF	0802010107	Allocation of fund to buy vehicles and other means of transport.
MAF	0803	Key Priority Area 3: Coordination
MAF	080301	Strategic Objective 1: To improve linkage between states line ministries and NGOs.
MAF	08030101	Effectives coordination and networking with Line/ State Ministries, Rural Community Leaders, NGOs, Developmei
MAF	0803010101	Holding Meetings, Seminars, Workshops & Conferences.
MAF	0803010102	Facilitated the Construction of offices, Community centre, Cars for the State level and other equipment.
MAF	09	DIRECTORATE OF PLANT PROTECTION
MAF	0901	Key Priority Area 1: Policy and legal framework of plant protection
MAF	090101	Strategic Objective 1: Formulate laws and regulations for plant quarantine pests and diseases, pesticides a
MAF	09010101	Formulation of laws and regulations
MAF	0901010101	Facilitate drafting of laws and regulations
MAF	0901010102	Submit drafted laws to council of ministers and legislative assembly for approval
MAF	09010102	Disseminate plant protection laws and regulations
MAF	0901010201	Create awareness to stakeholders
MAF	0901010202	Implement the regulatory scheme on plant protection services
MAF	0902	Key Priority Area 2: Capacity building
MAF	090201	Strategic Objective 1: Recruitment of specialized, professional, and technical staff
MAF	09020101	Recruitment of staff
MAF	0902010101	Develop a structure for PP
MAF	0902010102	Establish of new directorate
MAF	09020102	Train new PP staff, extension workers and farmers on pest control measures
MAF	0902010201	Training on safe use of pest control products (pesticides, bio-control agents).
MAF	0902010202	Training on IPM
MAF	0903	Key Priority Area 3: Plant protection
MAF	090301	Strategic Objective 1: Prevent introduction and establishment of exotic pests to South Sudan
MAF	09030101	Prevent introduction and establishment of exotic pests
MAF	0903010101	Facilitate the establishment of quarantines check points at border posts and inter-states
MAF	0903010102	Facilitate the purchase of check points tools & supplies
MAF	0903010103	Inspect incoming agricultural products (seeds, or consumable goods).
MAF	0903010104	Inspect agricultural products meant for export in accordance to the IPPC
MAF	09030102	Prevent proliferation and spread of locals pests
MAF	0903010201	Establish inter-state check points between states
MAF	0903010202	Conduct regular pests inspection of agricultural products coming from other states
MAF	0903010203	Delimit the spreading of pest following an incursion to the country
MAF	0903010204	Allow/reject the incoming agricultural commodities not or carrying pest not in the area or state
MAF	09030103	Safeguard stored agricultural products
MAF	0903010301	Routine inspection of existing storage facilities for pests identification
MAF	0903010302	Facilitate the purchase of fumigants and fumigations equipment
MAF	0903010303	Fumigate products and disinfect the infected stores
MAF	0903010304	Train on proper storage and store pests control
MAF	0903010305	Establish laboratories for identification of pests & diseases

(Continued)

ACTIVITY-BASED STRUCTURE

Min	CD	Directorate
		Key priority area
		Strategic objectives
		Strategies
		Key activities/output/results
MAF	09030104	Establish surveillance system for pests and diseases
MAF	0903010401	Establish surveillance units in both national & states
MAF	0903010402	Baseline survey to detect, identify major crop pests & diseases
MAF	0903010403	Purchase of pesticides for pests control
MAF	0903010404	Field pests control campaign against cereal pests, vegetable pests, fruit trees pests
MAF	09030105	Promote integrated Pest management approaches
MAF	0903010501	Train PP staff, extension workers and farmers on IPM methods/techniques
MAF	0903010502	Establish rearing laboratory for biological agents
MAF	0903010503	Train laboratory technicians
MAF	0903010504	Identify of natural pests/enemies (parasitoids, pathogen, predator)
MAF	0903010505	Rear pests/enemies/biological control agents in the laboratory
MAF	0903010506	Release of biological agents to the fields
MAF	0903010507	Establish Data base for pests and diseases in the country
MAF	09030106	Safe global trade in agricultural products as per IPPC standard or the requirements of trading partners
MAF	0903010601	Provide field inspection for growers that wish to export agricultural commodities
MAF	0903010602	Certificate the agricultural products as per IPPC standards to assist growers in moving their products to others
MAF	09030107	Ensure registration of pesticides
MAF	0903010701	Formation of pesticides National Council (PNC) by ministerial order & regulations for its mandate.
MAF	0903010702	Formation of professional board of pests & diseases committee (PDC) by Ministerial order & a protocol for Pest
MAF	0903010703	Establishment of Pesticides registration Book
MAF	09030108	Effective control of pesticides
MAF	0903010801	Issue import permits of pesticides & agrochemicals
MAF	0903010802	Licenses for storage & shops of pesticides & agrochemicals
MAF	0903010803	Licenses for formulation of pesticides & agrochemicals
MAF	09030109	Ensure safe use of pesticides
MAF	0903010901	Inspection of pesticide stores, shops, factories and qualifications of shopkeepers and skills of pesticides users
MAF	0903010902	Training of pesticides dealers & applicators
MAF	09030110	Establish & strengthen plant protection structures at the state level for effective coordination and pest management
MAF	0903011001	Establish functioning plant protection Units in the 10 states
MAF	0903011002	Facilitate construction of PP products stores in 10 states
MAF	0903011003	Facilitate provision of plant protection products & equipment for 10 states
MAF	0903011004	Facilitate the staffing of PP units in the 10 states
MAF	090302	Strategic Objective 2: Strengthen safe use of pesticides
MAF	09030201	Safe use of pesticides and support for small holder farmers
MAF	0903020101	Train small holder farmers on chemical handling
MAF	0903020102	Identify and engage agro-dealers in training farmers in handling chemicals
MAF	0903020103	Facilitate conducive environment for agro-dealers to operate
MAF	10	DIRECTORATE OF AGRICULTURAL EDUCATION AND TRAINING
MAF	1001	Key Priority Area 1: Capacity building
MAF	100101	Strategic Objective 1: Training and strengthening the capacity of staff of the MAFCRD
MAF	10010101	Strengthen the Capacity of Staff of the MAFCRD
MAF	1001010101	Conduct training needs assessments
MAF	1001010102	Review curriculum
MAF	1001010103	Facilitate training of staff both national and state
MAF	1001010104	Facilitates training of Coop Officer, rural and community development workers
MAF	1001010105	Facilitate construction of Agric. Centres
MAF	1001010106	Facilitate external training and education of the Ministry staff
MAF	1001010107	Facilitate study tours
MAF	1001010108	Supervised training centres
MAF	11	DIRECTORATE OF SPECIAL PROJECTS AND DONORS COORDINATION
MAF	1101	Key Priority Area 1: Coordination
MAF	110101	Strategic Objective 1: To provide strategic leadership and supervision and establish close management and
MAF	11010101	Coordination Mechanism strengthened.
MAF	1101010101	Facilitate a Forum for line Ministries, Development partners & INGOs
MAF	1101010102	Conduct periodic field visits to projects sites in the ten States.
MAF	1101010103	Facilitate PPP in agriculture sector
MAF	1101010104	Support agricultural services institutions
MAF	1101010105	Link farmers/ farmers Associations to Service providers
MAF	12	DIRECTORATE OF AGRICULTURE PRODUCTION AND EXTENSION SERVICES
MAF	1201	Key Priority Area 1: Capacity building
MAF	120101	Strategic Objective 1: To provide skilled training to farmers, extension workers
MAF	12010101	Capacity Building for stakeholders

(Continued)

		ACTIVITY-BASED STRUCTURE
Min	CD	Directorate
		Key priority area
		Strategic objectives
		Strategies
		Key activities/output/results
MAF	1201010101	Facilitate Training Needs Assessment
MAF	1201010102	Facilitate to Support review of the Curriculum
MAF	1201010103	Facilitate to Train Farmers
MAF	1201010104	Facilitate to Train Extension Workers
MAF	1201010105	Monitor the training of farmers and extension workers
MAF	1202	Key Priority Area 2: Provision of inputs
MAF	120201	Strategic Objective 1: To facilitate distribution of seeds and farm machinery to farmers
MAF	12020101	Provision of Inputs
MAF	1202010101	Facilitate the Purchase of inputs (seeds and Farm Machinery)
MAF	1202010102	Facilitate Distribution of inputs
MAF	1202010103	Monitor purchase and distribution of inputs
MAF	1203	Key Priority Area 3: Establishment of model farms
MAF	120301	Strategic Objective 1: To establish model farms at zonal level
MAF	12030101	Establish Model Farms (Zeat Project)
MAF	1203010101	Facilitate to identify Farm sites
MAF	1203010102	Facilitate the Establishment of model Farms
MAF	1203010103	Monitor the utilization of the model farms
MAF	1204	Key Priority Area 4: Agriculture infrastructure
MAF	120401	Strategic Objective 1: To construct and improve infrastructure
MAF	12040101	Construction and improvement of infrastructure (Zeat Project)
MAF	1204010101	Facilitate construction of stores/warehouse, irrigation channels mechanical workshops
MAF	1204010102	Facilitate installation of farm equipment (post harvest , irrigation & workshops)
MAF	1204010103	Facilitate the rehabilitation of Market Centers,
MAF	1204010104	Facilitate the Rehabilitation of Feeder Roads
MAF	1204010105	Facilitate theRehabilitation of stores,mechanical workshops and irrigation channels
MAF	13	DIRECTORATE OF PLANNING AND AGRICULTURE ECONOMICS
MAF	1301	Key Priority Area 1: Coordination
MAF	130101	Strategic objective 1: To strengthen coordination mechanism within the ministry, states and other stakehol
MAF	13010101	Develop Coordination mechanism
MAF	1301010101	Hold regular intra/inter directorate meetings
MAF	1301010102	Conduct States Coordination Meetings.
MAF	1301010103	Coordinate preparation of budget
MAF	1301010104	Coordinate preparation of reports
MAF	1302	Key Priority Area 2: Monitoring and evaluation
MAF	130201	Strategic Objective 1: To strengthen monitoring and evaluation system within the ministry
MAF	13020101	Establish M&E framework
MAF	1302010101	Develop M&E framework
MAF	1302010102	Develop M&E tools
MAF	1302010103	Disseminate M&E tools to all Directorates and states
MAF	1302010104	Monitor ministry programs (Collection, analysis and dissemination of results)
MAF	1302010105	Facilitate evaluation of projects
MAF	1302010106	Facilitate M&E training for staff at national and state levels
MAF	1303	Key Priority Area 3: Management information system
MAF	130301	Strategic Objective 1: To improve food security information for action/decision making
MAF	13030101	Strengthen food security information management system
MAF	1303010101	Coordinate surveys on food security and livelihood systems
MAF	1303010102	Information processing and documentation.
MAF	1303010103	Information dissemination to stakeholders
MAF	1303010104	Update IMS database
MAF	130302	Strategic Objective 2: To strengthen statistical unit
MAF	13030201	Strengthening of the statistical Unit
MAF	1303020101	Establish a functional Statistical Unit
MAF	1303020102	Facilitate procurement of computers and statistical software
MAF	1303020103	Recruitment and deployment of qualified and skilled staff
MAF	1304	Key Priority Area 4: Policy and planning
MAF	130401	Strategic Objective 1: To facilitate planning and designing of new project and programs for national and sta
MAF	13040101	Strengthen policy and planning mechanism
MAF	1304010101	Conduct feasibility studies on new projects/programmes
MAF	1304010102	Design new projects at national and state level
MAF	1304010103	Implement new projects at national level
MAF	1304010104	Follow up and monitorCoordinate formulation of policies

3.4.3 Five-year Strategic Plan of the Former MARF (now MLFI)

Table 3.4.3 Five-year Strategic Plan of the Former MARF (now MFLI)

ACTIVITY-BASED STRUCTURE		
Min	CD	Directorate <u>Key priority area</u> <u>Strategic objectives</u> <u>Strategies</u> <u>Key activities/output/results</u>
MAR	01	Directorate of Planning
MAR	0101	(not identified)
MAR	010101	Prepare the MARF National Livestock and Fisheries Strategic Plans; Annual and rolled over a 5-years period to support and institutionalize a results-oriented culture in MARF
MAR	01010101	National Livestock and Fisheries Strategic and 5-years rolling Operational Plans.
MAR	0101010101	Facilitate the development and translation of MARF Strategy into prioritized, coherent outcome -based annual plans and budgets.
MAR	0101010102	Conduct monitoring / evaluation of annual implementation of the MARF approved strategic and annual plans, and facilitate monthly and quarterly reporting.
MAR	0101010103	Strengthen the institutional capacity of the MARF and its counterpart state ministries to better perform their planning functions.
MAR	0101010104	Establish a comprehensive national livestock and fisheries M&E system and forums to include key state and non-state stakeholders from all over South Sudan.
MAR	0101010105	Explore/ develop a framework for citizen-based M&E to improve performance through participation.
MAR	0101010106	Provide advice to the Under-Secretary, Deputy Minister, Minister and Directors General on service delivery improvements and key policy initiatives, as requested.
MAR	0102	(not identified)
MAR	010201	Improve warehousing and increase use of livestock and fisheries statistics and information
MAR	01020101	Warehousing and use of Livestock and Fisheries statistics and information.
MAR	0102010101	Set up livestock and fisheries database and a geo-information system at the MARF to store technical and management data.
MAR	0102010102	Develop information policy, and implement knowledge and document management applications in support of the MARF as a whole.
MAR	0102010103	Develop staff capacity in MARF and the states in livestock and fisheries data collection, analysis and dissemination.
MAR	0103	(not identified)
MAR	010301	Improve gender analysis and Mainstreaming
MAR	01030101	Introduce a Department of Gender Analysis and Mainstreaming in the Directorate of Planning, Statistics and Documentation for improved gender balance and equity in MARF and
MAR	0103010101	Create Department of Gender Analysis and Mainstreaming under Directorate of Planning, Statistics and Documentation and Staff DoGAM with Director and Assistant Director
MAR	02	Directorate of State Coordination and Special Projects
MAR	0201	(not identified)
MAR	020101	2012-2016 MARF Policy Framework and Strategic Plans adopted and utilised as national livestock and fisheries development plan, reference benchmark document and advocacy tool
MAR	02010101	(not identified)
MAR	0201010101	Print and distribute copies of the 2012-2016 MARF Policy Framework and Strategic Plans (PFSP) to key stakeholders
MAR	0201010102	Establish fora to present to and review with stakeholders the 2012-2016 MARF Policy Framework and Strategic Plans
MAR	0201010103	Strengthen MARF public relations through regularly reviewing and publicising achievements against the national livestock and fisheries development plan+
MAR	0201010104	Use the 2012-2016 MARF Policy Framework and Strategic Plans with the MoFEP, donors, development partners and the Natural Resources Sector Working Group (NRSWG) to advocate for implementation and development of projects,
MAR	0201010105	Regularly review and benchmark+ progress against the 2012-2016 MARF Policy Framework and Strategic Plans and circulate progress report to stakeholders, including feeding into aid coordination planning via the NRSWG
MAR	0202	(not identified)
MAR	020201	Special projects achieve maximum positive impact for beneficiaries of MARF livestock and fisheries
MAR	02020101	(not identified)
MAR	0202010101	Develop and utilise a framework for implementation supervision, monitoring, reporting and impact evaluation for existing and new special projects
MAR	0202010102	1. Regular Special project steering meetings held 2. Regular meetings held with relevant SMARFs
MAR	0202010103	2.5 Ensure documentation filed and available for reference on all special projects
MAR	0202010104	2.6 Develop projects to address gap areas in relation to the implementation of the MARF 2012-2016 Plan

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ACTIVITY-BASED STRUCTURE		
Min	CD	Directorate
		Key priority area
		Strategic objectives
		Strategies
		Key activities/output/results
MAR	0203	(not identified)
MAR	020301	Effective collaboration and cooperation between MARF and State MARFs in livestock and fisheries
MAR	02030101	(not identified)
MAR	0203010101	Promotion of national agenda for livestock and fisheries development as outlined in 2012-2016 Policy Framework and Strategic Plans
MAR	0203010102	Development of capacity of State MARFs for Strategic Planning in line with national plans
MAR	0203010103	Increase interaction/collaboration between MARF and SMARF in relation to livestock and fisheries development
MAR	0203010104	Provide a forum for issues, concerns and opinions of SMARFs to be raised and addressed by the MARF
MAR	03	Directorate of Administration, Finance and Human Resource Development (DAF/HRD)
MAR	0301	(not identified)
MAR	030101	Infrastructure planned for in the Strategic Plan (2012-2016) in place in the Headquarters and elsewhere
MAR	03010101	(not identified)
MAR	0301010101	Construction of permanent HQ with sufficient office space for all and room for future expansion
MAR	0301010102	Construction of small workshop with tools to enhance vehicle maintenance
MAR	0301010103	Completion of toilets facility to provide clean and safe washroom facilities for staff and guests
MAR	0302	(not identified)
MAR	030201	Completion of the MARF HQ Compound and Service Facilities in Juba
MAR	03020101	(not identified)
MAR	0302010101	Construction of a high perimeter wall around the MARF HQ in Juba with all security provisions
MAR	0302010101	Ensure adequate fuel supply reserve at MARF HQ
MAR	0302010101	Provide office space for the MARF drivers
MAR	0303	(not identified)
MAR	030301	Provision of Staff Transportation to and from the MARF HQ Compound in Juba
MAR	03030101	(not identified)
MAR	0303010101	Purchase of two large buses to add to the present MARF fleet to enhance staff transportation
MAR	0304	(not identified)
MAR	030401	Provision of Office Furniture, Equipment (computers, printers, photocopiers), Stationery, Vehicle and Generator Spare Parts and Lubricants for the MARF HQ in Juba
MAR	03040101	(not identified)
MAR	0304010101	Purchase of office furniture, equipment, stationery, vehicle and generator spare parts and lubricants
MAR	0305	(not identified)
MAR	030501	Capacity Building of MARF HQ Staff in Juba
MAR	03050101	Human Resources Development in the MARF HQ and the 10 States of the Republic of South Sudan
MAR	0305010101	1. Conduct a training needs assessment for each directorate and develop a scheduled capacity- building training programme for the MARF staff at all levels 2. Development of a national training plan 3. Coordinate and facilitate trainings
MAR	03050102	Strengthen the capacity of MARF to make comprehensive policy related to Technical and Vocational Education
MAR	0305010201	1. Train staff in policy development 2. Participate in TVET meetings, workshops, platforms etc. 3. Develop policy that is gender-sensitive 4. Conduct livestock labour market survey
MAR	03050103	Strengthen the capacity of the Mariel Lou Livestock Training Centre (MLLTC) to offer fully fledged TVET and
MAR	0305010301	1. Train MLLTC staff on curriculum development 2. Organise exchange study visits for tutors to fully accredited training institutions 3. Train tutors on teaching methodologies in the livestock sector 4. Increase awareness on training opportunities available at the centre 5. Conduct outreach trainings in all States to encourage applications
MAR	04	Directorate of Investment , Marketing and Supplies
MAR	0401	(not identified)
MAR	040101	Enhance Investment in the Livestock and Fisheries Sectors in South Sudan
MAR	04010101	Develop and regularly review policies and laws governing investment in Livestock and Fisheries sectors
MAR	0401010101	Draft and prepare policies and laws governing investment in Livestock and Fisheries and submit them to legal bodies.
MAR	04010102	Develop livestock and fisheries investment guidelines and programs/ projects for investment both by public and private sectors
MAR	0401010201	Hire consultants to prepare investment guidelines, programs and projects for investment on PPP basis

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ACTIVITY-BASED STRUCTURE

Min	CD	Directorate
		Key priority area
		Strategic objectives
		Strategies
		Key activities/output/results
MAR	04010103	Conduct national, regional and international livestock and fisheries investment promotion campaigns.
MAR	0401010301	Hold Investor Conferences at national, regional and international levels
MAR	04010104	Promote value addition in livestock, livestock products and by-products
MAR	04010101	Establish 2 meat, 2 fish processing plants and 1 tannery on PPP basis
MAR	0402	(not identified)
MAR	040201	Increased market access for South Sudan livestock and livestock products and fisheries
MAR	04020101	Develop and regularly review policies and laws governing livestock, live-stock products and fish marketing.
MAR	0402010101	Draft and prepare policies and laws governing marketing in Livestock/Fisheries and submit them to legal bodies
MAR	04020102	Improve market infrastructure throqconstruction of auction platforms, holding grounds, landing sites, satellite and export abattoirs, etc.
MAR	0402010201	Construct 3 auction platforms, and 6 fish landing sites,7 satellite and 3 export abattoirs
MAR	04020103	Improve communication and dissemination of livestock and fish markets information to all stakeholders.
MAR	0402010301	Upload and disseminate livestock and fish prices to stakeholders
MAR	04020104	Strengthen capacities of livestock and fish marketing officials, institutions and groups/ associations in collaboration with partners and stakeholders.
MAR	0402010401	Organize/ train livestock/fish market staff, pastoralist unions/fisher-folk associations on data collection analysis/ dissemination, and storage/ auction facilities management
MAR	0403	(not identified)
MAR	040301	Ensure availability and access- ability of vet, livestock production and fisheries inputs
MAR	04030101	Supply quality drugs, vaccines, equipment and instruments, livestock production and fisheries inputs
MAR	0403010101	Contract private sector to procure and supply quality drugs, vaccines, equipment and instruments, livestock production and fisheries inputs
MAR	05	Directorate of Animal Production and Range Management
MAR	0501	(not identified)
MAR	050101	Increase Milk Production by 25% by end of 2015
MAR	05010101	Establish model/demonstration
MAR	0501010101	Complete the construction/operationalization of Marial Bai dairy farm
MAR	0501010102	Construct a model/demonstration farm in Malakal
MAR	0501010103	Compete the Construction of MAFAO model farm near Juba town
MAR	0502	(not identified)
MAR	050201	Increase the supply of poultry meat and eggs by 30% at the end of 2016
MAR	05020101	Construct three model/ demonstration / training/seed stock farms in three states of South Sudan
MAR	0502010101	Construct, equip and stock a model/ demonstration farm in Wau
MAR	0502010102	Construct, equip and stock a model/ demonstration farm in Malakal
MAR	0502010103	Construct, equip and stock a model/ demonstration farm near Juba town
MAR	0503	(not identified)
MAR	050301	Improve the quality of hides and skins for local and international markets
MAR	05030101	Establish standards and provide training on the production of quality hides and skin
MAR	0503010101	Construct and equip a demonstration/ training tannery close to an abattoir
MAR	0503010102	Establish standards for the production of quality hides and skins
MAR	0503010103	Establish training manuals and training programme to train livestock keepers and slaughter house/slab operatives in the production of quality hides and skins
MAR	0504	(not identified)
MAR	050401	Increase honey and bee-wax production
MAR	05040101	Support to bee farmers in the three states of UNS, CES and NBG
MAR	0504010101	Train and supply bee farmers with equipment
MAR	0505	(not identified)
MAR	050501	Improve utilisation and conservation of rangelands and water resources
MAR	05050101	Mapping of livestock migratory routes and grazing areas
MAR	0505010101	Conduct mapping exercise in the ten states of RSS
MAR	05050102	Establishment of water
MAR	0505010201	Needs assessment in the ten states

(Continued)

ACTIVITY-BASED STRUCTURE

Min	CD	Directorate <u>Key priority area</u> <i>Strategic objectives</i> Strategies Key activities/output/results
MAR	05050103	Pasture/rangeland conservation/ improvement
MAR	0505010301	In collaboration with relevant stakeholders, develop mechanisms for drought preparedness
MAR	0505010302	Conduct research on disease resistant and high-yielding pasture varieties
MAR	0505010303	Undertake efforts to institutionalize community involvement in natural resources management
MAR	0505010304	Encourage and train in fodder and pasture conservation
MAR	0506	(not identified)
MAR	050601	Characterise, document, conserve and improve (in collaboration with the Directorate of Animal and Fisheries Research and Development) the available
MAR	05060101	Documentation of existing situation with production and breed improvement research studies
MAR	0506010101	Survey and document demographic distribution of species/breed types and characteristics
MAR	0506010102	Introduce (in collaboration with DAFRD) livestock breed improvement programme, initially through model/demonstration farms
MAR	0506010103	Pilot collection of semen and artificial insemination (AI) from model/ demonstration/training/seed stock farms
MAR	0507	(not identified)
MAR	050701	Develop livestock feed standards and quality feed formulations for all classes of livestock, in
MAR	05070101	Documentation and dissemination of feed standards and feed formulation research to develop and support the production of quality locally-formulated livestock feeds
MAR	0507010101	Promote the utilization of crop residues in animal feeds
MAR	0507010102	Promote livestock feeds that can be locally sourced and formulated
MAR	0507010103	Encourage livestock producer associations to establish feed mills
MAR	0507010104	Develop and publish standards for formulated feeds for different classes of livestock
MAR	0507010105	Analyse feed imports to ensure compliance with set standards
MAR	06	Directorate of Fisheries and Aquaculture Development
MAR	0601	(not identified)
MAR	060101	Ensure maximum sustainable fish production to meet local demand
MAR	06010101	Provision of preservation facilities.
MAR	0601010101	Training on fish preservation techniques
MAR	06010102	Avail market facilities through construction of cold storage
MAR	0601010201	Construct market facilities
MAR	0602	(not identified)
MAR	060201	Develop Local entrepreneurs capacity (in SME) to access markets
MAR	06020101	Develop investment policy to attract entrepreneurs
MAR	0602010101	Construct fish market facilities in urban towns
MAR	06020102	Purchase of refrigerated vans and boats to transport fresh fish
MAR	0602010201	Identify refrigerated vans of 10 tons
MAR	0603	(not identified)
MAR	060301	Support procurement of fishing gear and equipment to enhance production.
MAR	06030101	Provide efficient gear recommended
MAR	0603010101	Construction of bush shops for storage of gear
MAR	06030102	Reduction of post-harvest losses through use of recommended gear
MAR	0603010201	Identify suitable specifications for recommended gear
MAR	0604	(not identified)
MAR	060401	Establishment of demonstration fish ponds in four states.
MAR	06040101	Construction of fish ponds in selected areas
MAR	0604010101	Select suitable areas and assess water availability and suitability
MAR	06040102	Stocking of fish ponds
MAR	0604010201	Purchase of fish feeds
MAR	06040103	Training of fish farmers on pond management
MAR	0604010301	Training of fish farmers
MAR	0605	(not identified)
MAR	060501	Strengthening of institutional capacity of the directorate for effective services delivery
MAR	06050101	Develop clear guidelines to manage fish resources for sustainability
MAR	0605010101	Trainings on responsible fisheries management
MAR	06050102	Strengthening harmonization of fisheries policies to meet international standards
MAR	0605010201	Liaise with regional fisheries administration
MAR	06050103	Develop co-management approaches
MAR	0605010301	Develop co-management guidelines

(Continued)

		ACTIVITY-BASED STRUCTURE
Min	CD	Directorate
		Key priority area
		Strategic objectives
		Strategies
		Key activities/output/results
MAR	0606	(not identified)
MAR	060601	Strengthening collaboration with all stakeholders at information sharing forum.
MAR	06060101	Form Strong collaboration with states and partners.
MAR	0606010101	Conduct stakeholders meetings and conference.
MAR	06060102	Formation of Regional working groups
MAR	0606010201	Presentations and discussions
MAR	07	Directorate of Veterinary Service
MAR	0701	(not identified)
MAR	070101	Provide effective veterinary services and implement specific disease control measures on behalf of livestock-owning communities in South Sudan
MAR	07010101	(not identified)
MAR	0701010101	Continue to ensure delivery of essential veterinary drugs and vaccines to livestock keepers, using existing govt. procurement procedures.
MAR	0701010102	Control of important vector-borne diseases and related vectors; to introduce appropriate control measures on ticks and tick-borne diseases with particular reference to ECF.
MAR	0701010103	PPR control programme in the 7 states of EE, JS, LS, NBG, Warrap, Unity & Upper Nile.
MAR	0701010104	Focus on the development of control strategies / control of priority cattle diseases (CBPP, FMD, RVF and other emerging diseases).
MAR	0701010105	Establishment of cold rooms for optimum storage of vaccines and test kits in Juba, Wau, Malakal and Ramciel.
MAR	0701010106	Harmonization of animal health certification in all states
MAR	0701010107	Establishment of 10 border check points (quarantines, holding grounds)
MAR	0702	(not identified)
MAR	070201	Provide effective public health safety and control of selected diseases of public health importance in the Republic of South Sudan
MAR	07020101	(not identified)
MAR	0702010101	Improve Meat Hygiene in 10 States of RSS
MAR	0702010102	Improve Milk Hygiene in 10 States of RSS
MAR	0702010103	Implement effective rabies surveys and control in domestic dog populations in ten States
MAR	0702010104	Construction of 4 standard abattoirs and 100 Meat outlets 2012: Juba; 2013:Malakal; 2014: Wau; 2015: Ramciel
MAR	0703	(not identified)
MAR	070301	Ensure an Effective Livestock Diseases Surveillance and Reporting System Operating for South Sudan
MAR	07030101	(not identified)
MAR	0703010101	Develop and improve an efficient and effective reporting system.
MAR	0703010102	Develop effective and efficient disease surveillance systems and procedure (an exit strategy for LESP project)
MAR	0703010103	Established coordination mechanism for promotion of epidemio-surveillance system internationally, regionally and locally
MAR	0703010104	Use of GIS for mapping diseases, linking environment, geographical factors and vector prevalence to develop appropriate surveillance and disease control plans with practical testing in pilot areas
MAR	0703010105	Training of staff on database management;
MAR	0703010106	Assess the use of zoning and compartmentalization protocol (OIE) for specific disease surveillance and control
MAR	0703010107	Conduct awareness campaigns on RVF, ECF, PPR, FMD, HPAI, and trypanosomiasis
MAR	0704	(not identified)
MAR	070401	Improve laboratory diagnostic capacity for routine epidemio- surveillance analyses of priority diseases
MAR	07040101	(not identified)
MAR	0704010101	Strengthen diagnostic laboratories in the states
MAR	0704010102	Purchase of Laboratory equipment and consumables . Juba Lab
MAR	0704010103	Purchase Laboratory equipment and consumables . States labs
MAR	0704010104	Training programme for middle cadre diagnosticians and laboratory technicians

(Continued)

		ACTIVITY-BASED STRUCTURE
Min	CD	Directorate
		Key priority area
		Strategic objectives
		Strategies
		Key activities/output/results
MAR	08	Directorate of Livestock and Fisheries Extension
MAR	0801	(not identified)
MAR	080101	Improve skills of Extension agents for effective service delivery.
MAR	08010101	Training and skills development
MAR	0801010101	Provide basic and in- service training both in subject matter areas and extension methods
MAR	0801010102	Upgrading of extension facilities
MAR	0802	(not identified)
MAR	080201	Strengthen institutional capacity of Directorate to effectively carry out its mandate
MAR	08020101	Implementation of National Agriculture and Livestock Extension Policy (NALEP)
MAR	0802010101	Formation of stakeholder fora
MAR	0802010102	Formation of NALEP implementation committees
MAR	0802010103	Advocacy and endorsement of NALEP by Council of Ministers and launching
MAR	0803	(not identified)
MAR	080301	Build and strengthen local, regional and international networks and partnership of Extension Service
MAR	08030101	Partnership development
MAR	0803010101	Research Extension linkage workshops
MAR	0803010102	Formation of coordination entities and linkages with NGOs and private sector
MAR	08030102	Regional participation
MAR	0803010201	Participation in regional and international networks, partnership, collaboration, etc.
MAR	0804	(not identified)
MAR	080401	Promote adoption of appropriate approaches and technologies in Livestock and fisheries
MAR	08040101	Technology dissemination
MAR	0804010101	Investigation of socio-economic aspects of technology on livelihoods of producers.
MAR	0805	(not identified)
MAR	080501	Strengthen Directorate of Extension capacity to timely disseminate essential messages
MAR	08050101	Publication
MAR	0805010101	Develop extension messages and packages
MAR	0805010102	Establish and equip resource and documentation centre
MAR	0806	(not identified)
MAR	080601	Empower livestock producers and fisher-folk through increasing knowledge and promoting social change
MAR	08060101	Human capital development
MAR	0806010101	Exhibitions and exposure visits
MAR	0806010102	Facilitate formation of livestock producer and fisher-folk associations and groups through ToT
MAR	0807	(not identified)
MAR	080701	Create awareness on improved utilization and conservation of rangelands and water resources
MAR	08070101	Natural Resources Management (NRM) by livestock herders
MAR	0807010101	Educate herders on NRM through Rangeland management extension programme
MAR	0808	(not identified)
MAR	080801	Institutionalize participatory and demand-driven extension approaches
MAR	08080101	Extension approach development
MAR	0808010101	Pilot and upscale Pastoralist and Fisher-folk Field Schools (P/FFS) and Participatory Technology Devt (PTD) in the states
MAR	0809	(not identified)
MAR	080901	Improve mobility of extension field agents
MAR	08090101	Provision of logistical support
MAR	0809010101	Purchase of vehicles and motor bikes for counties
MAR	0810	(not identified)
MAR	081001	Main-stream gender equity and social development issues into extension service delivery
MAR	08100101	Cross-cutting issues in extension
MAR	0810010101	Socio-economic gender analysis (SEAGA) to determine priority cross-cutting issues Yearly conference on gender in livestock and fisheries development
MAR	0811	(not identified)
MAR	081101	Mainstream gender issues to create awareness on danger of HIV/AIDS amongst the fishing communities
MAR	08110101	Reduce prevalence of HIV/AIDS amongst the fishing communities
MAR	0811010101	Conduct HIV/AIDS awareness campaigns within the fishing grounds
MAR	0812	(not identified)
MAR	081201	Reach out to all categories of livestock and fisheries clientele for wider coverage
MAR	08120101	Extension outreach programs
MAR	0812010101	Community education and dialogues,
MAR	0812010102	Media publicity and promotion of livestock and fisheries through print and electronic media
MAR	0812010103	Organize animal health camps

(Continued)

ACTIVITY-BASED STRUCTURE

Min	CD	Directorate
		Key priority area
		Strategic objectives
		Strategies
		Key activities/output/results
MAR	09	Directorate of Animal and Fisheries Research and Development
MAR	0901	(not identified)
MAR	090101	To develop and strengthen the Capacity of Livestock and Fisheries Research laboratories.
MAR	09010101	Construct Central Research Laboratory and rehabilitate two satellite laboratories
MAR	0901010101	Design and preparation of BQs. Signing of contracts, construction of the units and provision of equipment, consumables, chemicals, and reagents
MAR	0901010102	Rehabilitation, renovation and construction of the Satellite Laboratories
MAR	0902	(not identified)
MAR	090201	To Develop sustainable livestock and fisheries activities in South Sudan
MAR	09020101	Reduce food insecurity in rural households
MAR	0902010101	Implementation of PATTEC modalities - mapping of tsetse flies and ticks (disease vectors) of economic importance.
MAR	0902010102	Socio-economic impact of East Coast fever (ECF) on Cattle production determined
MAR	0902010103	Stock assessments of fisheries and aquaculture development
MAR	0902010104	Study on genetic improvement of dairy goats/ dairy and beef cattle, feed formulation analysis and quality assurance

3.4.4 Programmes and Projects Identified in South Sudan (Donor Book 2011)

Table 3.4.4 Natural Resources Sector DPs Supported Programmes and Projects

CD	Scheme/Fund Mechanisms Donors implementers projects
01	Bilateral Donors
0101	Government of Australia
010101	OXFAM GB
01010101	Improving food security and livelihood opportunities in Lakes and Western Bahr El Ghazal States
010102	(not identified)
01010201	Sudan Humanitarian and Recovery Funding 2009-10
0102	Government of Canada
010201	Norwegian Refugee Council
01020101	Legal Assistance to Returnees to Southern Sudan
010202	United Nations HABITAT
01020201	Capacity Building for Land Conflict Management in South Sudan
010203	(not identified)
01020301	Basic Service Provision and Recovery
01020302	Engaging Youth in Food Security and Livelihoods
01020303	Sustainable Livelihoods and Mine Action (SLAM)
01020304	Food Security - South Sudan
01020305	Building Community Resilience
010204	CHF International
01020401	Peace and Livelihoods in South Sudan
0103	Government of France
010301	(not identified)
01030101	Bilinyang Boma Resettlement (BBR) Project
01030102	Consolidating the Community-Based Seed Production and Supply
010302	Government of France
01030201	Ox-Plough and Grinding Mill Project in Akobo
010303	- Bangladesh Rural Advancement Committee - World Food Programme
01030301	Local Procurement of Food through the Purchase for Progress (P4P) Pilot in Southern Sudan, Western and Central Equatoria States
0104	Government of Germany
010401	GTZ - Deutsche Gesellschaft für Technische Zusammenarbeit
01040101	Food Security and Agricultural Development
0105	Government of Ireland
010501	(not identified)
01050101	Concern Worldwide: Aweil Food Security, Health & Nutrition
0106	Government of Japan
010601	Ministry of Cooperatives & Rural Development
01060101	Improvement in and around Juba for Sustainable Peace and Development (LIPs)
0107	Government of Netherlands
010701	Ministry agriculture & Forestry
01070101	Poultry & Decentralised Animal Health Services
010702	Government of the Netherlands [Ministry of Development Cooperation]
01070201	Support to Integrated Crop Development & Training Centre
0108	Government of Norway
010801	Government of Norway [Norwegian Agency for Development Cooperation]
01080101	The Southern Sudan Forest Sector Programme
0109	Government of Spain
010901	(not identified)
01090101	Support the sustainable increase of food production of returnees and residents in Budi County
0110	Government of Switzerland
011001	ACF
01100101	SDC Contributions to Various NGO Projects
011002	(not identified)
01100201	Supporting Livelihoods of Vulnerable Communities in NBeG
0111	Government of USA
011101	(not identified)
01110101	Food, Agribusiness and Rural Markets
011102	Winrock BRIDGE

(Continued)

CD	Scheme/Fund Mechanisms
	Donors
	implementers
	projects
01110201	Building Responsibility in the Delivery of Government Services (BRIDGE) - Agriculture
011103	Ministry of Wildlife Conservation & Tourism
01110301	Conservation of Biodiversity Across the Boma-Jongeli Landscape in Southern Sudan
011104	Ministry of Wildlife Conservation & Tourism
01110401	Sudan Property Rights Program
011105	(not identified)
01110501	Expanded Agri Inputs and Agribusiness
011106	(not identified)
01110601	Innovation Grant
011107	(not identified)
01110701	Food Security/Famine Early Warning System
011108	(not identified)
01110801	Texas A&M
0112	Office of United States Foreign disaster Assistance
011201	(not identified)
01120101	OFDA 2010 Support for Agriculture and Food Security Sector
011202	(not identified)
01120201	Livelihood Support for Returnees & Vulnerable Local Host Population
011203	Adventist Development & Relive Agency (ADRA) Sudan Southern sector
01120301	Returnee Reintegration & Livelihood Enhancement
011204	- VSF - B - VSF - G
01120401	Emergency Veterinary Support Program
02	Multilateral Organisations
0201	European Union
020101	European Union
02010101	Food Security Thematic Program (FSTP) [all components combined]
020102	(not identified)
02010201	Sudan Institutional Capacity Programme: Food Security Information for Action (SIFSIA)
020103	- GTZ - Deutsche Gesellschaft für Technische Zusammenarbeit - Ministry of Agriculture & Forestry
	- Ministry of Animal Resources & Fisheries
02010301	Sudan Productive Program (SPCRP): Nyal-Shambe-Terekeka Fisheries Production and Marketing Project (Model Project)
020104	GTZ - Deutsche Gesellschaft für Technische Zusammenarbeit
02010401	Sudan Productive Capacity Reconstruction Program (SPCRP): Aweil Technical Rehabilitation Project
020105	GTZ - Deutsche Gesellschaft für Technische Zusammenarbeit
02010501	Sudan Productive Capacity Reconstruction Program (SPCRP): Bahr-el-Ghazal Livestock Production and marketing Project
020106	Food and Agriculture Organization
02010601	Sudan Productive Capacity Reconstruction Program (SPCRP): Capacity Building Component
020107	- Ministry of Animal Resources & Fisheries - VSF - B
02010701	Livestock Epidemic- Surveillance Project (LESP) South Sudan
0202	United Nations High Commissioner for Refugees
020201	- Norwegian Refugee Council - United Nations High Commissioner for Refugees
02020101	Land and Property Study
0203	World Bank
020301	World Vision
02030101	Emergency Food Crisis Response Project
03	Pooled funding Mechanisms
0301	Multi Donor Trust Fund
030101	- Ministry of Animal Resources & Fisheries - United Nations Office for Project Services
03010101	Livestock and Fisheries Development Project
03010102	Support to Agriculture and Forestry Development Project
0302	Common Humanitarian Fund
030201	(not identified)
03020101	CHF Total Allocations For 2010
03020102	CHF Total Allocations For 2011



THE REPUBLIC OF SOUTH SUDAN

MINISTRY OF ELECTRICITY, DAMS, IRRIGATION & WATER RESOURCES



WATER SECTOR

IRRIGATION DEVELOPMENT MASTER PLAN

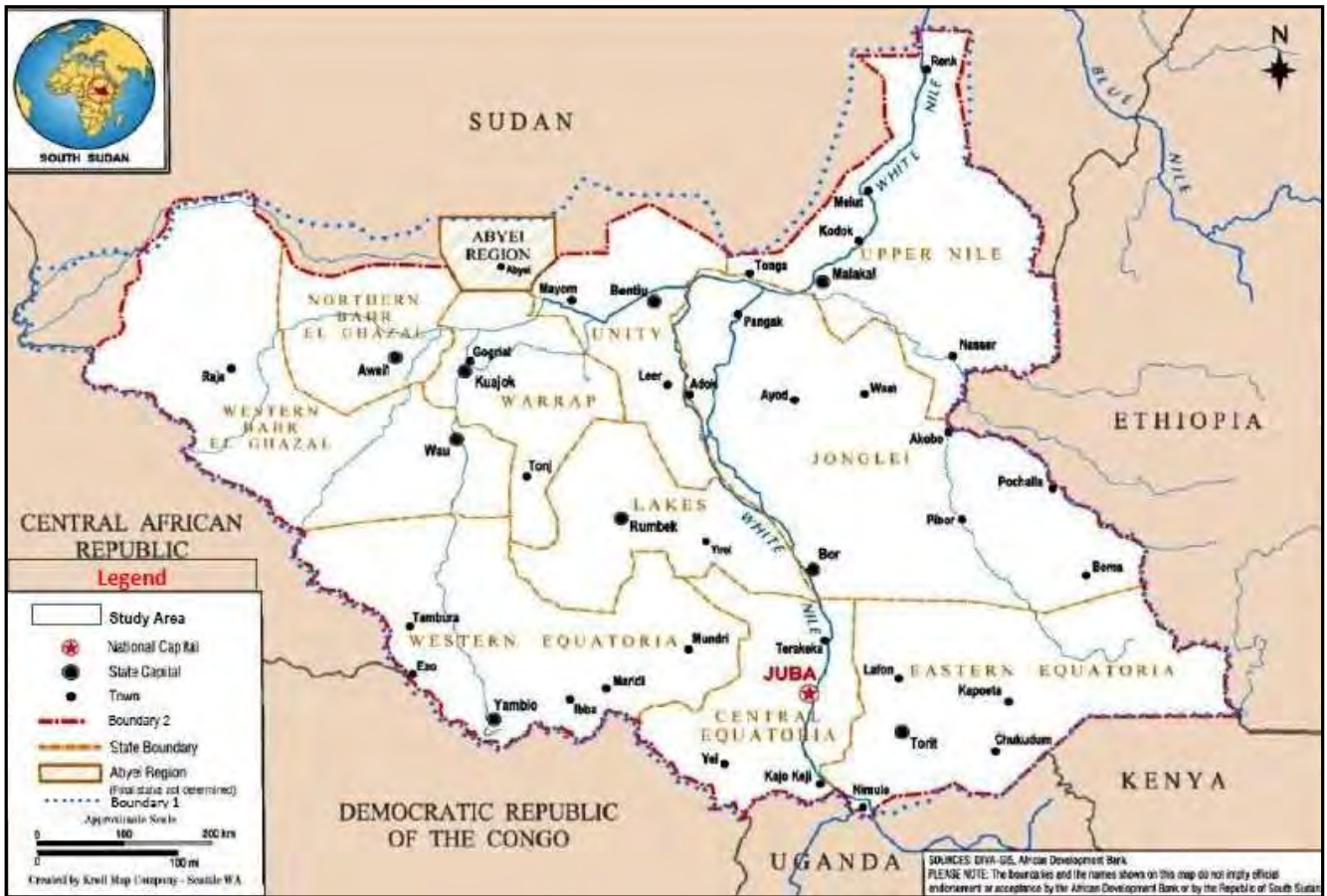
(FINAL REPORT)

ANNEX 7: COST ESTIMATE FOR THE MASTER PLAN (MP)

NOVEMBER 2015

THE PROJECT FOR IRRIGATION DEVELOPMENT MASTER PLAN IN THE REPUBLIC OF SOUTH SUDAN (RSS) LOCATION MAP

Map of the Republic of South Sudan



Location Map: Adopted from African Development Bank

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1. SUMMARY OF INVESTMENT PROGRAMMES' OUTPUTS AND COSTS

Table 1.1 Output of the MP Core Programmes

ID	Programme	Output	Short-term						Mid-term						
			2015/16	16/17	17/18	18/19	19/20	20/21	21/22	22/23	23/24	24/25	25/26	26/27	27/28
2	National Irrigation Scheme Development Programme (NISDP)	The Area of Irrigation Scheme Development (ha)													
3	State Irrigation Scheme Development Programme (SISDP)				1,000	2,000	2,500	2,957	5,000	5,000	5,000	5,000	5,000	5,000	5,402
4	County Irrigation Scheme Development Programme (CISDP)														
5	Community Irrigation Farms Development Programme (CIFDP) No. of Site	The Number of Site of Community Irrigation Farms Development		15	60	87	88	88	68	68	68	68	68	68	68
8	Irrigated Agriculture Extension Programme (IAEP)	The Number of Site of Irrigation Schemes/Farms		15	64	93	96	98	84	84	84	84	84	84	86

ID	Programme	Output	Long-term											Total		
			28/29	29/30	30/31	31/32	32/33	33/34	34/35	35/36	36/37	37/38	38/39		39/40	
2	National Irrigation Scheme Development Programme (NISDP)	The Area of Irrigation Scheme Development (ha)														
3	State Irrigation Scheme Development Programme (SISDP)		13,600	13,600	13,600	13,600	13,600	13,600	13,600	13,600	13,600	13,600	13,600	13,600	14,105	207,564
4	County Irrigation Scheme Development Programme (CISDP)															
5	Community Irrigation Farms Development Programme (CIFDP) No. of Site	The Number of Site of Community Irrigation Farms Development	105	105	105	105	105	105	105	105	105	105	105	106	106	2,076
8	Irrigated Agriculture Extension Programme (IAEP)	The Number of Site of Irrigation Schemes/Farms	148	148	148	148	148	148	149	149	149	149	149	150	150	2,740

Table 1.2 Summary of the MP Investment Cost Estimate

ID	Programme	Project (Cost base)	Short-term	Medium-term	Long-term	Total (Programme)
1	Irrigation Development Guidelines Formulation Programme (IDGFP)	Irrigation Development Guidelines Formulation (Table 2.1)	1,418	7	62	1,487
2	National Irrigation Scheme Development Programme (NISDP)	Irrigation Scheme Development (USD24,000/ha referring to the Priority Project Plans of IDMP)	202,962	849,660	3,928,910	4,981,532
3	State Irrigation Scheme Development Programme (SISDP)					
4	County Irrigation Scheme Development Programme (CISDP)					
5	Community Irrigation Farms Development Programme (CIFDP)	Community Irrigation Farms Development (Table 2.2)	2,714	585	1,487	4,786
6	Private Sector Irrigation Investment Promotion Programme (PSIIPP)	Private Sector Irrigation Investment Promotion (Table 2.3)	722	7	62	791
7	Human Resource and Institutional Development for Irrigation Programme (HRIDP)	Irrigation & Drainage Training Centre Project (Table 2.4, 2.5)	6,186	2,453	3,014	11,653
		Monitoring and Evaluation System Establishment Project (Table 2.6)	1,079	364	412	1,855
8	Irrigated Agriculture Extension Programme (IAEP)	Irrigated Agriculture Extension (Table 2.7)	2,051	137	299	2,487
9	Information Network System Establishment Programme (INSEP)	(A) Bahr el-Jebel Basin Hydromet Information System	872	517	312	1,701
		(B) Bahr el-Ghazal Basin Hydromet Information System	824	573	1,282	2,679
		(C) River Sobat Basin Hydromet Information System	471	324	524	1,319
		(D) White Nile Basin Hydromet Information System	483	415	549	1,447
		(E) Groundwater Monitoring System	815	551	1,115	2,481
		(F) Regional Nile Basin Hydromet Services and a National Water Resources Monitoring	1,455	700	1,235	3,390
		(G) Nile Basin Decision Support System (NBDSS)	160	280	520	960
		(H) Nationwide Topographic Maps Development	54,550	0	0	54,550
		(I) Nationwide High Resolution Maps Development	3,238	0	0	3,238
		Term-total for INSEP (Table 2.8, 2.9)	62,868	3,360	5,537	71,765
Total (Term)			280,000	856,573	3,939,783	
Total (MP)						5,076,356

Table 1.3 Investment Cost Estimate of the MP Programmes in Short and Medium Terms

(Unit: 000 USD)

ID	Programme	Project (Cost base)	Short-term						Medium-term						Total (Programme)	
			2015/16	16/17	17/18	18/19	19/20	20/21	21/22	22/23	23/24	24/25	25/26	26/27		27/28
1	Irrigation Development Guidelines Formulation Programme (IDGFP)	Irrigation Development Guidelines Formulation (Table 2.1)		593	382	382	60	1	1	1	1	1	1	1	1	1,425
2	National Irrigation Scheme Development Programme (NISDP)	Irrigation Scheme Development (USD24,000/ha referring to the Priority Project Plans of IDMP)														1,052,622
3	State Irrigation Scheme Development Programme (SISDP)				24,000	48,000	60,000	70,962	120,000	120,000	120,000	120,000	120,000	120,000	129,660	
4	County Irrigation Scheme Development Programme (CISDP)															
5	Community Irrigation Farms Development Programme (CFDP)	Community Irrigation Farms Development (Table 2.2)		1,077	617	799	122	99	77	77	100	77	77	77	100	3,299
6	Private Sector Irrigation Investment Promotion Programme (PSIIPP)	Private Sector Irrigation Investment Promotion (Table 2.3)		352	155	155	59	1	1	1	1	1	1	1	1	729
7	Human Resource and Institutional Development for Irrigation Programme (HRIDIP)	Irrigation & Drainage Training Centre Project (Table 2.4, 2.5)		1,650	3,135	647	487	267	87	87	87	87	87	87	1,931	8,639
		Monitoring and Evaluation System Establishment Project (Table 2.6)					832	247	292	12	12	12	12	12	12	1,443
8	Irrigated Agriculture Extension Programme (IAEP)	Irrigated Agriculture Extension (Table 2.7)		944	439	619	36	13	13	13	36	13	13	13	36	2,188
9	Information Network System Establishment Programme (INSEP)	(A) Bahr el-Jebel Basin Hydromet Information System		174	174	174	175	175	74	74	74	74	74	74	73	1,389
		(B) Bahr el-Ghazal Basin Hydromet Information System		165	165	165	165	164	82	82	82	82	82	82	81	1,397
		(C) River Sobat Basin Hydromet Information System		94	94	94	94	95	46	46	46	46	46	47	47	795
		(D) White Nile Basin Hydromet Information System		97	97	97	96	96	59	59	59	59	59	60	60	898
		(E) Groundwater Monitoring System		163	163	163	163	163	79	79	79	79	79	78	78	1,366
		(F) Regional Nile Basin Hydromet Services and a National Water Resources Monitoring		291	291	291	291	291	100	100	100	100	100	100	100	2,155
		(G) Nile Basin Decision Support System (NBDSS)		32	32	32	32	32	40	40	40	40	40	40	40	440
		(H) Nationwide Topographic Maps Development		10,910	10,910	10,910	10,910	10,910	0	0	0	0	0	0	0	54,550
		(I) Nationwide High Resolution Maps Development		648	648	648	647	647	0	0	0	0	0	0	0	3,238
			Term-total for INSEP (Table 2.8, 2.9)						62,868							3,360
Total (Annual)			0	17,190	41,302	63,176	74,169	84,163	120,951	120,671	120,717	120,671	120,671	120,672	132,220	1,136,573
Total (Term)								280,000						856,573		
Sub-Total																

Note: Fiscal Year: July to June (2015/16 = from July 2015 to June 2016)

Table 1.4 Investment Cost Estimate of the MP Programmes in the Long Term

(Unit: 000 USD)

ID	Programme	Project (Cost base)	Long-term												Total	
			28/29	29/30	30/31	31/32	32/33	33/34	34/35	35/36	36/37	37/38	38/39	39/40		
1	Irrigation Development Guidelines Formulation Programme (IDGFP)	Irrigation Development Guidelines Formulation (Table 2.1)	1	26	1	1	1	1	1	1	1	1	1	26	1,487	
2	National Irrigation Scheme Development Programme (NISDP)	Irrigation Scheme Development (USD24,000/ha referring to the Priority Project Plans of IDMP)	326,400	326,400	326,400	326,400	326,400	326,400	326,400	326,400	326,400	326,400	326,400	338,510	4,981,532	
3	State Irrigation Scheme Development Programme (SISDP)															
4	County Irrigation Scheme Development Programme (CISDP)															
5	Community Irrigation Farms Development Programme (CIFDP)	Community Irrigation Farms Development (Table 2.2)	118	118	118	141	118	118	118	141	118	118	119	142	4,786	
6	Private Sector Irrigation Investment Promotion Programme (PSIIPP)	Private Sector Irrigation Investment Promotion (Table 2.3)	1	1	26	1	1	1	1	1	1	1	1	26	791	
7	Human Resource and Institutional Development for Irrigation Programme (HRIDIP)	Irrigation & Drainage Training Centre Project (Table 2.4, 2.5)	87	87	87	87	87	87	87	87	87	87	2,057	87	87	11,653
		Monitoring and Evaluation System Establishment Project (Table 2.6)	12	125	12	12	12	12	12	12	12	12	12	12	167	1,855
8	Irrigated Agriculture Extension Programme (IAEP)	Irrigated Agriculture Extension (Table 2.7)	19	19	19	42	19	19	19	42	19	19	20	43	2,487	
9	Information Network System Establishment Programme (INSEP)	(A) Bahr el-Jebel Basin Hydromet Information System	26	26	26	26	26	26	26	26	26	26	26	26	1,701	
		(B) Bahr el-Ghazal Basin Hydromet Information System	107	107	107	107	107	107	107	107	107	107	106	106	2,679	
		(C) River Sobat Basin Hydromet Information System	44	44	44	44	44	44	44	44	43	43	43	43	1,319	
		(D) White Nile Basin Hydromet Information System	46	46	46	46	46	46	46	46	46	45	45	45	1,447	
		(E) Groundwater Monitoring System	93	93	93	93	93	93	93	93	93	93	93	92	2,481	
		(F) Regional Nile Basin Hydromet Services and a National Water Resources Monitoring	103	103	103	103	103	103	103	103	103	103	103	102	3,390	
		(G) Nile Basin Decision Support System (NBDSS)	43	43	43	43	43	43	43	43	44	44	44	44	960	
		(H) Nationwide Topographic Maps Development	0	0	0	0	0	0	0	0	0	0	0	0	0	54,550
		(I) Nationwide High Resolution Maps Development	0	0	0	0	0	0	0	0	0	0	0	0	0	3,238
		Term-total for INSEP (Table 2.8, 2.9)		5,537												71,765
Total (Annual)			327,100	327,238	327,125	327,146	327,100	327,100	327,100	327,146	327,100	329,069	327,100	339,459	/	
Total (Term)			3,939,783													
Grand Total																5,076,356

Note: Fiscal Year: July to June (2015/16 = from July 2015 to June 2016)

2. DETAILED OVERALL PROGRAMMES' COSTS

Table 2.1 Inclusive Detailed Cost Estimate: IDGFP

Item	2016/17				2017/18				2018/19						
	Quantity	Unit	Unit Price (US\$)	Total Price (US\$)	Quantity	Unit	Unit Price (US\$)	Total Price (US\$)	Quantity	Unit	Unit Price (US\$)	Total Price (US\$)			
Specialist/consultants	Project Manager / Irrigation Institution														
	6	M/M	25,000	150,000	6	MM	25,000	150,000	6	MM	25,000	150,000			
	Facility Design Specialist														
Consultation Workshop	O&M														
	6	M/M	20,000	120,000	4	MM	20,000	80,000	4	MM	20,000	80,000			
	50USD x 100 persons x 2 days/time														
Dissemination Workshop	per diem 150USD x 50 person x 3 days/time														
	1 nos 22,500				1 nos 10,000 10,000				1 nos 10,000 10,000						
	stationery, paper														
Equipment	50USD x 100 persons x 2 days/time														
	per diem 150USD x 50 person x 3 days/time														
	stationery, paper														
Guidelines printing	PCs and other ICT Equipment														
	1	set	200,000	200,000											
	Printing														
Study visit	Per diem of participants (250USD per day) (foreign country) 11 x 5 days														
	55 MD 250 13,750				55 MD 250 13,750				55 MD 250 13,750						
	Transportation (2000USD) 11 persons (including consultants)														
Operation Cost	Meccellouneous														
	1 set 1,000 1,000				1 set 1,000 1,000				1 set 1,000 1,000						
	Fuel for survey														
Total Cost	Fuel for operation & monitorin														
	1 set 1,000 1,000				1 set 1,000 1,000				1 set 1,000 1,000						
	Other operation cost (Paper, stationery, etc)														
1 set 500 500				1 set 500 500				1 set 500 500							
				592,500				381,750				381,750			

Item	2019/20				2020/21				Remark			
	Quantity	Unit	Unit Price (US\$)	Total Price (US\$)	Quantity	Unit	Unit Price (US\$)	Total Price (US\$)				
Specialist/consultants	Project Manager / Irrigation Institution											
	Facility Design Specialist											
	O&M											
Consultation Workshop	50USD x 100 persons x 2 days/time											
	per diem 150USD x 50 person x 3 days/time											
	stationery, paper											
Dissemination Workshop	50USD x 100 persons x 2 days/time											
	1 nos 10,000 10,000				1 nos 22,500 22,500							
	per diem 150USD x 50 person x 3 days/time											
Equipment	stationery, paper											
	1 LS 1,000 1,000											
	PCs and other ICT Equipment											
Guidelines printing	Printing											
	500 nos 50 25,000								Re-printing every 10 years			
	Per diem of participants (250USD per day) (foreign country) 11 x 5 days											
Study visit	Transportation (2000USD) 11 persons (including consultants)											
	Meccellouneous											
	Fuel for survey											
Operation Cost	Fuel for operation & monitorin											
	1 set 1,000 1,000				1 set 1,000 1,000							
	Other operation cost (Paper, stationery, etc)											
1 set 100 100				1 set 100 100								
				59,600				1,100 Annual recurrent expenses				

Table 2.2 Inclusive Detailed Cost Estimate: CIFDP

Item	2016/17				2017/18				2018/19			
	Quantity	Unit	Unit Price (US\$)	Total Price (US\$)	Quantity	Unit	Unit Price (US\$)	Total Price (US\$)	Quantity	Unit	Unit Price (US\$)	Total Price (US\$)
Specialist/consultants	Project Manager / Irrigation Engineer											
	Facility Design Specialist											
	Agronomist / Agriculture Extension Specialist											
Construction of small scale irrigation facilities	Local materials (50%)+ cement(50%) (10m3 x 150USD) + machine lease											
	Community labor contribution (20 MM x 125USD)											
Equipment	Simple tools for construction											
	PCs and other ICT Equipment											
	Other Office Equipment											
	Motor bike for extension											
	Vehicles 1*4WD, 2*Pickup											
Guidelines printing	Printing											
Training	Matrenials											
	Per diem of participants (150USD*5days per per person)) (Juba)											
	Trainer (government staff) to train extension in State (200USD*10days)											
	Per diem of participants (60USD*5days per per person)) (State)											
Operation Cost	Fuel for survey											
	Fuel for operation & monitoring											
	Other operation cost (Paper, stationery, etc)											
Total Cost												
Without Commnity Contribution												

Item	2019/20				2020/21				Remark
	Quantity	Unit	Unit Price (US\$)	Total Price (US\$)	Quantity	Unit	Unit Price (US\$)	Total Price (US\$)	
Specialist/consultants	Project Manager / Irrigation Engineer								
	Facility Design Specialist								
	Agronomist / Agriculture Extension Specialist								
Construction of small scale irrigation facilities	Local materials (50%)+ cement(50%) (10m3 x 150USD) + machine lease								
	Community labor contribution (20 MM x 125USD)								
Equipment	Simple tools for construction								
	PCs and other ICT Equipment								
	Other Office Equipment								
	Motor bike for extension								
	Vehicles 1*4WD, 2*Pickup								
Guidelines printing	Printing								
Training	Matrenials								
	Per diem of participants (150USD*5days per per person)) (Juba)								
	Trainer (government staff) to train extension in State (200USD*10days)								
Operation Cost	Per diem of participants (60USD*5days per per person)) (State)								
	Fuel for survey								
	Fuel for operation & monitoring								
Other operation cost (Paper, stationery, etc)									
Total Cost									
Without Commnity Contribution									

Table 2.3 Inclusive Detailed Cost Estimate: PSIIPP

Item	2016/17				2017/18				2018/19					
	Quantity	Unit	Unit Price (US\$)	Total Price (US\$)	Quantity	Unit	Unit Price (US\$)	Total Price (US\$)	Quantity	Unit	Unit Price (US\$)	Total Price (US\$)		
Specialist/consultants	6	M/M	25,000	150,000	4	MM	25,000	100,000	4	MM	25,000	100,000		
Consultation Workshop	:50USD x 100 persons x 2 days/time													
	:per diem 150USD x 50 person x 3 days/time													
	:stationery, paper													
Dissemination Workshop	:50USD x 100 persons x 2 days/time													
	:per diem 150USD x 50 person x 3 days/time													
	:stationery, paper													
Equipment	1	set	200,000	200,000										
Guidelines printing														
Study visit	:Per diem of participants (250USD per day)) (foreign country) 6 x 5 days													
	:Transportation (2000USD) 6 persons (including consultants)													
	:Miscellaneous													
Operation Cost	:Fuel for survey													
	:Fuel for operation & monitorin													
	:Other operation cost (Paper, stationery, etc)													
Total Cost				352,000	Total Cost				155,000	Total Cost				155,000

Item	2019/20				2020/21				Remark
	Quantity	Unit	Unit Price (US\$)	Total Price (US\$)	Quantity	Unit	Unit Price (US\$)	Total Price (US\$)	
Specialist/consultants									
Consultation Workshop	:50USD x 100 persons x 2 days/time								
	:per diem 150USD x 50 person x 3 days/time								
	:stationery, paper								
Dissemination Workshop	:50USD x 100 persons x 2 days/time								
	:per diem 150USD x 50 person x 3 days/time								
	:stationery, paper								
Equipment									
Guidelines printing	500	nos	50	25,000					every 10 year re-printing
Study visit	:Per diem of participants (250USD per day)) (foreign country) 6 x 5 days								
	:Transportation (2000USD) 6 persons (including consultants)								
	:Miscellaneous								
Operation Cost	:Fuel for survey								
	:Fuel for operation & monitorin								
	:Other operation cost (Paper, stationery, etc)								
Total Cost				59,100	Total Cost				600

Table 2.4 Inclusive Detailed Cost Estimate: HRIDIP (Irrigation & Drainage Training Centre Project-1)

Items		2016/17			2017/18			2018/19						
		Quantity	Unit	Unit Price (US\$)	Total Price (US\$)	Quantity	Unit	Unit Price (US\$)	Total Price (US\$)	Quantity	Unit	Unit Price (US\$)	Total Price (US\$)	
1. ITC Construction	Specialist/consultants	Project Manager	2	M/M	25,000	50,000	1	M/M	25,000	25,000				
		Irrigation Engineer	3	M/M	20,000	60,000	2	M/M	20,000	40,000				
		Facility Design Specialist	3	M/M	20,000	60,000	1	M/M	20,000	20,000				
		Architecture	3	M/M	20,000	60,000	1	M/M	20,000	20,000				
		Procurement Specialist	1	M/M	20,000	20,000	2	M/M	20,000	40,000				
	Construction of ITC Buildings	Construction Supervision	5	M/M	20,000	100,000	5	M/M	20,000	100,000				
		ITC Main Building (Office, Lecture halls, Research Centre, Library and Store)	1,000	m2	400	400,000	1000	m2	300	300,000				
		Accommodation Facility and Canteen	200	m2	500	100,000	200	m2	500	100,000				
	Construction of Farms	Garage and Workshop for the Machineries					100	set	200	20,000				
		Training Farm	10	ha	10,000	100,000	10	ha	5,000	50,000				
		Demonstration Farm	15	ha	10,000	150,000	15	ha	5,000	75,000				
	Equipment	Research Farm	5	ha	10,000	50,000	5	ha	5,000	25,000				
		Irrigation Facility for Farms	1	set	500,000	500,000	1	set	500,000	500,000				
		Agricultural Machines (including attachment)					1	set	100,000	100,000				
		Irrigation Equipment (Sprinklers, Drips and others)					1	set	50,000	50,000				
PCs and other ICT Equipment						1	set	200,000	200,000					
Research Equipment						1	set	1,100,000	1,100,000					
	Other Office Equipment					1	set	100,000	100,000					
	Vehicles 1*4WD, 2*Pickup					3	car	70,000	210,000					
	Sub-Total							3,075,000						
2. Operation/Training for Engineer	MEDIWR Staff	Director	12	M/M	-	-	12	M/M	-	-	12	M/M	-	-
		Sub-Director/Irrigation Engineer1	12	M/M	-	-	12	M/M	-	-	12	M/M	-	-
		Trainer1: Irrigation Engineer2		M/M			3	M/M	-	-	12	M/M	-	-
		Trainer2: Structure Engineer		M/M			3	M/M	-	-	12	M/M	-	-
		Trainer3: hydrologist		M/M			3	M/M	-	-	12	M/M	-	-
		Trainer4: geologist		M/M			3	M/M	-	-	12	M/M	-	-
3. Operation/Training for Extension Workers	MAFCRD Staff	Assistants	12	M/M	-	-	12	M/M	-	-	36	M/M	-	-
		Sub-Director/Master Trainer1 Agriculture	12	M/M	-	-	12	M/M	-	-	12	M/M	-	-
		Master Trainer2 Agriculture		M/M			3	M/M	-	-	12	M/M	-	-
		Master Trainer3 WUA		M/M			3	M/M	-	-	12	M/M	-	-
4. O&M Staff														
										24	M/M	-	-	
5. Supporting Specialist	Specialist/Consultants	Assistants												
		Irrigation Facility Specialist					1	M/M	20,000	20,000	6	M/M	20,000	120,000
		Civil Structural Specialist									4	M/M	20,000	80,000
		Hydrologist									4	M/M	20,000	80,000
		Agronomist					1	M/M	20,000	20,000	6	M/M	20,000	120,000
		Extension Specialist									4	M/M	20,000	80,000
6. Operation Cost	Operation Cost	Training Specialist					1	M/M	20,000	20,000	4	M/M	20,000	80,000
		Fuel									1	set	36,000	36,000
		Agricultural Inputs									1	set	5,000	5,000
		Maintenance Costs for ITC Building									1	set	1,000	1,000
		Maintenance Costs for Irrigation Facilities									1	set	1,000	1,000
		Maintenance Costs for Equipment									1	set	1,000	1,000
		ICT supplies									1	set	2,400	2,400
		Research Equipment Supplies									1	set	3,600	3,600
		Farm Equipments Supplies									1	set	2,400	2,400
		Internet									1	set	12,000	12,000
		Other operation cost (Paper, stationery, etc)									1	set	12,000	12,000
	Total (US\$)				1,650,000				3,135,000			647,200		

Table 2.5 Inclusive Detailed Cost Estimate: HRIDIP (Irrigation & Drainage Training Centre Project-2)

	Items	2019/20				2020/21				2021/22				Remark	
		Quantity	Unit	Unit Price (US\$)	Total Price (US\$)	Quantity	Unit	Unit Price (US\$)	Total Price (US\$)	Quantity	Unit	Unit Price (US\$)	Total Price (US\$)		
1.ITC Construction	Specialist/consultants	Project Manager													
		Irrigation Engineer													
		Facility Design Specialist													
		Architecture													
		Procurement Specialist													
		Construction Supervision													
	Construction of ITC Buildings	ITC Main Building (Office, Lecture halls, Research Centre, Library and Store)													20% renewal after 10 years, 50% renewal after 20 years
		Accommodation Facility and Canteen													
		Garage and Workshop for the Machineries													
	Construction of Farms	Training Farm													
		Demonstration Farm													
		Research Farm													
	Equipment	Irrigation Facility for Farms													
		Agricultural Machines (including attachment)													
Irrigation Equipment (Sprinklers, Drips and others)															
PCs and other ICT Equipment															
Research Equipment															
Other Office Equipment															
	Vehicles 1*4WD, 2*Pickup														
	Sub-Total														
2.Operation/Training for Engineer	MEDIWR Staff	Director	12	M/M	-	-	12	M/M	-	-	12	M/M	-	-	
		Sub-Director/Irrigation Engineer1	12	M/M	-	-	12	M/M	-	-	12	M/M	-	-	
		Trainer1: Irrigation Engineer2	12	M/M	-	-	12	M/M	-	-	12	M/M	-	-	
		Trainer2: Structure Engineer	12	M/M	-	-	12	M/M	-	-	12	M/M	-	-	
		Trainer3: hydrologist	12	M/M	-	-	12	M/M	-	-	12	M/M	-	-	
		Trainer4: geologist	12	M/M	-	-	12	M/M	-	-	12	M/M	-	-	
		Assistants	36	M/M	-	-	36	M/M	-	-	36	M/M	-	-	
3.Operation/Training for Extension Workers	MAFCRD Staff	Sub-Director/Master Trainer1 Agriculture	12	M/M	-	-	12	M/M	-	-	12	M/M	-	-	
		Master Trainer2 Agriculture	12	M/M	-	-	12	M/M	-	-	12	M/M	-	-	
		Master Trainer3 WUA	12	M/M	-	-	12	M/M	-	-	12	M/M	-	-	
		Assistants	24	M/M	-	-	24	M/M	-	-	24	M/M	-	-	
4.O&M Staff		36	M/M	300	10,800	36	M/M	300	10,800	36	M/M	300	10,800	Annual cost	
5.Supporting Specialist	Specialist/Consultants	Irrigation Facility Specialist	6	M/M	20,000	120,000	3	M/M	20,000	60,000					
		Civil Structural Specialist	2	M/M	20,000	40,000									
		Hydrologist	2	M/M	20,000	40,000									
		Agronomist	6	M/M	20,000	120,000	3	M/M	20,000	60,000					
		Extension Specialist	2	M/M	20,000	40,000									
		Training Specialist	2	M/M	20,000	40,000	3	M/M	20,000	60,000					
6.Operation Cost	Operation Cost	Fuel	1	set	36,000	36,000	1	set	36,000	36,000	1	set	36,000	36,000	
		Agricultural Inputs	1	set	5,000	5,000	1	set	5,000	5,000	1	set	5,000	5,000	
		Maintenance Costs for ITC Building	1	set	1,000	1,000	1	set	1,000	1,000	1	set	1,000	1,000	
		Maintenance Costs for Irrigation Facilities	1	set	1,000	1,000	1	set	1,000	1,000	1	set	1,000	1,000	
		Maintenance Costs for Equipment	1	set	1,000	1,000	1	set	1,000	1,000	1	set	1,000	1,000	
		ICT supplies	1	set	2,400	2,400	1	set	2,400	2,400	1	set	2,400	2,400	Annual cost
		Research Equipment Supplies	1	set	3,600	3,600	1	set	3,600	3,600	1	set	3,600	3,600	
		Farm Equipments Supplies	1	set	2,400	2,400	1	set	2,400	2,400	1	set	2,400	2,400	
		Internet	1	set	12,000	12,000	1	set	12,000	12,000	1	set	12,000	12,000	
		Other operation cost (Paper, stationery, etc)	1	set	12,000	12,000	1	set	12,000	12,000	1	set	12,000	12,000	
	Total (US\$)				487,200				267,200				87,200		

Table 2.6 Inclusive Detailed Cost Estimate: HRDIP (M&E System Establishment Project)

Items	2016/17				2017/18				2018/19			
	Quantity	Unit	Unit Price (US\$)	Total Price (US\$)	Quantity	Unit	Unit Price (US\$)	Total Price (US\$)	Quantity	Unit	Unit Price (US\$)	Total Price (US\$)
1. Specialist	HRD Specialist1											
	HRD Specialist2											
	Architecture											
	ICT Specialist											
	Irrigation Engineer											
	River Engineer											
	Water Supply Engineer											
Project Monitoring Specialist												
2. facilities Constriction												
3. Equipment Procurement												
4. Other Operation Cost												
Total Cost (US\$)												

Items	2019/20				2020/21				2021/22					
	Remark Quantity	Unit	Unit Price (US\$)	Total Price (US\$)	Quantity	Unit	Unit Price (US\$)	Total Price (US\$)	Quantity	Unit	Unit Price (US\$)	Total Price (US\$)		
1. Specialist	HRD Specialist1	7	MM	25,000	175,000	3	MM	25,000	75,000	4	MM	25,000	100,000	
	HRD Specialist2	8	MM	20,000	160,000	4	MM	20,000	80,000	5	MM	20,000	100,000	
	Architecture	4	MM	20,000	80,000	-	MM	20,000	-	-	MM	20,000	-	
	ICT Specialist	3	MM	20,000	60,000	-	MM	20,000	-	-	MM	20,000	-	
	Irrigation Engineer	1.5	MM	20,000	30,000	1	MM	20,000	20,000	1	MM	20,000	20,000	
	River Engineer	1.5	MM	20,000	30,000	1	MM	20,000	20,000	1	MM	20,000	20,000	
	Water Supply Engineer	1.5	MM	20,000	30,000	1	MM	20,000	20,000	1	MM	20,000	20,000	
Project Monitoring Specialist	1.5	MM	20,000	30,000	1	MM	20,000	20,000	1	MM	20,000	20,000		
2. facilities Constriction														20% renewal after 10 years, 50% renewal after 20 years
3. Equipment Procurement														replade every 10 years
4. Other Operation Cost														Annual operation cost
Total Cost (US\$)					832,000				247,000				292,000	

Table 2.7 Inclusive Detailed Cost Estimate: IAEP

Item	2016/17				2017/18				2018/19							
	Quantity	Unit	Unit Price (US\$)	Total Price (US\$)	Quantity	Unit	Unit Price (US\$)	Total Price (US\$)	Quantity	Unit	Unit Price (US\$)	Total Price (US\$)				
Specialist/consultants	Project Manager / Water Management				6	M/M	25,000	150,000	6	M/M	25,000	150,000	6	M/M	25,000	150,000
	Agronomist / Agriculture Extension Specialist				6	M/M	20,000	120,000	6	M/M	20,000	120,000	6	M/M	20,000	120,000
Equipment	Simple tools for farm management				15	set	100	1,500	60	set	100	6,000	87	set	100	8,700
	PCs and other ICT Equipment				1	set	200,000	200,000								
	Other Office Equipment				1	set	100,000	100,000								
	Motor bike for extension				50	nos	2,600	130,000	50	nos	2,600	130,000	100	nos	2,600	260,000
	Vehicles 1*4WD, 2*Pickup				3	car	70,000	210,000								
Guidelines printing	Printing												1000	nos	50	50,000
Training	Materials				1	nos	2,000	2,000	1	nos	2,000	2,000				
	Per diem of participants (150USD*5days per per person)) (Juba)				30	nos	750	22,500	30	nos	750	22,500				
	Trainer (government staff) to train extension in State (200USD*10days)												5	nos	2,000	10,000
	Per diem of participants (50USD*5days per per person)) (State)												50	nos	250	12,500
Operation Cost	Fuel for survey				1	set	3,000	3,000	1	set	3,000	3,000	1	set	3,000	3,000
	Fuel for operation & monitoring				1	set	2,000	2,000	1	set	2,000	2,000	1	set	2,000	2,000
	Fuel for field operation				1	set	2,000	2,000	1	set	2,000	2,000	1	set	2,000	2,000
	Other operation cost (Paper, stationery, etc)				1	set	1,000	1,000	1	set	1,000	1,000	1	set	1,000	1,000
Total Cost							944,000				438,500					619,200

Item	2019/20				2020/21				Remark				
	Quantity	Unit	Unit Price (US\$)	Total Price (US\$)	Quantity	Unit	Unit Price (US\$)	Total Price (US\$)					
Specialist/consultants	Project Manager / Water Management												
	Agronomist / Agriculture Extension Specialist												
Equipment	Simple tools for farm management				88	set	100	8,800	88	set	100	8,800	Unit per site: 100USD/site
	PCs and other ICT Equipment												
	Other Office Equipment												
	Motor bike for extension												
	Vehicles 1*4WD, 2*Pickup												
Guidelines printing	Printing												
Training	Materials												
	Per diem of participants (150USD*5days per per person)) (Juba)												
	Trainer (government staff) to train extension in State (200USD*10days)				5	nos	2,000	10,000					every 3 year training
Operation Cost	Per diem of participants (50USD*5days per per person)) (State)				50	nos	250	12,500					every 3 year training
	Fuel for survey												
	Fuel for operation & monitoring				1	set	2,000	2,000	1	set	2,000	2,000	Annual recurrent cost
	Fuel for field operation				1	set	2,000	2,000	1	set	2,000	2,000	Annual recurrent cost
Operation Cost	Other operation cost (Paper, stationery, etc)				1	set	500	500	1	set	500	500	Annual recurrent cost
	Total Cost							35,800				13,300	

Table 2.8 Inclusive Detailed Cost Estimate: INSEP -1

	Items	Short-Term				Medium-Term				Long-Term				
		Quantity	Unit	Unit Price (US\$)	Total Price (US\$)	Quantity	Unit	Unit Price (US\$)	Total Price (US\$)	Quantity	Unit	Unit Price (US\$)	Total Price (US\$)	
(A) Bahr el-Jebel Basin Hydromet Information System (HIS)	Specialist/Consultants	Architecture	1	MM	20,000	20,000			0					
		Procurement Specialist	2	MM	20,000	40,000	1	MM	20,000	20,000	1	MM	20,000	20,000
		Construction Supervision	3	MM	20,000	60,000	2	MM	20,000	40,000	1	MM	20,000	20,000
	Construction of Stations	River depth measurement station	5	set	7,000	35,000	3	set	7,000	21,000	2	set	7,000	14,000
		Weather station (Total Weather Station)	5	set	3,000	15,000	1	set	3,000	3,000				
		Discharge measurement (ADCP)	5	set	80,000	400,000	4	set	80,000	320,000	1	set	80,000	80,000
	Equipment	Pressure type water level measurement	5	set	3,500	17,500	4	set	3,500	14,000	2	set	3,500	7,000
		Sedimentation catchment												
		Water quality kit												
		Weather station (Total Weather Station)	5	set	15,000	75,000	1	set	15,000	15,000				
		Weather station (Rain gauge)	2	set	4,000	8,000	2	set	4,000	8,000	1	set	4,000	4,000
		Weather station (Manual Rain Gauge)					1	set	1,000	1,000	2	set	2,000	
		Vehicles 1*4WD, 1*Pickup	2	car	70,000	140,000								
	Operation	Boat rental for River discharge measurement (1time/station/month)	360	time	120	43,200	432	time	120	51,840	936	time	120	112,320
		Fuel for vehicle for River discharge measurement (1time/station/month)	360	time	50	18,000	432	time	50	21,600	936	time	50	46,800
		Operator for Weather station (Manual Rain Gauge)					365	days	5	1,825	1095	days	5	5,475
		Sub-Total				871,700				517,265				311,595
(B) Bahr el-Ghazal Basin Hydromet Information System (HIS)	Specialist/Consultants	Architecture	1	MM	20,000	20,000			0					
		Procurement Specialist	2	MM	20,000	40,000	1	MM	20,000	20,000	1	MM	20,000	20,000
		Construction Supervision	2	MM	20,000	40,000	2	MM	20,000	40,000	4	MM	20,000	80,000
	Construction of Stations	River depth measurement station	4	set	7,000	28,000	4	set	7,000	28,000	8	set	7,000	56,000
		Weather station (Total Weather Station)	9	set	3,000	27,000	1	set	3,000	3,000				
		Discharge measurement (ADCP)	4	set	80,000	320,000	4	set	80,000	320,000	8	set	80,000	640,000
	Equipment	Pressure type water level measurement	4	set	3,500	14,000	4	set	3,500	14,000	8	set	3,500	28,000
		Sedimentation catchment												
		Water quality kit												
		Weather station (Total Weather Station)	9	set	15,000	135,000	1	set	15,000	15,000				
		Weather station (Rain gauge)	2	set	4,000	8,000	2	set	4,000	8,000	1	set	4,000	4,000
		Weather station (Manual Rain Gauge)	1	set	1,000	1,000	9	set	1,000	9,000	4	set	1,000	4,000
		Vehicles 1*4WD, 1*Pickup	2	car	70,000	140,000								
	Operation	Boat rental for River discharge measurement (1time/station/month)	288	time	120	34,560	576	time	120	69,120	2,496	time	120	299,520
		Fuel for vehicle for River discharge measurement (1time/station/month)	288	time	50	14,400	576	time	50	28,800	2,496	time	50	124,800
		Operator for Weather station (Manual Rain Gauge)	365	days	5	1,825	3650	days	5	18,250	5110	days	5	25,550
		Sub-Total				823,785				573,170				1,281,870
(C) Sobat Basin Hydromet Information System (HIS)	Specialist/Consultants	Architecture	1	MM	20,000	20,000			0					
		Procurement Specialist	2	MM	20,000	40,000	1	MM	20,000	20,000	1	MM	20,000	20,000
		Construction Supervision	1	MM	20,000	20,000	1	MM	20,000	20,000	2	MM	20,000	40,000
	Construction of Stations	River depth measurement station	2	set	7,000	14,000	2	set	7,000	14,000	3	set	7,000	21,000
		Weather station (Total Weather Station)	2	set	3,000	6,000	3	set	3,000	9,000				
		Discharge measurement (ADCP)	2	set	80,000	160,000	2	set	80,000	160,000	3	set	80,000	240,000
	Equipment	Pressure type water level measurement	2	set	3,500	7,000	2	set	3,500	7,000	3	set	3,500	10,500
		Sedimentation catchment	1	set	1,500	1,500					1	set	1,500	1,500
		Water quality kit												
		Weather station (Total Weather Station)	2	set	15,000	30,000	3	set	15,000	45,000				
		Weather station (Rain gauge)	2	set	4,000	8,000								
		Weather station (Manual Rain Gauge)					2	set	2,000					
		Vehicles 1*4WD, 1*Pickup	2	car	70,000	140,000								
	Operation	Boat rental for River discharge measurement (1time/station/month)	144	time	120	17,280	288	time	120	34,560	1,092	time	120	131,040
		Fuel for vehicle for River discharge measurement (1time/station/month)	144	time	50	7,200	288	time	50	14,400	1,092	time	50	54,600
		Operator for Weather station (Manual Rain Gauge)					730	days	5	3,650				
		Sub-Total				470,980				323,960				524,290

Table 2.9 Inclusive Detailed Cost Estimate: INSEP -2

Items	Short-Term				Medium-Term				Long-Term					
	Quantity	Unit	Unit Price (US\$)	Total Price (US\$)	Quantity	Unit	Unit Price (US\$)	Total Price (US\$)	Quantity	Unit	Unit Price (US\$)	Total Price (US\$)		
(D) White Nile Basin Hydromet Information System (HIS)	Architecture	1	MM					0						
	Specialist/Consultants	Procurement Specialist	2	MM	20,000	40,000	1	MM	20,000	20,000	1	MM	20,000	20,000
		Construction Supervision	1	MM	20,000	20,000	2	MM	20,000	40,000	2	MM	20,000	40,000
	Construction of Stations	River depth measurement station	2	set	7,000	14,000	3	set	7,000	21,000	3	set	7,000	21,000
		Weather station (Total Weather Station)	3	set	3,000	9,000	1	set	3,000	3,000				
	Equipment	Discharge measurement (ADCP)	2	set	80,000	160,000	3	set	80,000	240,000	3	set	80,000	240,000
		Pressure type water level measurement	2	set	3,500	7,000	3	set	3,500	10,500	3	set	3,500	10,500
		Sedimentation catchment												
		Water quality kit												
		Weather station (Total Weather Station)	3	set	15,000	45,000	1	set	15,000	15,000				
		Weather station (Rain gauge)	1	set	4,000	4,000	1	set	4,000	4,000				
		Weather station (Manual Rain Gauge)			2	set	1,000	2,000						
		Vehicles 1*4WD, 1*Pickup	2	car	70,000	140,000								
	Operation	Boat rental for River discharge measurement (1time/station/month)	144	time	120	17,280	360	time	120	43,200	1,248	time	120	149,760
Fuel for vehicle for River discharge measurement (1time/station/month)		144	time	50	7,200	360	time	50	18,000	1,248	time	50	62,400	
Operator for Weather station (Manual Rain Gauge)						730	days	5	3,650					
	Sub-Total							414,700				549,310		
(E) Ground Water Monitoring System	Specialist/Consultants	Hydro Geologist	14	MM	25,000	350,000	7	MM	25,000	175,000	15	MM	25,000	375,000
		Geologist	19	MM	20,000	380,000	14	MM	20,000	280,000	30	MM	20,000	600,000
	Construction of Stations	Ground Water Monitoring Station (100m depth)	5	m	12,000	60,000	5	set	12,000	60,000	5	set	12,000	60,000
	Equipment	Pressure type ground water level measurement	5	set	3,500	17,500	5	set	3,500	17,500	5	set	3,500	17,500
		Water quality kit												
	Operation	Fuel for vehicle for River discharge measurement (1time/station/month)	144	time	50	7,200	360	time	50	18,000	1,248	time	50	62,400
	Sub-Total				814,700			550,500				1,114,900		
(F) Regional Nile Basin Hydromet Services and a National Water Resources Monitoring System for South Sudan	Specialist/Consultants	Project Managr	11	MM	25,000	275,000	8	MM	25,000	200,000	13	MM	25,000	325,000
		Hydrology/Meteorology	16	MM	20,000	320,000	9	MM	20,000	180,000	19.5	MM	20,000	390,000
		System Engineer	28	MM	20,000	560,000	16	MM	20,000	320,000	26	MM	20,000	520,000
	Equipment	Data server	1	set	300,000	300,000								
	Sub-Total				1,455,000			700,000				1,235,000		
(G) Nile Basin Decision Support System (NBDSS)	Specialist/Consultants	Hydrology/Meteorology	4	MM	20,000	80,000	7	MM	20,000	140,000	13	MM	20,000	260,000
		System Engineer	4	MM	20,000	80,000	7	MM	20,000	140,000	13	MM	20,000	260,000
	Equipment	Data server (shared with project (F))				160,000								
	Sub-Total				160,000			280,000				520,000		
(H) Nationwide topographic maps development	Specialist/Consultants	Hydrology/Meteorology	6	MM	25,000	150,000								
	Map development	68 km2	800,000		54,400,000									
	Equipment	Data server (shared with project (F))												
	Sub-Total				54,550,000									
(I) Nationwide high resolution maps development	Specialist/Consultants	GIS expert	16	MM	20,000	320,000								
		System Engineer	28	MM	20,000	560,000								
	Map development	90 %	25,000		2,250,000									
	Equipment	Satellite Image Data	90	%	1,200	108,000								
		Data server (shared with project (F))												
	Sub-Total				3,238,000									
	Total (US\$)				62,867,645			3,359,595				5,536,965		

Table 2.10 Summary of the MP Overall Cost Estimate

ID	Programme	Project (Cost base)	Investment Cost	Other Costs								Total (Programme)	
				Consultants	Workshops	Equipment	Printing	Visits	O&M	Construction	Training		Map Development
1	Irrigation Development Guidelines Formulation Programme (DGFP)	Irrigation Development Guidelines Formulation (Table 2.1)		1,010	101	200	75	72	29				1,487
2	National Irrigation Scheme Development Programme (NISDP)	Irrigation Scheme Development (USD24,000/ha referring to the Priority Project Plans of IDMP)								4,981,532			4,981,532
3	State Irrigation Scheme Development Programme (SISDP)												
4	County Irrigation Scheme Development Programme (CISDP)												
5	Community Irrigation Farms Development Programme (CFDP)	Community Irrigation Farms Development (Table 2.2)		1,170		1,238	25		70	2,076	207		4,786
6	Private Sector Irrigation Investment Promotion Programme (PSIPP)	Private Sector Irrigation Investment Promotion (Table 2.3)		350	101	200	75	39	26				791
7	Human Resource and Institutional Development for Irrigation Programme (HRIDP)	Irrigation & Drainage Training Centre Project (Table 2.4, 2.5)		1,794		5,279			1,917	2,663			11,653
		Monitoring and Evaluation System Establishment Project (Table 2.6)		1,110		255			252	238			1,855
8	Irrigated Agriculture Extension Programme (IAEP)	Irrigated Agriculture Extension (Table 2.7)		810		1,301	50		119		207		2,487
9	Information Network System Establishment Programme (INSEP)	(A) Bahr el-Jebel Basin Hydromet Information System		220		1,092			301	88			1,701
		(B) Bahr el-Ghazal Basin Hydromet Information System		260		1,660			617	142			2,679
		(C) River Sobat Basin Hydromet Information System		180		812			263	64			1,319
		(D) White Nile Basin Hydromet Information System		200		878			301	68			1,447
		(E) Groundwater Monitoring System		2,160		53			88	180			2,481
		(F) Regional Nile Basin Hydromet Services and a National Water Resources Monitoring		3,090		300				3,390			
		(G) Nile Basin Decision Support System (NBDSS)		960				960					
		(H) Nationwide Topographic Maps Development		150				54,400	54,550				
		(I) Nationwide High Resolution Maps Development		880		108				2,250	3,238		
		Term-total for INSEP (Table 2.8, 2.9)		8,100	0	4,903	0	0	1,570	542	0	56,650	71,765
Sub-Total				14,344	202	13,376	225	111	3,983	4,987,051	414	56,650	
Total (MP)													5,076,356



THE REPUBLIC OF SOUTH SUDAN

MINISTRY OF ELECTRICITY, DAMS, IRRIGATION & WATER RESOURCES



WATER SECTOR

IRRIGATION DEVELOPMENT MASTER PLAN

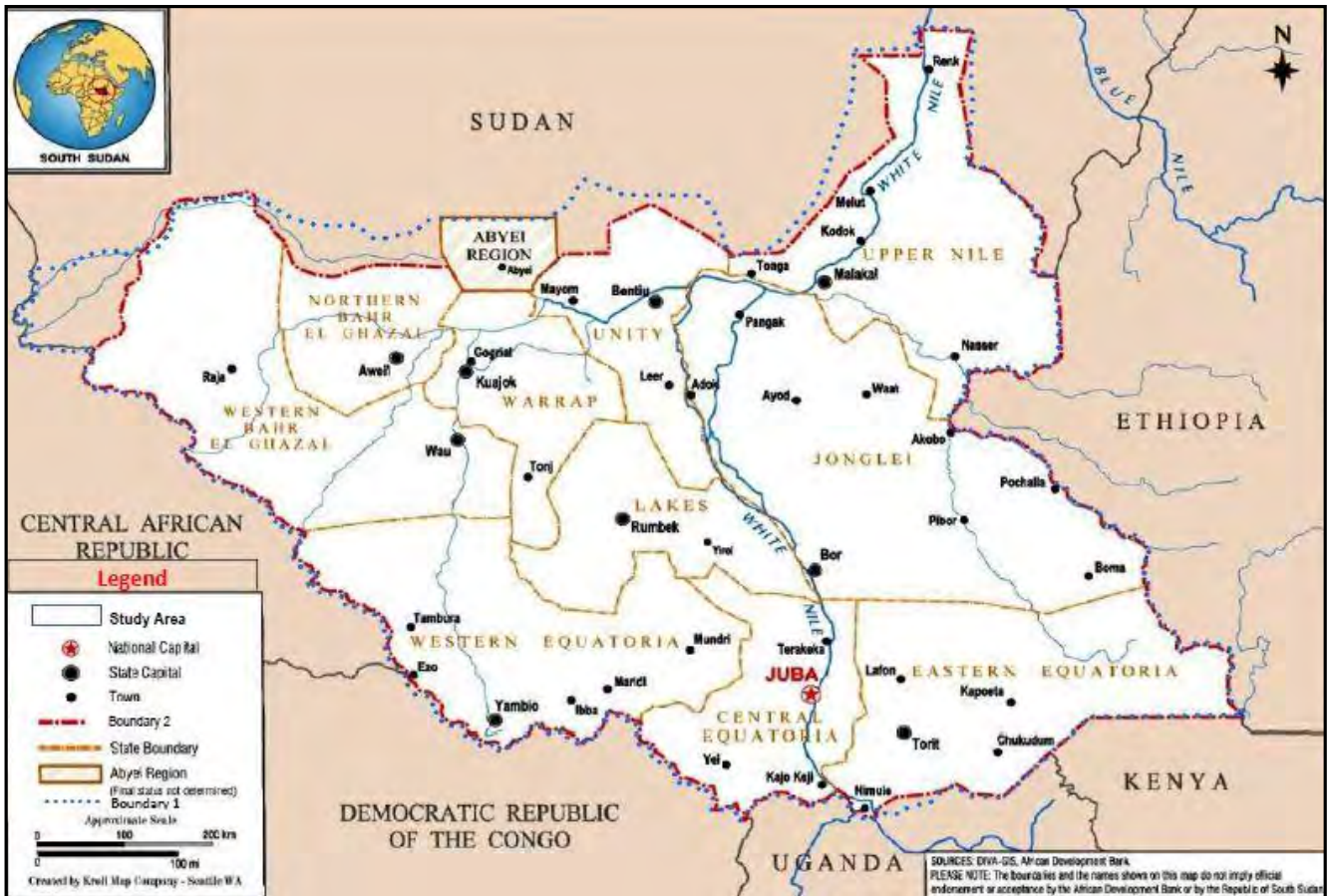
(FINAL REPORT)

ANNEX-8: RECORDS OF DISCUSSIONS AND MEETINGS

NOVEMBER 2015

THE PROJECT FOR IRRIGATION DEVELOPMENT MASTER PLAN IN THE REPUBLIC OF SOUTH SUDAN (RSS) LOCATION MAP

Map of the Republic of South Sudan



Location Map: Adopted from African Development Bank

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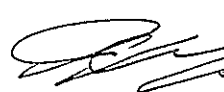
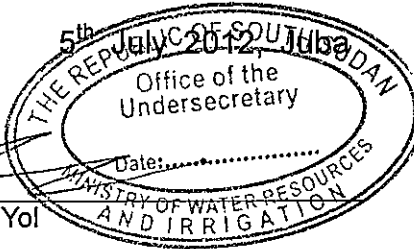
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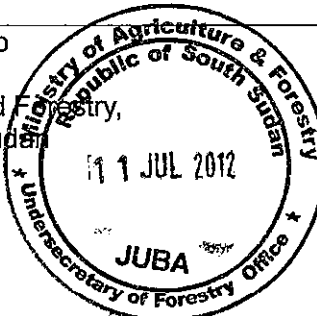
1. RECORD OF DISCUSSIONS ON THE PROJECT FOR FORMULATING IDMP AGREED WITH JICA BY MEDIWR & MAFCRD, 11th JULY 2012

RECORD OF DISCUSSIONS
ON
THE PROJECT FOR IRRIGATION DEVELOPMENT MASTER PLAN
AGREED BETWEEN
JAPAN INTERNATIONAL COOPERATION AGENCY
AND
MINISTRIES CONCERNED OF THE GOVERNMENT OF
THE REPUBLIC OF SOUTH SUDAN



Mr. Atsushi HANATANI
Chief Representative
South Sudan Office
Japan International Cooperation Agency



Eng. Isaac Liabwel C. Yol
Under Secretary,
Ministry of Water Resources and Irrigation,
Republic of South Sudan



Prof. Mathew Gordon Udo
Undersecretary,
Ministry of Agriculture and Forestry,
The Republic of South Sudan

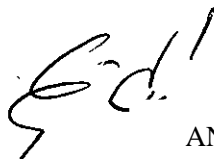
Based on the Minutes of Meetings on the Detailed Planning Survey on the Project for Irrigation Development Master Plan (hereinafter referred to as "the Project") signed on 27th April 2012 between the Ministry of Water Resource and Irrigation (hereinafter referred to as "MWRI"), the Ministry of Agriculture and Forestry (hereinafter referred to as "MAF") and the Japan International Cooperation Agency (hereinafter referred to as "JICA"), JICA held a series of discussions with MWRI ,MAF and relevant organizations to develop a detailed plan of the Project.

Both parties agreed the details of the Project and the main points discussed as described in the Appendix 1 and the Appendix 2 respectively.

Both parties also agreed that MWRI/MAF, the counterpart to JICA, will be responsible for the implementation of the Project in cooperation with JICA, coordinate with other relevant organizations and ensure that the self-reliant operation of the Project is sustained during and after the implementation period in order to contribute toward social and economic development of the Republic of South Sudan.

The Project will be implemented within the framework of the Note Verbales to be exchanged between the Government of Japan (hereinafter referred to as "GOJ") and the Government of Republic of South Sudan (hereinafter referred to as "RSS").

Appendix 1: Project Description



PROJECT DESCRIPTION

I. OUTLINE OF THE PROJECT

1. Title of the Project

The Project for Irrigation Development Master Plan

2. The Main Objective of the Project

- To formulate the irrigation development master plan, and strengthen the capacity of South Sudanese counterpart personnel through its process

3. Scope of the Project:

The project shall cover the following aspects:

- Support the Master plan formulation
 - Water sector situation analysis
 - Assessment of water resources
 - Formulation of strategic framework for irrigated agriculture
 - Zoning for irrigation development
 - Identification of appropriate irrigation models by zone
 - Formulation of procedures for environmental and social consideration for irrigation development
 - Proposing organization management structures for irrigation schemes
 - Assessment and planning for required human resources
 - Formulation of implementation plans for priority projects
- Facilitate the formulation process through:
 - Support to the consolidation and capacity development of the MWRI/MAF task team
 - Support the government-led stakeholder coordination of the master plan formulation

4. Target Area

The project covers the whole areas in South Sudan in principle.

5. Duration

24 months

The detail and final duration shall be determined before formal signing of the R/D.

6. Activities

Activity 1: Water sector situation analysis

- Socio-economic conditions
- Policies, strategies, laws and institutions related to water resources management, development and utilization
- Roles, responsibilities and structures of organizations related to water resources management, development and utilization
- Present conditions of water resource utilization (e.g. existing irrigation, water storage, hydro-power and potable water facilities)

- General conditions of water resources and land development potential (e.g. availability of water resources, population needs and existing livelihood practices)
- Existing environmental and social safeguard regulations

Activity 2: Assessment of water resources

- Assessment of water resources potential through mapping of surface, drainage systems, rainfall patterns, river flows, lakes, wetlands and extent of floods

Activity 3: Formulation of strategic framework for irrigated agriculture

- Clarification of key issues and challenges in irrigation
- Formulation of strategic framework for irrigated agriculture
- Identification of programmes for irrigated agriculture

Activity 4: Zoning for irrigation development

- Assessment of availability of irrigable land with dependable water sources, socio-economic factors (e.g. population, access roads, and land tenure), natural conditions (e.g. soil types and topography) and agricultural conditions (e.g. cropping patterns)
- Zoning for irrigation development

Activity 5: Identification of appropriate irrigation models by zone

- Presentation of irrigation models by zone
- Presentation of facility design by irrigation model

Activity 6: Formulation of procedures for environmental and social consideration for irrigation development

- Review of existing procedures for environmental and social consideration for water related development
- Proposing of appropriate procedures
- Formulation of capacity development plans for environmental and social consideration

Activity 7: Proposing of organization management structures for irrigation schemes

- Review of existing organizational structures for planning, promoting, supervising, operating and maintaining irrigation schemes at National, State and County levels
- Clarification of roles and responsibilities of organization for planning, promoting, supervising, operating and maintaining irrigation schemes at National, State and County levels and private sector
- Presentation of appropriate organizational structures to effectively manage irrigation schemes (e.g. irrigation boards, scheme management units, etc.)
- Clarification of institutional arrangements for promoting private investment in irrigated agriculture sector
- Review of existing farmers organizations (e.g. cooperatives and farmers associations)
- Formulation of plans for farmers organizations
- Presentation of appropriate methodologies for O&M and irrigation by model
- Clarification of O&M and water fees collection mechanism
- Clarification of O&M mechanisms by utilizing collected O&M fees

Activity 8: Assessment and planning for required human resources

- Review of existing relevant human resources
- Formulation of capacity development plans for staffs of organizations related to irrigation development at National, State and County levels
- Formulation of capacity development plans for farmers organizations
- Review of existing related training institutes
- Formulation of institutional development plans for training institutions related to



irrigation development

- Formulation of training plans for farmers in irrigation schemes, in terms of on-farm water management, crop production, post harvesting activities and marketing

Activity 9: Formulation of implementation plans for priority projects

- Identification of higher priority irrigation schemes (high irrigable arable land with dependable water and socio-economic resources), and preparation of the following:
 - Conducting of technical studies and designs
 - Estimation of approximate project cost
 - Identification of possible implementers including the private sector
 - Identification of target crops to be cultivated in irrigation schemes
 - Conducting environmental and social consideration studies
 - Analysis of economic impact
 - Identification of appropriate institutional arrangement on O&M

7. Input

(1) Input by JICA

- a) Dispatch of Mission
- b) Training of the South Sudanese counterparts on specific relevant subjects
- c) Cars, electric devices, office equipment and other equipment necessary for survey

(2) Input by MWRI/MAF

MWRI/MAF will take necessary measures to provide at its own expense:

- a) Services of MWRI/MAF's counterpart personnel and administrative personnel as referred to in I-8;
- b) Office space: At least one office desk and suitable office space where applicable;
- c) Supply or replacement of basic equipment, instruments, tools and materials necessary for the implementation of the Project other than the equipment provided by JICA;
- d) Information as well as support in obtaining medical service;
- e) Identification cards for JICA missions;
- f) Available data (including maps and photographs) and information related to the Project;

8. Implementation Structure

Technical Committee and Agricultural Master Plan Task Team will be established in order to facilitate inter-organizational coordination. It will be held whenever it deems necessary. A list of proposed members of the team is shown as below;

(1) South Sudanese Side

(a) Technical Committee

Technical Committee will receive reports of progress from irrigation Development Master Plan Task Team and give feedbacks with political viewpoints.

The members of Technical Committee are undersecretaries of MWRI (lead) and MAF(co-lead) .

(b) Irrigation Development Master Plan Task Team

Irrigation Development Master Plan Task Team will be a responsible body for formulating the comprehensive agricultural development master plan. The members of Task Team will be;

【MWRI】

Eng. Jiben Jeremiah Odok, Director for Irrigation & Drainage

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Eng. Makuac Ador Malej, Asst. Director for Irrigation & Water Control
Eng. Jal Fnom Kojeaze, Senior Engineer for Irrigation & Water Control
Eng. Simon Otoung Awijak, Deputy Director for Hydrology
Eng. Deng Santino Ater, Asst. Director for Hydrology
Eng. Robert Peter Zakayo, Inspector for Hydrology
Mr. Gai Simon Reath, Asst. Inspector for Hydrology
Mr. Andrew Yunda Stephen, Deputy Director for Planning
Eng. Kiden Stella Jacob, Senior Inspector for Hafirs, Dams & Dykes
Eng. Phillip Jhon Akol, Asst. Inspector for Hafirs, Dams & Dykes

【MAF】

A representative from comprehensive agriculture development master plan task team

(3) JICA Side

The mission members (experts) of JICA will give necessary technical guidance, advice and recommendations to MWRI/MAF on any matters pertaining to the implementation of the Project.

9. Reports

Reports in English will be jointly prepared by South Sudanese and Japanese sides, and submitted to the Government of the Republic of South Sudan

10. Environmental and Social Considerations

MWRI agreed to abide by 'JICA Guidelines for Environmental and Social Considerations' in order to ensure that appropriate considerations will be made for the environmental and social impacts of the Project.

II. UNDERTAKINGS OF MWRI AND THE GOVERNMENT OF REPUBLIC OF SOUTH SUDAN


MWRI/RSS will take necessary measures to:

- Ensure that the technologies and knowledge acquired by the South Sudanese nationals as a result of Japanese technical cooperation contributes to the economic and social development of South Sudan, and that the knowledge and experience acquired by the personnel of South Sudan from technical training as well as the equipment provided by JICA will be utilized effectively in the implementation of the Project; and
- Grant privileges, exemptions and benefits to members of the JICA missions, which are no less favourable than those granted to experts and members of the missions and their families of third countries or international organizations performing similar missions in South Sudan.
- Provide security-related information as well as measures to ensure the safety of members of the JICA missions;
- Permit members of the JICA missions to enter, leave and sojourn in the Republic of South Sudan for the duration of their assignments therein and exempt them from foreign registration requirements and consular fees.
- Exempt members of the JICA missions from taxes and any other charges on the equipment, machinery and other material necessary for the implementation of the Project;
- Exempt members of the JICA missions from income tax and charges of any kind

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imposed on or in connection with any emoluments or allowances paid to them and/or remitted to them from abroad for their services in connection with the implementation of the Project; and

- Meet taxes and any other charges on the equipment, machinery and other material, necessary for the implementation of the Project.

III. EVALUATION

JICA will conduct the following evaluations and surveys to mainly verify actualization of the proposed Master Plan, impact of the Project and draw lessons. The MWRI/MAF is required to provide necessary support for them.

1. Ex-post evaluation three (3) years after the project completion, in principle
2. Follow-up surveys on necessity basis

The three parties may promote jointly evaluation of the Project.

IV. PROMOTION OF PUBLIC SUPPORT

For the purpose of promoting support for the Project, MWRI/MAF will take appropriate measures to make the Project widely known to the people of South Sudan.

V. MUTUAL CONSULTATION

JICA and MWRI/MAF will consult each other whenever any major issues arise in the course of Project implementation.

VI. AMENDMENTS


The record of discussions may be amended by mutual consultation.

The minutes of meetings will be signed by authorized persons of each side who may be different from the signatories of the record of discussions.

End

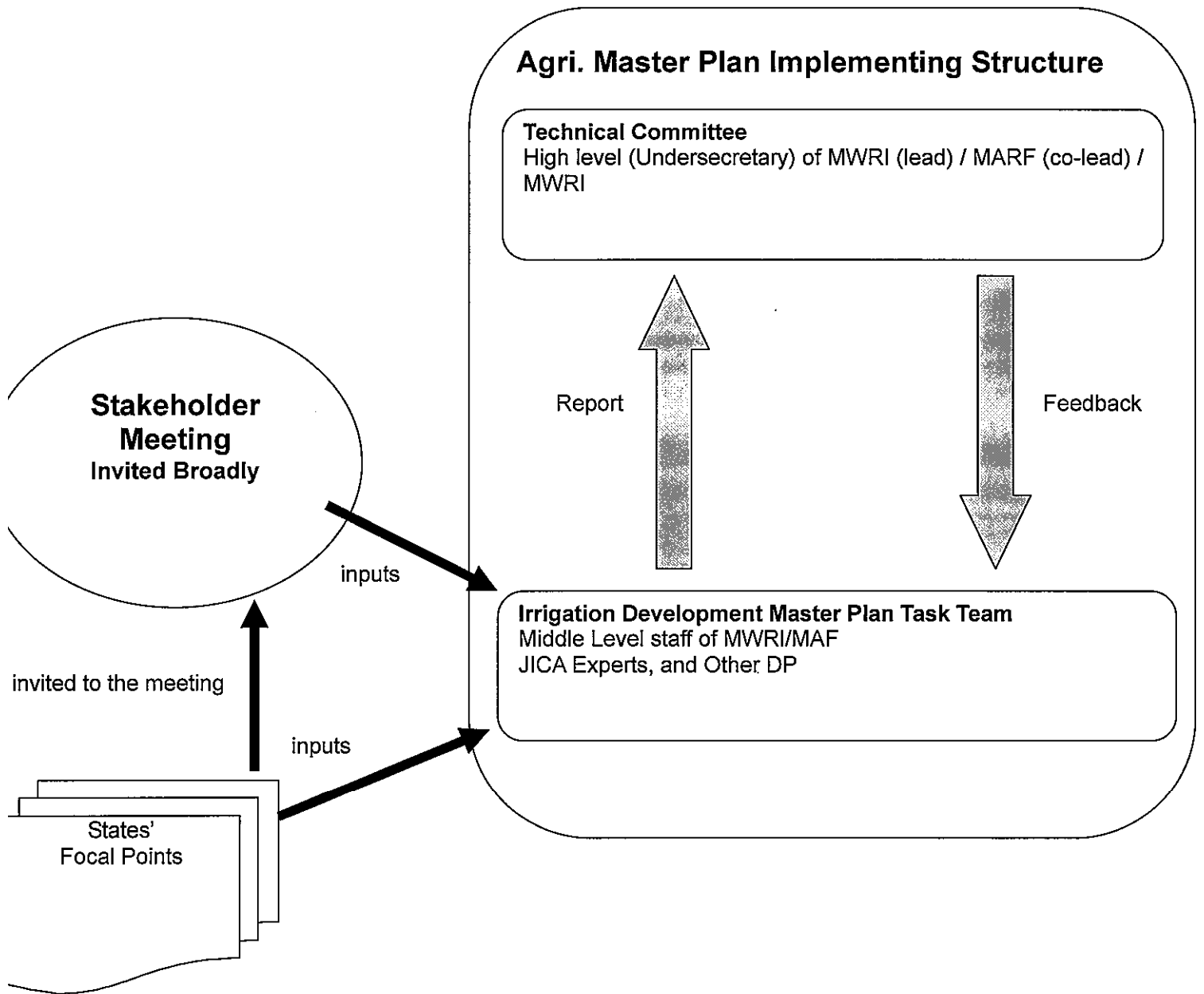
Annex 1 Project Organization Chart



 16
ANN8-7



Annex1 Project Organisation Chart



MAIN POINTS DISCUSSED

Three parties confirmed that the following are essential points for actualization of the master plan.

(1) Regarding activity 9 both South Sudanese and Japanese sides further agreed that the formulation of such plans will very much depend on the availability of reliable data and information; the two will work out the possibility of obtaining such requirements during the MP formulation process.

(2) Regarding the undertakings of MWRI and the Government of Republic of South Sudan as stated in Annex 1 (Draft of the Record of Discussions), MWRI will ensure that it undertakes the requirements included therein within its mandate and capacity.

End.

2. OFFICIAL LAUNCHING OF CAMP & IDMP FORMULATION, 22nd SEPTEMBER 2012, NYAKURON CULTURAL CENTRE

The Republic of South Sudan

Formulation of Comprehensive Agriculture Master Plan (CAMP) & Irrigation Development Master Plan (IDMP)

Speeches at the Launching Ceremony

Date and Time	Saturday, September 22, 2012, 09:00-13:00 (including registration and refreshment)
Venue	VIP Hall, Nyakuron Cultural Centre
Guest of Honor	H.E. Hon. Dr. Riek Machar Teny, Vice President, the Republic of South Sudan
Other Dignitaries/ Attendees	<p><u>Ministry of Agriculture, Forestry, Cooperatives and Rural Development (MAFCRD)</u> Hon. Dr. Betty Achan Ogwaro, Minister Hon. Beda Machar Deng, Deputy Minister Prof. Mathew Udo, Undersecretary Mr. Jaden Tongun Emilio, Undersecretary Mr. John Chuol Dhol, Director General of Agriculture Production and Extension Services Dr. Loro George Leju, Director General of Research and Training Mr. John Pangech, Director of Planning Dr. Erneo Balasio, Director of Mechanization Mr. Frazer Andrea, Community Development/ Dean of Studies Mr. Joseph Akim, Deputy Director of Extension Mr. Kenyi Bullen Baggü, Director of Agroforestry and Forest Extension Mr. Alfred Dimido, Director of Cooperative Development Ms. Suzan Faridnesio, Assistant Inspector for Food Nutrition</p> <p><u>Ministry of Animal Resources and Fisheries (MARF)</u> Hon. Dr. Martin Elia Lomurö, Minister Dr. Makwei Malual Kang, Undersecretary Ms. Ann Felix Baije, Director General of Animal Production and Range Management Mr. Anthony Raymond, Director General of Special Projects Mr. Lewis K Jaja, Director General of Special Projects Dr. John Kanisio, Director General of Veterinary Services Mr. William Olami Aba, Director of Planning, Statistics and Documentation Mr. Sarafino Aloma, Acting Director General of Fisheries Mr. Aguer Barach Atem, Deputy Director of Finance Mr. David Peter Mina, Assistant Research Officer Ms. Eva Ceaser, Inspector of Extension Ms. Esther Kaku, Assistant Inspector of Planning Mr. Martin Yoa Sor, Director of Animal Production Ms. Suzana Gabriel Fandas, Inspector for Fisheries Cooperatives Mr. Stansilaus Tombe Venusto Lako, Inspector of Hides and Skins Mr. Augustino Atillio, Director of Extension Dr. Taban Tereka, Deputy Director, Disease and Vector Control Ms. Aya Warille</p> <p><u>Ministry of Water Resources and Irrigation (MWRI)</u> Eng. Isaac Liabwel C. Yol, Undersecretary Eng. James Adam Boy, Director General of Hydrology Eng. Jiben Jeremiah, Director of Irrigation and Drainage Mr. Makuac Ador Malek, Assistant Director of Irrigation and Water Control Mr. Malual Deng Mayol, Irrigation Specialist Mr. Jal Panom, Senior Inspector for Irrigation & Water Control Mr. Robert Zakayo, Inspector for Hydrology</p>

	<p>Mr. Nyasigin Deng Bar, Acting Director of Water Resources Management Mr. Peter Mahal Dhieu Mr. Clement Abel <u>Other Ministries and Agencies of RSS</u> Mr. Isaiah Chol Aruai, Chairperson, NBS Mr. Aggrey Abate, Vice Chancellor, Juba University <u>Development Partners</u> Mr. Nicholas Coghlan, Head of Office, Canadian Embassy Ms. Jenny Coghlan, Canadian Embassy Mr. Zhang Jun, First Secretary, Chinese Embassy Mr. Ying Xhin, Secretary, Chinese Embassy Mr. Darren Evans, Livelihood/Food Security Advisor, DFID South Sudan Mr. Tom Rhodes, Chief, Economic Growth Office, USAID South Sudan Mr. Naren Chanmugam, Agriculture Officer, USAID South Sudan Mr. Atsushi Hanatani, Chief Representative, JICA South Sudan Mr. Kyohei Miyoshi, Representative, JICA South Sudan Ms. Makiko Kimura, Project Formulation Advisor, JICA South Sudan Mr. Emmanuel Minari, Agriculture Programme Coordinator, JICA South Sudan Mr. Takanobu Nawashiro, JICA Expert, Yei <u>Private Sector</u> Mr. Brett Scott, Country Manager, Lonagro South Sudan Ltd/John Deere Mr. Clive Pearce, Lonagro South Sudan Ltd/John Deere Mr. Aggrey Idri, South Sudan Association of Private Universities (SSAPU) Mr. Tang Guachao, General Manager, China Shan Dong International Mr. Zhu Xin, Manager, China Shan Dong International Mr. Guor David Lueth, Staff, Equity Bank Mr. Charles Anyama, Consultant, South Sudan Chamber of Commerce, Industry & Agriculture (SSCCIA) Mr. Botel Mori Nyombe, Advisor, Cooperatives and Rural Development (former Undersecretary, MCRD) Mr. Nyalon Charles (affiliation unknown) <u>Media</u> Mr. Abdulrazig Juma, Journalist, News Agency of South Sudan Mr. Emmanuel Data, Journalist, New Nation Mr. Nasir S Assai, Journalist (affiliation unknown)</p>
Consultant Team (CAMP)	<p>Ms. Satoko Emoto, Team Leader/Agricultural Policy Mr. Toshifumi Serizawa, Administrative and Financial Management/ Forestry Development Mr. Hironari Onishi, Administrative and Financial Management/M&E Mr. Takao Inamori, Rural Development/Land Tenure/Rice Development Policy Mr. Ayo Peter Wani, Research Assistant Ms. Sande Baityo, Secretary</p>
Consultant Team (IDMP)	<p>Mr. Kazumitsu Tsumura, Team Leader/Development Policy Mr. Hitoshi Toku, Irrigation and Drainage Mr. Akira Nakamura, Organization/Capacity Building/Training Mr. John K. Kimani, Irrigation Institution/Operation and Maintenance Mr. Satoshi Shoji, Water Resources Potential Mr. Shohei Natsuda, Socio-economy Analysis Mr. Tatsuya Ieizumi Project Operational Management Ms. Miki Takahashi, Agriculture/Soil</p>

The ceremony started at 10:30 am, announced by Mr. Pangech, Director of Planning, MAFCRD. He then invited Prof. Udo, Undersecretary, MAFCRD, to give an introductory speech about CAMP.

1. Introduction to the CAMP Process by Prof. Mathew Gordon Udo, Undersecretary, MAFCRD

He started by an opening prayer, greeted the Vice President, invited dignitaries and guests and explained that the gathering was to launch of the formulation of CAMP and the Irrigation Development Master Plan (IDMP).

He then read the Comprehensive Agriculture and Irrigation Development Master Plan (CAMP) in Brief, attached in the program of the ceremony.

- Background and Objective: South Sudan has a huge agricultural potential that could substantially contribute to food security and socio-economic development. The specific potential includes crops, livestock, forestry and fisheries. Despite the agricultural potential and the investments made by government and development partners over the past six years, the country remains food insecure and a vast majority of the rural population continues to live in poverty.
- To improve the food security situation, reduce poverty and diversify the economy, there is consensus that the Government of the Republic of South Sudan should prioritise the formulation of a Comprehensive Agriculture and Irrigation Development Master Plan (CAMP). Hence, the ministries concerned have taken the decision to formulate the plan so as to facilitate the enhancement of agricultural production and productivity and international competitiveness of the sector.
- The Government is committed to ensure the plan is fully aligned to the national agenda of rural transformation, the Economic Pillar of SSDP and, the Comprehensive Africa Agriculture Development Programme (CAADP). For this reason the process is inclusive.
- Once formulated, the Government will ensure that all public and private investments and programs supported by the development partners in the sector are aligned to CAMP. The implementation of all the programs will be directed, coordinated, monitored and reviewed by Government in collaboration with all stakeholders.
- The CAMP process is primarily funded by the Government of Japan through JICA and supported by other development partners including CIDA, DFID, EU, FAO, GIZ, NEPAD, USAID, WFP and the World Bank. The process remains open to the private sector and all other stakeholders.
- The Key Implementing Ministries are: the Ministry of Agriculture, Forestry, Cooperatives and Rural Development; Ministry of Animal Resources and Fisheries; and Ministry of Water Resources and Irrigation.
- Collaborating Government Agencies include: the Ministry of Finance and Economic Planning; Ministry of Commerce, Industry and Investment; Ministry of Wildlife Conservation and Tourism; Ministry of Environment; Land Commission; National Bureau of Statistics and the State Governments, especially the relevant ministries. Other government agencies at national and state levels will also be involved in the process. Thank you.
- MAFCRD and MARF are developing CAMP and MWRI is developing IDMP, so there is a need for the Undersecretary of MWRI to give us a brief introduction to DMP.

2. Introduction to IDMP by Eng. Isaac Liabwel C. Yol, Undersecretary, MWRI

After greeting to all the guests, the Undersecretary informed them that the Minister of MWRI could not attend because he had commitments on the country's post-independence issues in Addis Ababa and that the Deputy Minister was sick due to Malaria. As the head of the ministry's technical personnel, therefore, he would like to explain the importance of IDMP as a sub-set of the CAMP.

- Why do we want to irrigate our land? Is it because we have water? No. Is it because we want to compete with other countries? No. We want to irrigate because we are in need; because most of our communities are susceptible to hunger. Our animal and crop production are susceptible to lack of dependable water sources, so we need to ensure that there are dependable water sources in order to achieve food security, enhance the other economic sectors of the country, and achieve other things, too. It is a necessity to be satisfied.
- The word "formulation" is important. Some of the lingering problems in the country are related to the availability of financial resources for our projects, but they are also due to the fact that there are no viable, dependable, or attractive programs and projects systematically formulated. Therefore, when we lend our money out, it does not land on the right ground.
- To achieve leadership of the government and the country at large, it was important to register our application

to the Japanese government to facilitate the development of CAMP for South Sudan with a very strong sub-set, that is, IDMP. This year's planning has gone, but it is good that the government technical team, together with the Japanese counterparts, will take some of our priority projects to be considered by our leadership in our up-coming planning for 2013/2014. Finally, I thank everyone on behalf of our ministry.

3. Address by Mr. Atsushi Hanatani, Chief Representative, JICA South Sudan

After observing the protocol, he introduced himself to all the guests and started the address.

- Your Excellency: It is a great honor and, indeed a privilege, to have the opportunity to make a few remarks on behalf of JICA at this memorable occasion during which you have come to the official launch of the formulation of the Comprehensive Agriculture and Irrigation Development Master Plan (CAMP and IDMP) of the Republic of South Sudan.
- Japan International Cooperation Agency (JICA) is the official agency of the Japanese Government mandated to implement Japanese Official Development Assistance (ODA) provided on a bilateral basis. Prior to the independence of South Sudan, JICA has been providing technical assistance and project support to the government and people of South Sudan in the area of basic infrastructure, basic services and livelihoods. JICA South Sudan program is an integral part of Japanese government's effort to consolidate peace and promote socio-economic development in the Republic of South Sudan.
- As an agency with many years of experience in supporting a number of developing countries throughout the stages of social and economic development, JICA would like to prioritize its support for South Sudan in two areas: 1) laying a strong foundation for long-term economic development by prioritizing the strengthening of connectivity with neighboring markets; and 2) to address some of the structural challenges, including its landlocked-ness and over-reliance on mineral resources through diversification of economy. For the reasons, JICA has been and will continue to support transport infrastructure and agriculture development in the years to come. For the transport infrastructure, JICA has undertaken a number of projects including construction of bridges within Juba town and two major projects have begun, to construct a New Nile Bridge in Juba and to expand the River Port. For the agriculture development the support to the formulation of the Comprehensive Agriculture Master Plan and Irrigation Development Master Plan is the first major intervention that will be followed by specific projects that will be identified during the formulation process.
- Your Excellency: Ladies and Gentlemen: I believe there are three main reasons why it is important to support CAMP. Firstly, as a new nation, it is necessary for South Sudan to develop an institutional framework and investment plan to guide public and private investment in the sector as well as a clear vision, strategies and policies for the ministries concerned. Secondly, it is necessary to establish an organizational structure staffed with qualified human resources to deliver services to the farmers and, finally, while on-going programs are important and useful to address urgent needs and challenges, there is need to come up with a "master" plan that can harness all the development efforts to be made by various stakeholders in the sector - in this case, agriculture.
- JICA has witnessed that such a plan, when properly owned by the government and supported by all development partners and the private sector, it can help boost the profile of the sector, facilitate budgetary allocation and private investments leading to improved farm production and competitiveness and ultimately household and national income from agriculture activities.
- Your Excellency: In order for a Master Plan to be formulated and implemented successfully, the process must be government-led and government-owned; it must be comprehensive in addressing sectoral and thematic areas and clearly elaborate the investment, service delivery, institutional/ organizational, regulatory, taxation and human resources concerns; donor coordination and related issues need to be addressed and; very importantly, an appropriate implementation and monitoring framework with clear roles and responsibilities of stakeholders at the central, state and local levels to facilitate need to be agreed.
- Over the coming years, JICA intends to support long-term social and economic development of the Republic of South Sudan with due consideration for delivering immediate peace dividends to the beneficiary population and thereby contribute to long-term economic growth and development.
- In conclusion, the intention of JICA is to contribute to the sustainable economic development of the Republic

of South Sudan. To achieve this, JICA has initiated a process of developing the South Sudan Country Strategy that will be anchored on the diversification of South Sudan's economic structure as the main Strategic Vision. To achieve this, we intend to prioritize support to the development of agriculture and infrastructure sectors in addition to support to basic services.

- Finally, I want to assure the government and the people of the Republic of South Sudan that JICA is committed to be a reliable partner in the development of South Sudan during this difficult time of austerity and during the better days ahead. Thank you so much.

4. Remarks by Hon. Dr. Martin Elia Lomurö, Minister, MARF

Introduced by Dr. Makwei Malual Kang, Undersecretary, MARF, Hon. Dr. Lomurö greeted all the guests.

- I am pleased to have the Vice President to share this very important moment and participate in the occasion. For the last six years, the Government of South Sudan has attempted to tap into the country's natural resources with multilateral and bilateral support. We are perhaps one of the African countries endowed with huge natural resources. In terms of animal resources and fisheries, we enjoy some 12 million heads of cattle and 25 million heads of sheep and goats combined. Yet we are even food insecure.
- The River Nile is passing our mouth, and we have some area designated under Ramsar Convention, where we can easily tap 300 tons of fish every year sustainably. Yet we have a problem in caching fish.
- There are seven states in which 70% of the population relies on cattle for their livelihoods, and some 12-15% rely on crops. They are very poor. Hon. Vice President is one of those who have studied those fields. Now that we have become a nation, the challenge is even greater and we cannot rely on oil and minerals. We must use all the resources that God has given us to become food secure, create jobs, increase our household incomes and change our lives socially. Once those are achieved, it is also our desire to make sure that these sectors contribute to the GDP of our country.
- This JICA program has given us more confidence than we have ever had from any other bilateral or multilateral cooperation programs because it respects our vision of cooperation. It compels donors to make aid effective in the country through cooperation. We have primary data both from the ministries and from the strategic plans of the ministries. This is the first time in our agricultural sector that a donor actually bases its program on local strategic development plans. I thank JICA for that.
- JICA has also immediately started to form a task team where experts from the concerned ministries actually work through the process. Even before starting the process, JICA had a workshop to ensure that the national experts knew the logic of formulating a master plan, that they had the eyes to identify, analyze and interpret the process, and that they could put up a program for development of this sector. This has never happened before.
- This is a challenge to our teams. If someone struck by a tsunami leaves the suffering of his own people and takes off across seas to help you, what should you do? You have to be absolutely serious and absolutely cooperative because this is a genuine friend, a friend that you have never had before. I advise my team and teams from other ministries that what you are doing is not just for yourself but for the people liberated. This liberation is now the liberation through knowledge. If you succeed in this, then you can put your hands up and say they are really free. Now you can fee them using your own resources. You are creating jobs from your own resources, building and improving their lives in the countryside, and managing to learn from your own resources. They don't have to look for employment from the government; they can start fisheries and animal resources and range management and create their own jobs.
- It is essential that while we receive the support from Japan, you should take that opportunity, own it, harmonize it and make sure that you use it as an exemplar.
- I understand that some of the organizations (DPs) have agreed to support this program. Some of them have been in South Sudan for the last six years, but I have not been able to put his hand on anything that has been done and shown. I hope when they are coming to contribute to this program, they will do it honestly and professionally; otherwise, I really prefer that they see this program on its own so that we can use it as a test case for others. This is important because many times programs have started, for instance EU projects, MTFD projects and USAID projects, but I have not been able to see them. Some are too minute to my eyes

and others are too big that they are above my eye level.

- I am saying this very seriously because the Government of South Sudan has been under severe pressure in many things. Even the failure of donor-funded projects is blamed on us. So-called service providers that tap into those funds are out of their move. This program is a government-JICA program, nothing to do with service providers or NGOs. Therefore, we would like to be tested whether we can deliver. While we are moving towards the support of JICA and other donors, we need serious discussions to see how they are going to contribute, whether their contribution is going to affect whatever they have committed themselves to doing for South Sudan and whether their presence in the JICA program will lead to a success. This needs to be analyzed properly.
- This JICA program is good, so I have decided to support it personally and as a minister. I believe from what I have seen from earlier work done by JICA and from the roads and bridges among other things they have supported, that they are serious people and that in two years' time, we will see this sector or the natural resource sector will transform through CAMP.
- I want to thank the Vice President for travelling to come back on time to attend this launch. I hope from all the speeches so far given, you will be able to find what to say.

5. Remarks by Hon. Dr. Betty Achan Ogwaro, Minister, MAFCRD

Introduced by Mr. Jaden Tongun Emilio, Undersecretary, MAFCRD, Hon. Dr. Ogwaro observed the protocol and expressed her great pleasure to launch the CAMP process.

- I want to start by highlighting how the CAMP process came about. First and foremost, CAMP is not a JICA program but a program of MAFCRD, MARF and MWRI. After I took office last year, I was lost as to what we were doing as a ministry and what donors were willing to support us. Therefore, at a meeting I had with all the donors, I made an appeal to them that I needed support to develop an agricultural master plan. It took 5 minutes of silence, but I was glad that JICA jumped up to say, "We will support you." The rest of the donors at that moment did not respond and they thought I was crazy. Later on I explained why I wanted to develop a master plan. First of all, everybody working in the agriculture sector should identify themselves with the master plan, whether they are donors or ministries. This is where we are today, launching the master plan.
- I then appealed to the Minister for Animal Resources and Fisheries, who was not at the meeting. I wanted his ministry to be involved, and I was confident that my colleague, Hon. Dr. Lomurö would support it, because this is a sister ministry. I thank Hon. Dr. Lomurö because he did not hesitate.
- Although a number of countries have increased their support to the agricultural sector in South Sudan, the overall investment still remains at below the level required to sustain viable agricultural programs that address the current and future priorities.
- Domestic political support for agriculture has been achieved. This is evidenced in that the President himself launched the "come back to land" at the beginning of the rainy season early this year. It is also evidenced that the Vice President himself is sitting here despite his busy schedule. Now that political support is achieved, it is technical drive that is needed.
- The support from the international community is still much desired. Some of the reasons heard from them are that South Sudan is still young, so they don't know where to start, and that there is no plan and they don't know the government's priorities, so they don't know what to do. This is why we are here today.
- Agricultural development efforts in South Sudan are highly fragmented, given the region's complex economical resources and farming systems. As a new nation, South Sudan needs all kinds of support, be it financial, technical or otherwise, and other output generated by national, regional and global research organizations. That is why we are working with universities such as the University of Juba and University of Bahr el Ghazal to see that we enhance research. This will be very much part of the master plan. We need data to find where to start the master plan. That is why the National Bureau of Statistics is a very much important partner in formulating the master plan.
- The private sector still plays a limited role in agriculture development in South Sudan. Private investment needs to be globalized. Private investment at the moment is still localized and limited. Much of the investment

is happening in Upper Nile state and limiting itself to a range of commodities, for instance sorghum, with limited implements they have. Therefore, the private sector needs to come and join these efforts.

- The national ministry of agriculture (MAFCRD) has re-assessed the progress in agricultural productivity, food security situation and inadequate funding in agricultural productivity to increase farmers' incomes that cover salaries, operating costs and capital investment, over the long and immediate terms, to make the national agricultural system more productive.
- The CAMP process offers South Sudan's agricultural ministries a mechanism to structure their investment and align better evidence to the return to agricultural investment. We will also spur stronger not only the domestic will but also international funding support. The current situation of donors' funding for agricultural programs is still unsustainable. It involves much of critical decisions around the donors' priorities. For this reason, we want the donors to be part of the master plan so that they will clearly see the priorities of the government in relation to their support. The master plan formulation is led by the three ministries, while JICA is providing technical support. I am pleased that USAID, FAO and other aid agencies that were at the meeting where I appealed for support to the master plan formulation, have now come to support it.
- The colleague who spoke before me spoke elaborately, so I am not going to speak so much, but this is a crucial process initiated by government, to be managed by government, supported by donor agencies with funding from the Japanese government through JICA.
- We are very pleased that JICA is supporting agricultural productivity for the first time, as said by Mr. Hanatani earlier in his speech. I also want other DPs to support the efforts of the three ministries so as to ensure food for the nation and improvement of the economy of South Sudan. We want to use the oil revenues for agricultural development. Ninety eight percent of the revenue is from oil, which should be used on agriculture so that rural communities can gain income because it is their source of dependence.
- It will take two years to complete, and, to me, it looks very long. However, the process will involve research on farming communities, farming systems, constraints, how to address them, how to support farmers and so forth. All these processes will take a long time, but once it is done, we can say that we should do it according to what is written in the book [master plan] but not because we think so.
- I thank everyone once again. I now would like to invite the honorable Vice President to give his speech and closing remarks.

6. Closing Remarks by H.E. Dr. Hon. Dr. Riek Machar Teny, Vice President, the Republic of South Sudan

- First of all, I want to thank the two ministers for inviting me to this launching ceremony and JICA for their consistent work in South Sudan. Yesterday I thought I was not able to come, but I am glad that I came today.
- I was the first person to have a relationship with JICA for the first government. When I was the Minister for Housing and Physical Planning, JICA came in to support water supply projects, prepare a map of Munuki and the formulation of the Juba master plan [Emergency Study on the Planning and Support for Basic Physical and Social Infrastructure in Juba Town and the Surrounding Areas 2006-2008]. I am so happy because JICA is still with us in South Sudan despite its restrictive rules that they are told not to cross the bridge to the eastern side of Juba due to a security and, together with the ministries, has started a very ambitious program. The master plan formulation is a very long-term task, so you have to look so much ahead of time.
- A government must have a vision, and we now have Vision 2040. That is what sort of country we want to establish and what we want to be by 2040. The three ministries have a right to associate with each other because their work is close to one another. If they come up with a master plan that they have agreed upon, they will pull up our country in terms of agriculture, i.e., crops, animal resources and water.
- I would like you to add one more ministry, the Ministry of Commerce, Industry and Investment (MCII), because they have to include the private sector into the master plan. I participated in a one-day workshop by MCII on how we can promote our livestock and cereal production and food industries. I thought it was done by MAFCRD and MARF. In agricultural development, commerce aspects matter. When you are developing the master plan, therefore, you should not forget MCII. Also look at Vision 2040, the South Sudan Development Plan and work done by United Nations agencies. Some of them are long term but should be started now. Also look at work done by the United Nations Mission in South Sudan for their peace building priorities.

- Yesterday we, as the Council of Ministers, have passed more or less frameworks of two ministries. We coincidentally discussed the two frameworks at the same time on the same day. They are also very important, forming a basis on which your master plan should be developed. We are asking the Ministers to give us a timetable since you will aggregate what you want to do in the master plan. How long will it take to formulate your master plan? Eighteen months? It's fine. What is your planning period? It must be longer than 10 years because the master plan is developing broad visions, not like the strategic plan, which is for five years.
- I hope you will coordinate the process because it is a very big task. The ministries collaborating with you will not want to be marginalized. The Ministry of Environment will be very particular about what is composed in the master plan of the three ministries or four ministries. Are environmental issues taken care of? How about land issues? Every day we are talking about land management and land tenure.
- The sooner they are involved in the process from now, the better the process will be. The Land Commission will bring an expert and the Ministry of Environment will bring an expert. The three focal ministries and MCII will bring one or two experts. The more people are willing to participate, the more debate will be.
- If you are not incorporated, then you will act outside the master plan and have a conflict. So all those partners working with you ought to be incorporated at this stage so that their programs are not affected or they don't work outside the box.
- Now I am happy to declare the CAMP and IDMP processes launched.

Compiled by the JICA and Consultants Team

3. FIRST TECHNICAL COMMITTEE (TC) MEETING OF CAMP WITH PARTICIPATION OF THE THEN MWRI AND IDMP TT, 24th SEPTEMBER 2012, CASSAVA HALL, MAFCRD PREMISES, JUBA

Formulation of the Comprehensive Agriculture Master Plan (CAMP) of the Republic of South Sudan

Minutes of 1st Technical Committee Meeting

Agenda	<ol style="list-style-type: none"> 1. Opening Remarks by Undersecretary of MAFCRD 2. Progress Report by the CAMP Task Team 3. Presentation and Discussion on Coordination Mechanism and TOR for CAMP Institutions by the CAMP Task Team and Technical Committee 4. Way Forward 5. AOB
Date and Time	Monday, September 24, 2012, 10:00-12:25
Venue	Cassava Hall, MAFCRD
Attendants	<p><u>Ministry of Agriculture, Forestry, Cooperatives and Rural Development (MAFCRD)</u> Prof. Mathew Gordon Udo, Undersecretary Mr. John Chuol Dhol, Director General of Agriculture Production and Extension Services Mr. Lino Loku Gori, Acting Director General of Planning Mr. John Obita Pangech, Director of Planning Mr. Joseph Akim Gordon, Deputy Director of Extension Mr. Frazer Andrea, Community Development/Dean of Studies Mr. Kenyi Bullen Baggu Nathaniel, Director of Agroforestry and Forest Extension Mr. Erneo Balasio Peter Tombe, Director of Mechanization Ms. Suzan Faridnesio Gore Lado, Assistant Inspector of Food Nutrition</p> <p><u>Ministry of Animal Resources and Fisheries (MARF)</u> Mr. Makwei Malual Kang, Undersecretary Ms. Suzana Gabriel Fandas, Inspector of Fisheries Cooperatives Ms. Eva Ceaser Alexander, Inspector of Extension Dr. Nyajok Kulang John, Veterinary Officer Mr. Akech Andrew Ngang, Laboratory Technician Mr. David Lawrence Lual, Livestock Water Development Officer Ms. Esther Kaku Henery, Assistant Inspector of Planning</p> <p><u>Ministry of Water Resources and Irrigation (MWRI)</u> Eng. Isaac Liabwel C. Yol, Undersecretary Eng. Jiben Jeremiah, Director of irrigation and Drainage Mr. Andrew Yunda Stephen, Deputy Director of Planning</p> <p><u>JICA South Sudan Office</u> Mr. Atsushi Hanatani, Chief Representative Mr. Kyohei Miyoshi, Representative Mr. Emmanuel Minari, Agriculture Programme Advisor</p> <p><u>JICA Consultant Team for CAMP</u> Ms. Satoko Emoto, Team Leader/Agricultural Policy Mr. Toshifumi Serizawa, Administrative and Financial Management/</p>

	Forestry Development Mr. Hironari Onishi, Administrative and Financial Management/M&E Mr. Ayo Peter Wani, Research Assistant
Handouts	<ol style="list-style-type: none"> 1. Agenda 2. Progress Report on the CAMP process 3. Coordination Mechanism and Terms of Reference (TOR) for institutions concerned with the formulation of the Comprehensive Agriculture Master Plan (CAMP) (Draft) 4. Power point presentation of the above
Agreements	<ol style="list-style-type: none"> 1. The draft document of coordination mechanism and TOR is approved with the following modifications. <ol style="list-style-type: none"> 1) There are two task teams (TTs), one for CAMP and another for IDMP, and one technical committee (TC) to supervise the two TTs. Likewise, there is one inter-ministerial steering committee (ISC) as the highest decision-making body for CAMP, including IDMP as its sub-plan. 2) The moderators for issues focusing on IDMP are the Minister, MWRI, at ISC, and the Undersecretary, MWRI, at TC, respectively. 3) TC consists of Undersecretaries and senior-level staff members of the ministries concerned, while TT of middle-level staff members of MAFCRD, MARF and MWRI. 4) CAMP-TT has a team leader, a secretary and an assistant secretary. Major tasks of the secretariat will be described in the TOR. 5) State Focal Points include one staff member of each state directorate of water and sanitation to facilitate the IDMP formulation. 2. The Chief Representative of JICA South Sudan will explain JICA's budget for the formulation of CAMP and IDMP to the Undersecretaries of MAFCRD, MARF and MWRI. The date of the meeting is tentatively set for Monday, October 1, and will be coordinated by the JICA side.

1. Opening Remarks by Prof. Udo, Undersecretary, MAFCRD (10:30-10:35)

- Prof. Udo said that the meeting was scheduled for 10:00 and requested the participants to wait for colleagues from MAFCRD, MARF and MWRI. He commenced the meeting when the Undersecretary of MWRI had arrived, saying that there was good representation.
- He informed the participants that some of the TC members were attending a meeting for the Agricultural Fair and Conference (to be held November 27-30, 2012) concurrently going on in MAFCRD; otherwise they would have been present.
- He revealed that the CAMP process had been moving up and down for the last 4-6 months, in which the three ministries were involved, with MAFCRD and MARF developing mainly CAMP, while MWRI the Irrigation Development Maser Plan (IDMP). However, there should be a linkage between the two master plans since irrigation is essential for agricultural development. It is important to clarify the linkage, as well as what areas to be shared between the three ministries, before the two teams start formulating the master plans, respectively.
- He said that there had been the launching ceremony for CAMP and IDMP last Saturday (September 22), where most of the participants were present and, therefore, now was the time to go ahead and see what to do.
- The structure of CAMP coordination consists of: 1) the Inter-ministerial Steering Committee

(Ministers) (ISC); 2) the Technical Committee (Undersecretaries and Directors General) (TC); and 3) the CAMP Task Team (national experts of the three ministries and consultants deployed JICA) (TT). He explained that the present meeting was supposed to be a TC meeting and, accordingly, for the TC members only. The entire Task Team was allowed to attend this meeting so that they could go through what they had been doing and resolve some issues, but the next meeting and thereafter would be for the Undersecretaries and Directors General.

- He then proceeded to call on the leader of the CAMP-TT to present a progress report on what they had done so far.

2. Presentation and Discussion on Progress Report 1 (10:35-11:00)

- Ms. Satoko Emoto started by thanking Prof. Udo and everybody at the meeting. She clarified that the team leader of the CAMP-TT was Mr. Pangech, but on behalf of him and TT, she would briefly present what CAMP-TT had done since late July 2012. She informed the participants that the main purpose of the meeting was to obtain TC approval for the coordination mechanism and TOR for CAMP institutions.
- She then explained the Progress Report (Handout No. 2) and finally thanked everybody for his/her attention.

Questions and comments

- Mr. Akim pointed out that the consultant team was supposed to go to the fields with TT members and asked the reason the consultant team had made the field trip to Yei alone.
- Ms. Emoto responded that they had been supposed to go with a TT member, but he had fell sick on the previous day of the trip. Thus, the team went alone due to time constraints.
- Mr. Andrea said that his question was interrelated with the issue raised by Mr. Akim but from a different point of view. As shown in the report, most of the activities have been done by the consultants. Who holds the lead in the CAMP process? He continued to say that the consultants were supposed to guide TT members and asked who should drive the process.
- Mr. Isaac suggested that Ms. Emoto be allowed to give clarification if the questions were interrelated or the same while other kinds of questions and comments could be raised.
- Mr. Pangech commented that South Sudan had returnees but not refugees anymore and, therefore, the word "refugees" in the report should be deleted.
- Ms. Emoto responded to the question about the field trip to Yei. Most of the consultant members had not visited anywhere outside Juba and needed to learn the actual situation of rural areas. Yei is the only place for the team to go by road, so there is no need for many logistical arrangements. Moreover, they were scheduled to leave for Japan soon and could not reschedule the trip. Major activities have been done with TT members as indicated in the first part of the progress report. However, there were some tasks they had to do alone, for instance office establishment, discussions with DPs, stocktaking of the existing data that would be reviewed with TT members later. The team had no intention of excluding TT members from the process. She asked for understanding.
- About Mr. Pangech's comment on refugees, she said that it had been noted.
- Mr. Isaac commented that it was good to use the integration tracker system used by the East African community, where if any country did something that was not promoting the integration of the East African community, it would be indicated by a red mark pointing down wards, while if it promoted, they would use a green mark pointing upwards. He said that there was no justification for the field trip to Yei by the consultant team alone and that they should accept that it was an error and should improve next time.

- About the coordination mechanism, Mr. Bullen asked if the document to be presented for TC approval at the meeting was the final draft. He also questioned the distribution of PCs, requesting clarification of the word ~~lent~~ in the brackets after ~~distribution~~.
- To the first question, Mr. Pangech responded that he would explain it next.
- Regarding the second question, Mr. Onishi explained that the PCs were distributed to the TT members on a lent basis for the CAMP formulation period of about 2.5 years. When the formulation is completed, the PCs will be handed over to the respective ministries. He will arrange a session on the use of PCs and USB modems for the TT members on September 26 at the Cassava Hall. He requested them to attend the session.
- Regarding discussions with major DPs, Mr. Pangech said that they were supposed to do it together because they did not know the address the consultant team was using in their discussion with the DPs.
- Mr. Minari responded as follows. In most of the discussions with the DPs, he was with the consultant team because JICA wanted a number of DPs to get involved in the CAMP process. Since it was explained during the scoping mission, most of the DPs were clear about JICA's approach to the CAMP formulation, but JICA re-emphasized the approach in which the government was at the center and leading the process. JICA needed to have discussions with the DPs from a donor point of view. When it comes to actual formulation work, however, the consultants should work together with TT members as a team.
- About the administrative and financial management study, Mr. Akim wanted an explanation for the reason the consultant team had obtained an approval of the senior officials before the report was brought to the CAMP TT for review. He also said that the TT members did not know the budget, as JICA had not presented it to them until now.
- Mr. Serizawa said that the objective of the study was to understand how financial resource mobilization was practiced in the country to formulate the master plan. Once the master plan is formulated, resource mobilization is needed, and resources are to be put into the government through donor coordination and various types of financial management.
- Eng. Isaac complemented Mr. Serizawa's response, saying that the consultants were studying the financial management of the ministries with the help of the senior officials and compiling a report. The process should be that they will go through the TT's review, and then forward the report to TC and finally to high-level government officials.
- Mr. Serizawa agreed with Eng. Isaac that the draft report would be reviewed together with the TT members and submitted to TC.

3. Coordination Mechanism and TOR for CAMP Institutions (11:00-11:50)

- Mr. Pangech presented the draft Coordination Mechanism and TOR for CAMP Institutions (Handout No. 3) by using a PowerPoint file (Handout No. 4).

Questions and comments

- Mr. Akim asked about the composition of the CAMP TT; whether it had only middle-level staff or included senior-level staff. He said that he was asking it because he had received a letter from Prof. Udo to nominate three Directors General to the CAMP-TT.
- Mr. Yunda made two comments. First, the linkage between IDMP and CAMP should be clarified. Second, the secretariats are indicated in both TC and CAMP-TT, but their functions are not described in the document, which needs some consideration.
- Mr. Andrea also asked about the secretariat. A clearer structure is needed, that is, one secretariat for CAMP and IDMP. The roles and responsibilities of the secretariat should be clearly stated.

- Mr. Bullen commented that the coordination structure was result-based, not result-oriented. He then asked if only two members from MWRI were enough. He also requested more clarification about the secretariat and state focal points.
- Prof. Udo responded to Mr. Akim's question about his letter. He wrote the letter because the consultant team came to consult with him, saying that the TT members of MARF had some Directors General (DGs), while those of MAFCRD had only Directors, Assistant Directors and middle-level staff. He understood that the consultant team wanted a balance between the two ministries and a similar kind of advice and support from the senior-level officials of MAFCRD. However, he had now realized that there was TC in the coordination structure to which DGs were allocated and, therefore, could not see a reason the DGs were needed in TT. He said that this mistake would be corrected by writing the DGs that they were part of TC but not TT.
- Mr. Pangech expressed his gratitude to Prof. Udo for his clarification, which would provide information for what to be considered at the meeting. He also said that the linkage between CAMP and IDMP should be clarified. He added that the objectives of the meeting were to identify such a gap in understanding and to clarify the linkage.
- About the question on the secretariat's functions, Mr. Pangech responded that they could be delineated together with the TT members once it was formed. He also asked the TT members who had proposed a result-oriented structure to provide a good example if it was useful and convenient to the coordination.
- About the issue of having only two members from MWRI, Mr. Pangech reported that the TT members had held a heated debate about it. He personally thought that two were not enough and that discussion was still necessary for this issue.
- Mr. Dhol commented that all the projects he had seen had the same structure as this structure, i.e., a steering committee, a technical committee and a task team. He asked to whom the Inter-Ministerial Steering Committee (ISC) would report. The Food Security Council (FSC) should be activated so that ISC could report to it. There is no effective coordination between the central government and states and between the government and DPs and NGOs. He asked if the coordination mechanism was only for the two-year formulation of the master plan and if any decision had been made about the coordination mechanism for its implementation. He emphasized the need to establish a coordination mechanism to cover all projects.
- Mr. Isaac expressed that CAMP and IDMP should be implemented based on the mandates and functions of MAFCRD, MARF and MWRI. He argued that two representatives from MWRI were enough in CAMP-TT while one representative each from MAFCRD and MARF should attend IDMP-TT meetings because MWRI needed to relate water use to agriculture. The coordination structure should have two separate TTs because JICA had deployed two separate teams for IDMP and CAMP, but when the drafts of the two plans are completed, they will be forwarded to a single TC for approval. ISC should also be one, as they will not be engaged in data collection and analysis, program writing, etc. To establish two TTs is not creating parallel processes in this case.
- Mr. Isaac added that the State Focal Points must include a staff member from the directorate of water and sanitation of each state. To Mr. Dhol's question to whom ISC should report, he responded that the ministers would report to the Cabinet [the Council of the Ministers?], which would then approve the master plans.
- Mr. Minari requested clarification from Mr. Isaac about TC. He understood that there would be two TTs for CAMP and IDMP, respectively, and asked if there would be two separate TCs or one TC for the two.
- Mr. Isaac responded that the two master plans should be harmonized at technical level, i.e., TC. IDMP will have a separate TT, but TC should be one at which the representation for

IDMP is from MWRI, while that for CAPM is from MAFCRD and MARF. They will meet at TC and no information goes to ISC without passing through TC. IDMP TT will file a report and CAMP-TT will do the same, which will then be sent to TC for approval.

- Prof. Udo confirmed that there would be one ISC, one TC, two TTs, one for IDMP and one for CAMP, and focal persons at state level who would supply information to TTs. He asked for clarification about the difference in roles between the task team and the secretariat.
- Mr. Pangech responded that the secretariat would be set up within the respective TTs and consists of the team leader and secretaries. He confirmed with Mr. Isaac the appointment of a staff member of the directorate of water, hygiene and sanitation as one of the state focal points.
- Mr. Minari asked about the communication mechanism.
- Mr. Pangech indicated that there was a description on communication and information sharing on page 7 of the coordination mechanism document.
- Mr. Hanatani asked Mr. Isaac if he meant there would be one chairperson for TC.
- Mr. Isaac responded that one person could chair TC since the three ministries all belonged to one government and the agricultural sector and IDMP was a sub-plan of CAMP. If there is an issue about IDMP to which the chairperson cannot provide an answer, he/she can call on the Undersecretary of MWRI.
- Prof. Udo indicated that the above discussion was a point to be noted. He then asked for clarification about the fourth agenda %Way Forward.+
- Mr. Pangech explained that it meant the way forward for what had been discussed, in other words, whether the draft coordination mechanism was approved or not.
- Prof. Udo confirmed that a coordination structure with two TTs, one TC and one ISC had been proposed and asked the TC members if they approved the draft with some modifications. It was agreed.

4. AOB (11:50-12:25)

- Mr. Akim stressed that TT should be homogeneous, i.e., the JICA consultant team and the national team should work together so that it would succeed in achieving the goal.
- Mr. Pangech mentioned that the TT members had been discussing the operational budget for CAMP and wanted the issue to be clarified at the higher level.
- Mr. Isaac said that they needed to discuss logistical and administrative arrangements with JICA, as well as the budget, and asked the JICA Chief Representative to think about it.
- Mr. Hanatani responded that Mr. Isaac's proposal was accepted. Someone from the JICA office and the consultant team could attend the meeting to discuss the issue.
- Mr. Hanatani clarified that JICA was in full agreement with the government's proposition that the CAMP process would be driven by South Sudan and ensured that the consultant team would work with TT throughout the process. In the past there might have been some misunderstanding, and on some occasions it might appear to the South Sudanese side that the consultant team was working separately, but it was not their intention. He emphasized that JICA and the consultant team were fully aware of the importance of cooperation and requested the participants to understand its/their good intention. He promised that it would not happen again.
- Mr. Hantani continued to explain that some of the consultant team members were new here and, therefore, their level of understanding of the agricultural situation of the country was not up to the TT members. Some of the activities were done as their homework. Regarding the field trip to Yei, it was not their initial intention to make it alone. Some

members assignments were coming to an end and could not miss the chance, while the TT member they were supposed to travel with fell sick. Thus, they went to Yei alone. There would be more opportunities to make field visits together in the future.

- Prof. Udo asked what would be the right time the meeting to discuss the logistical and administrative issues.
- Mr. Hanatani and Mr. Minari suggested that the meeting be held on Monday, October 1.
- Mr. Bullen asked who was qualified for the master plan formulation and whether the work was on a voluntary basis.
- Prof. Udo responded that the TT members had been selected to formulate the master plan because they were qualified for the work. On the side of the consultants, they are also qualified for the work. JICA has selected them since the agency knows the consultants will do the job well. What is needed are that the two teams work together, harmony and linkage. Regarding motivation, incentives have been curtailed under the austerity budget, but there is some possibility that the ministries can appreciate the work you will do. It should be clarified what JICA can do and the ministries can do. The project [JICA] will be responsible for the costs when the TT members go on a field trip. Prof. Udo would like to leave the issue to a wider discussion.
- Mr. Pangech pointed out that since it had been agreed to have a meeting with JICA on the budget issue in the following week, there was no need to open it to a wider debate.
- Prof. Udo commended the TT members for the useful presentation and encouraged them and the consultant team to work together as a team, resolve issues through discussion and develop a good master plan. He wished everybody well and closed the meeting.

<END>

4. SECOND TC MEETING OF CAMP WITH PARTICIPATION OF THE THEN MWRI AND IDMP TT, 21ST MARCH 2013, CASSAVA HALL, MAFCRD PREMISES, JUBA

Formulation of the Comprehensive Agriculture Master Plan (CAMP) of the Republic of South Sudan

Minutes of 2nd Technical Committee (TC) Meeting

Agenda	<ol style="list-style-type: none"> 1. Opening Remarks by Undersecretary of MAFCRD 2. Progress Report by the CAMP Task Team 3. Presentation and Discussion on the CAMP Inception Report (Draft) 4. AOB
Date and Time	Thursday, 21 st March 2013, 10:00-12:30 (Started at 10:30)
Venue	Cassava Hall, MAFCRD
Attendees	<p><u>Ministry of Agriculture, Forestry, Cooperatives and Rural Development (MAFCRD)</u> Prof Mathew Gordon Udo, Undersecretary Mr John Chuol Dhol, Director General of Special Projects Coordination Mr Dominic Cirisio Iro, Deputy Director of Community Forestry</p> <p><u>Ministry of Animal Resources and Fisheries (MARF)</u> Dr Makwei Malual Kaang, Undersecretary Mr Anthony Raymond Tombura, Director General of Special Projects Coordination Prof Lewis Khamis Jaja, Director General of Research and Development Dr Jacob M. Korok, Acting Director General of Veterinary Services Mr William Olami Aba, Director of Planning, Statistics and Documentation Mr Sarafino Aloma, Acting Director General of Fisheries and Aquaculture Development Mr Martin Yoa Sor, Director of Animal Production</p> <p><u>Ministry of Water Resources and Irrigation (MWRI)</u> Eng. Isaac Liabwel C. Yol, Undersecretary</p> <p><u>CAMP Task Team (CAMP-TT)</u> Mr John Obita Pangech, Team Leader/Director of Planning, MAFCRD Ms Satoko Emoto, Agricultural Policy Mr Joejoe Wani Lemi, Liaison/Agricultural Expert Mr Ayo Peter Wani, Research Assistant</p> <p><u>IDMP Task Team (IDMP-TT)</u> Eng. Makuac Ador Malek, Acting Team Leader/Assistant Director of Irrigation and Water Control, MWRI Mr Akihiko Hata, Co-Team Leader, JICA Consultant Team</p>
Handouts	<ol style="list-style-type: none"> 1. Agenda 2. Progress Report No. 3 on the CAMP process 3. CAMP Inception Report (Draft) 4. Power point presentation of the above
Agreements/ Action Points	<ol style="list-style-type: none"> 1. Progress Report No. 3 <ol style="list-style-type: none"> 1) The three ministries will assign M&E officers to the CAMP-TT. 2) The CAMP-TT has tried to include everybody but will consider whether to include more stakeholders into the Stakeholder Meeting after the first one to be held on 26th March. 2. Inception Report <ol style="list-style-type: none"> 1) Do not leave out some important areas for data collection such as Torit, Kapoeta, Bor and Yambio for a security reason. These places are secure. 2) GRSS will discuss with JICA about their security measures that seem to affect adversely the quality of the field surveys conducted by the CAMP-TT. 3) Include "South Sudan Vision 2040" and NEAT/ZEAT in 2.1 Justification. 4) Include Counties, farmers, livestock keepers, etc. into Activity 5 [10-1] "Clarification of the roles of the national and state governments and the private sector" 5) Likewise, include Counties, farmers, livestock keepers, etc. into Activity 5 [10-5] "Identification of appropriate systems of monitoring and evaluation by the national and state governments."

The meeting was supposed to start at 10:00 am. Prof Udo, Chairperson, declared the opening upon the

arrival of Eng. Isaac, Undersecretary of MWRI, at 10:30 am. Then Mr Pangech, CAMP-TT Leader, briefly explained the purposes of the meeting, following the agenda (Handout No. 1).

1. Opening Remarks by Prof Udo, Undersecretary, MAFCRD (10:35-10:40)

- At the beginning, Prof Udo said that he did not know exactly why the Undersecretary and Directors General (DGs) from MARF were at the meeting and asked why MAFCRD's DGs were not present at the meeting. He believed that information might not have reached them. He urged the necessity to inform them not only electronically (by e-mail) but also by letter. They are engaged in several things, so the CAMP-TT needs to make sure that they will come to the meeting.

2. Presentation and Discussion on Progress Report No. 3 (10:40-11:15)

- Mr Pangech clarified that the meeting was not for the TT but for the TC and that the TT's role was to present progress and the Inception Report. He then started explaining what the TT had done since November 2012, following Progress Report No.3 (Handout No.2).

Questions and comments (11:00-11:15)

- Prof Udo thanked Mr Pangech for his presentation of the progress report and announced that the floor was open for comments and questions.
- Eng. Isaac commended Mr Pangech for the great work and various tasks done and made the following observations.
 - 1) Ministries of GRSS+ in Section 9 should be Ministries and institutions of GRSS+ since they include not only Ministries but also other types of agencies.
 - 2) In the table of Section 3, why is there no member for M&E on the GRSS side?
- Dr Kaang expressed concern about data collection in the 10 states that would take place during the rainy season. Taking into consideration more difficult access to rural areas during the rain season, he asked if the TT intended to do the exercise only in state capitals.
- Mr Pangech first responded to Eng. Isaac's observations. The first one will be incorporated. The absence of M&E officers is also concern to the TT and he has been requesting the government for M&E officers. Even in that morning, he was trying to secure one officer for M&E from the Directorate General of Policy and Planning, MAFCRD, but was informed that the officer was engaged in some other assignment. The TT needs one M&E officer from each of the three Ministries.
- For Dr Kaang's question, Mr Pangech answered that the TT would start the field surveys in the south and move to the north to overcome the problem. The TT has been debating on this issue. While the fisheries team will not have a big problem, the forestry team will have more problems, going to Eastern Equatoria and Western Equatoria states from now on. Nevertheless, the TT would like to complete the field surveys within the timeframe.
- Prof Udo acknowledged that it was a big issue for the three Ministries to secure M&E officers for the CAMP TT.
- Eng. Isaac explained that MWRI was trying to establish a position called M&E officer+ because of the need for coordination with DPs and promised that he would assign some person, not an engineer, to the M&E sub-sector team of the CAMP-TT from his Ministry. [Note: In the afternoon of the same day, Mr Pangech received an e-mail from Mr Andrew Yunda, a member of both CAMP-TT and IDMP-TT, informing that Mr John Lew, Assistant Inspector of M&E, Directorate of Planning and Programmes, MWRI, had been nominated as a member of the CAMP-TT.
- Dr Kaang stated that it had just come to his notice that the TT needed an M&E officer and that he would find out who could be assigned to the TT from the Directorate of Planning, MARF.
- Prof Udo revealed that on behalf of MAFCRD, Mr Pangech knew better who could be assigned from the Directorate General of Policy and Planning.
- Mr Sor pointed out that livestock owners were not mentioned as stakeholders in Section 9.
- Mr Pangech responded that the CAMP-TT had a livestock sub-sector team, considering cattle keepers as stakeholders of the CAMP. They are not specifically mentioned in the report, but they are on board. The TT is trying to include as many stakeholders as possible into the master plan.
- Dr Kaang pointed out that stakeholders were so many and the TT needed more highlights on the

stakeholders.

- Mr Pangech repeated that the TT had tried to include everyone in the stakeholders.
- Mr Tombura suggested that it would be better to start big because it would shrink after a while and that it started small, it would be difficult to expand.
- Prof Udo pointed out the need for clear specifications of the State Focal Points before they would come to Juba. Some State Ministers are confused about who should be appointed. When the TT talks of stakeholders, it should be more specific about them, e.g., what types of farmers (i.e., crops, livestock, fisheries and forestry), what types of private sector organizations, what types of NGOs, etc. The TT should also specify for what the TT needs them to come to the meetings. If the TT wants the master plan to be comprehensive, then they need to include various stakeholders.
- Mr Pangech responded that the TT were specific about the CAMP stakeholders and had specified selection criteria for the State Focal Points in particular.
- After confirming that there were no more comments and questions, Prof Udo declared that the meeting would move to the next agenda and requested Mr Pangech to present the CAMP Inception Report.

3. Presentation and Discussion on the CAMP Inception Report (Draft) (11:15-12:15)

- Mr Pangech presented the CAMP Inception Report (Draft) (Handout No. 3) by using a PowerPoint file (Handout No. 4).

Questions and comments (11:40-12:15)

- When Mr Pangech mentioned the security measures taken by JICA during his presentation, Mr Tombura reported that he had just visited Yambio. It is a very peaceful and safe place and the JICA consultants can go there.
- Mr Olami thanked Mr Pangech for his excellent presentation. Then he suggested that local governments and beneficiaries such crop farmers, livestock keepers and fisher folks, and CBOs be included into Activity 5 [10-1] "Clarification of the roles of the national and state governments and the private sector". Likewise, those stakeholders should be included into Activity 5 [10-5] "Identification of appropriate systems of monitoring and evaluation by the national and state governments" since they should also play a role in M&E.
- On the security issue, Mr Olami did not see any problem going to Torit and Kapoeta. The latter is rich in livestock resources and needs to be visited by the JICA consultants. Bor is also a vital area in terms of livestock production and fisheries and secure. UN flights go there. Renk, as well as some areas of Unity state, has some security problems because of its adjacency to the border. However, Kapoeta and Bor are safe and should not be missed.
- Mr Tombura thanked Mr Pangech for his elaborative, informative, educative and excellent presentation. Besides security, he would like to call the TC's attention to food security. The CAMP seems to focus on crops rather than livestock and fisheries. If the CAMP talks about food security, the entire Greenbelt zone, which stretches from WES to EES, should be visited. In particular, WES is the most peaceful and productive state among all aspects in South Sudan. Seeing is believing. The issue of security is out of the question. WFP flights go there three times a week, Monday, Wednesday and Friday. He strongly appealed to the JICA consultants to visit Yambio.
- Mr Korok first thanked Mr Pangech for his good presentation and then argued that JICA needed to present the criteria for selecting places their staff and consultants could visit.
- Mr Sarafino expressed slight concern about the pressure indicated in Chapter 7. The President has declared %a hunger free nation by 2014.+Data is an important means for decision making by the government. Even though there may be pressure, the government still has time and the TT should spend as much time as possible on data collection.
- Mr Dhol commended Mr Pangech and his team for the work done and emphasized his expectation of the CAMP to be implemented after two years. Then he made the following comments.
 - 1) "South Sudan Vision 2040" should be included in 2.1 Justification and used as a guide to the master plan formulation.
 - 2) Security is not a problem. It is a relative thing. No area should be excluded from the field surveys

- for a security reason. The TT can go to even Renk.
- 3) Implementation is a different thing from formulation. Even if some areas are not covered in the formulation stage due to insecurity, they can still be covered in the implemented stage because this is a comprehensive master plan that will cover the whole country.
 - 4) In relation to stakeholder identification, he had recently met a youth group complaining that things were done only in Juba and that they were not involved in planning. Women groups are also very active in agriculture in South Sudan. These people should be involved in the CAMP process. Then they will remember to involve others in the process.
- Prof Udo gave a chance to Mr Pangech to respond to the questions and comments.
 - Mr Pangech thanked Prof Udo and made the following responses.
 - 1) Regarding the security issues, JICA is receiving information from a security consultant EU and other DPs are also using and coordinating with other DPs. However, it is up to the DP to make a decision on the red line. For example, EU sends their consultants everywhere in the country while JICA consultants, including South Sudanese consultants, cannot go almost everywhere in the country except those cities shown in the map (Figure 7 on p. 27). The national TT members can go anywhere. The three Ministries should bring this issue to JICA to improve the situation.
 - 2) Regarding the involvement of local governments and beneficiaries in the CAMP process, particularly in M&E, he thanked Mr Olami for mentioning it and promised to include them.
 - 3) "South Sudan Vision 2040" will be included into 2.1 Justification as a guide of the CAMP-TT. SSDP is already there and growth strategies, such the South Sudan Investment Plan, will also be taken into consideration.
 - 4) In conducting the situation analysis, the TT is focusing on farmers, livestock keepers and fisher folks based on the lessons learned from the field trip to Yei in December 2012.
 - Mr Pangech finally asked the TC to help the TT facilitate their activities and guide them when they were faced with difficulties.
 - Prof Udo requested Ms Emoto to shed light on the security measures taken by JICA.
 - Ms Emoto responded that JICA's criteria for selecting areas that could be visited by consultants were not known, but it was true that other major DPs such as EU, DFID and CIDA allowed their staff and consultants to visit virtually everywhere in the country except border areas and some other critical areas. The JICA consultants can visit Yambio and Torit, but they must apply for security clearance more than three weeks before the trip and still may not obtain permission, depending on JICA's judgment. This makes the TT's planning for field surveys difficult. Fortunately, the national TT members can go anywhere. They prepare questionnaires in cooperation with the consultants and go over the questionnaires thoroughly prior to a field visit. To overcome the security issue, the TT has also introduced GIS techniques and a common questionnaire to establish linkages between data to be collected by the TT from the fields and NBS's census data.
 - Dr Kaang contended that security was a personal issue. If someone feels insecure, he/she will not be safe in a certain location. While there are some areas the government cannot allow the team to go, most of other areas are safe. For example, Renk is fertile and productive and has no security problem. Information on security that can be obtained from the government supports his position.
 - Prof Udo stated that his opinion was similar to those of other participants and questioned if the information based on which JICA made a decision was updated. There are some areas UN has declared Level 4 such as Nzara, Tambura and the westward in WES. UN officials should not go there, but information changes from time to time. For example, the security level of Yambio was 4 before, but it was declared secure after a while. The TC, as the government, is concerned about JICA's security restriction and even thinks that JICA's security information could be bias. If the TT is formulating a comprehensive plan and leaving out a potential area such as Yambio, then the plan would be evaluated as a fake because the team did not collect data from the productive area.
 - Prof Udo continued to comment on the pressure on the government described in Chapter 7. He made it clear that pressure was not the government's concern. The government is under pressure of all sorts, but the government has its own programme to fulfil with quick win projects, what is called NEAT, the National Efforts for Agricultural Transformation. The CAMP is part of the NEAT. The final presentation of the CAMP will be after two years. The President declared that South Sudan would be hunger free and self-sufficient in food by 2014 at the Governors' Forum, as well as at the Agriculture Trade Fair and Conference, in November 2012. As far as the agricultural sector is concerned, MAFCRD needs to come up with something. Therefore, the Ministry has launched the

Zonal Efforts for Agricultural Transformation (ZEAT), which selects a potential crop for each zone and formulates a strategy how to increase the production there. The ZEAT is part of the CAMP, the CAMP is part of the South Sudan Development Initiative (SSDI) and the SSDI is the materialization of SSDP. All policy documents should take them into consideration. The team should not work in isolation and the CAMP should fall within what the government plans to do over 40 years.

- Repeating the security issue, Prof Udo requested the JICA consultants to raise the government's concern to JICA. He suggested that the TC should review the government's security arrangements; otherwise the issue would deter the concentration of the government's efforts.
- Mr Sor asked about the table of contents of the Inception Report. While he has found the expected table of contents of the Final Report on pp. 20-22, he has not found that of the Inception Report.
- Mr Pangech showed the table of contents of the Inception Report after the cover page.

4. AOB (12:15-12:30)

- Mr Makuac announced that Mr Hata had just arrived and the rest of the IDMP consultants would arrive on 24th March due to a delay in their contract renewal with JICA and that the IDMP-TT would present their Draft Inception Report to the TC after the CAMP/IDMP Stakeholder Meeting.
- Mr Olami stated that he had been expecting Mr Pangech to call for clarification of the administrative issues raised by the national TT members. He believed that there was need for transparency concerning transport and allowances to be provided to them when they went to the fields and that the TC meeting was a right forum to discuss the issues.
- Mr Pangech responded that no problem had been reported about the transport and allowances for field visits. Extra money is given to the team for a contingency and they will bring back a receipt for the payment if they can justify it. The TT members agree on every process and have done it in a good mechanism. JICA provides commutation transport to the TT members during the formulation period as clarified in the minutes signed by the three Undersecretaries and the Chief Representative of JICA South Sudan last November. JICA says that the vehicles can only go to some collection points, but the TT members maintain that they need transport from/to their houses because their areas are not safe and unreachable on foot especially during the rainy season. However, they have basically agreed that the vehicle is only for coming to and returning from work and should not be used for private purposes such as going to markets.
- Regarding what had happened to the livestock sub-sector team in Terekeka, i.e., the Assistant Commissioner demanded SSP150/day for accompanying the team to the fields, Mr Pangech said that he was still waiting for a full report, but he did not think it right for the Assistant Commissioner to instruct his colleagues not to accompany the team if the team did not pay that amount, simply because he wanted the money. The TT has agreed that the amount to be paid is SSP50/day. If more is needed, it must be justified. This issue is one of the agendas of the TT meeting to be held on the following day (22nd March). Mr Pangech concluded that things were working very well so far.
- Prof Udo told Mr Pangech that it was an internal issue of the TT and should not be reported to the TC here. If the TT has any issue, the TT should solve it internally and, if necessary, should set up an administrative meeting with JICA. However, the TT seems to have solved some of the issues and managed so many other issues, which is good. The CAMP is a government project and South Sudanese project. The government should look at its contribution to the implementation of the project. There are certain things the TT should tolerate and find a solution to them. Finally, Prof Udo praised Mr Pangech for his good report and repeated that the security issue was the TC's concern. Even if the JICA consultants could not go to some areas, the national members can still go and collect data from every corner of the country, not exclude any area of the country.
- Dr Kaang commended the TT for progress in the CAMP process despite the austerity measures and said it was a job well done. Finally, he thanked the JICA team for supporting the national team and closed the meeting.

<END>

5. FIRST STATE FOCAL POINTS (SFPS) AND TASK TEAMS (TT) MEETING OF CAMP AND IDMP, 25th MARCH 2013, JUBA BRIDGE HOTEL

Formulation of the Comprehensive Agriculture Master Plan (CAMP) of the Republic of South Sudan

Minute of the State Focal Point Meeting

Agenda	<ol style="list-style-type: none"> 1. Introduction to the Meeting (Mr John Pangech) 2. Opening Remarks (Eng Isaac Liabwel) 3. Opening Remarks (Prof Mathew Udo) 4. Self-introduction of Members (all) 5. Objectives and Process of the CAMP (Mr John Pangech) 6. Objectives and Process of the IDMP (Eng Makuac Malek) 7. Expected Roles/Responsibilities of State Focal Points (Mr Joejoe Wani) 8. Overview of the Field Surveys (Mr Toshifumi Serizawa) 9. Discussion on Field Survey Methodology and Arrangements by Each Sub-sector (Leaders of each sub-sector, CAMP and IDMP) 10. Wrap-up (Mr John Pangech) 11. Closing Remarks (Dr Makwei Kaang)
Date and Time	25 th March, 2013, 09:00-17:42hours
Venue	Asmara Hall, Juba Bridge Hotel-Juba
Attendees	<p><u>Ministry of Agriculture, Forestry, Cooperatives and Rural Development (MAFCRD)</u></p> <p>Prof Mathew Gordon Udo, Undersecretary Mr John Pangech, Director for Planning Mr Erneo Balasio Tombe, Director of Mechanization Mr Joseph Akim Gordon, Deputy Director of Extension Mr Kenyi Bullen Baggu, Director for Agroforestry and Extension Ms Suzan F Gore, Assistant Inspector for Food Nutrition Mr Frazer Andrea, Community Development/Dean of Studies Mr Ezbon Lodu, Deputy Director Mr Noel Bangaza Cleopas, A/ Director Mr Justin Igu Eric, Conserverator of Forestry Ms Flora Joseph Loki, Assistant Inspector of Mechanization Mr Innocent O Kitara, Assistant Researcher of Extension</p> <p><u>Ministry of Animal Resources and Fisheries (MARF)</u></p> <p>Mr Makwei Malual Kaang, Undersecretary Mr William Olami, Acting DG/Director of Planning, Statistics and documentation Mr German Tom Lado, Laboratory Technician Ms Esther Kaku, A/inspector for planning Dr Nyajok Kulang, Veterinary officer Mr David Lual, Livestock officer Mr Samson Bringi, Inspector for Livestock Mr David Peter Mina, Assistant Researcher Ms Amal Mogga Sebit, Inspector for Fisheries and Statistics Ms Eva Ceaser, Inspector of Extension Mr Stanislaus Tombe, Inspector for Animal Production and Range Management Ms Suzana Gabriel, Inspector for Fisheries and Statistics</p> <p><u>Ministry of Water Resources and Irrigation (MWRI)</u></p> <p>Mr Isaac Liabwel, Undersecretary Mr Ephraim Modi, Acting Director General of Irrigation and Drainage Mr Andrew Yunda, Deputy Director of planning Mr Philip John Akol, Assistant Inspector for dams and dikes</p>

<p>Mr Wol Gordon Tong Mr Makuac Ador, Assistant Director Mr Jal Panom, Senior Inspector for Irrigation and Water Control Mr Simon Otoung, Deputy Director of Hydrology Mr Robert Peter Zakayo, Inspector of Hydrology Mr Chut Isaac Chol Mr Malual Deng Mayol, Irrigation Specialist Mr Gai Simon Reath, Assistant Inspector for Hydrology Mr John Lew Thor</p> <p><u>State Focal Point Persons</u></p> <p>Mr Julius Duku Anania, Ministry of Agriculture and Forestry, CES Mr John Tombe Vincent, Ministry of Animal Resources and Fisheries, CES Mr George Alphons Wani, Water Resources and Irrigation, CES Mr Richard Jada, Ministry of Animal Resources and Fisheries, CES Mr Timateo Amanamoi, Ministry of Agriculture and Forestry, EES Mr Isaac Oduho Leuterio, Ministry of Animal Resources and Fisheries, EES Mr Nyika Charles Jacob, Water Management and Irrigation, EEs Mr Atem DeGak Atem, Ministry of Animal Resources and Fisheries, Jonglei Mr Yohana Mayol Pach, MLF Livestock staff, Jonglei Mr Jackson Kwaje Laku, Department of Physical Infrastructure, Jonglei Mr Kerubino Dut John, Ministry of Cooperative and Rural Development, Lakes state Mr Aggrey Gabriel Makuac, Ministry of Animal Resources and Fisheries, Lakes state Mr John Chanyok Mayen, Irrigation (MOPI), Lakes state Mr Deng Deng Bol, Ministry of Agriculture and Forestry, NBG Mr James Mou Chan, Ministry of Animal Resources and Fisheries, NBG Mr Picos Ariath Ngor, Ministry of Water and Rural Development, NBG Mr John Gatlel Wich, Ministry of Agriculture and Forestry, Unity state Mr Angelo Thuok Buom, Ministry of Animal Resources and Fisheries, Unity State Mr Polis Machar Majak, Ministry of Water Resources and Irrigation, Unity state Mr Gano Wilson Akush, Ministry of Agriculture and Forestry, Upper Nile Mr Denis Tipo Arop, Ministry of Animal Resources and Fisheries, Upper Nile Mr Yak Stephen Lam, Ministry of Water Resources and Irrigation, Upper Nile Mr Achuil Kuch Chol, Ministry of Agriculture and Forestry, Warrap state Mr Ibrahim Abdalla Deng, Ministry of Water Resources and Irrigation, Warrap State Mr Martin Nyuol Deng, Ministry of Physical Infrastructure/Irrigation, Warrap State Mr John Costa Senda, Ministry of Agriculture and Forestry, WBG Mr Alexander Upiou Angelo, Ministry of Animal Resources and Fisheries, WBG Mr Abaker Jallab Khadam, Department of Rural Water and Sanitation, WBG Dr Peter Uchalla, Ministry of Agriculture Cooperatives and Environment, WES Mr Clement Mokorondere, Ministry of Agriculture, Cooperatives and Environment, WES</p> <p><u>JICA CAMP Consultant Team</u></p> <p>Ms Satoko Emoto, Team Leader/Agricultural Policy Mr Serizawa Toshifumi, Deputy Team Leader/Administrative and Financial Management/Forestry Development Mr Hironari Onishi, Administrative and Financial Management/M&E Ms Yukie Machidori, M&E/Project Administration Mr Yasuo Ohno, Agricultural Development/Rice Development Policy</p>

	<p>Ms Sarah Ossiya, Livestock Development Mr Dickens M. Chibeu, Animal Health officer Mr Robert Lindley, Inland Fisheries Development Mr Takao Inamori, Rural Development/Land Tenure/Rice Development Policy Mr Masafumi Nakanishi, Research/Training/Extension Ms Jenny Coghlan, Knowledge Management/IT Specialist Mr JoeJoe Wani Lemi, Research Assistant Mr Samuel Nyika, Research Assistant Mr Ayo Peter Wani, Research Assistant Ms Baityo Sande, Secretary</p> <p>IDMP Consultant Team Mr Kazumitsu Tsumura, Team Leader/Development Policy Mr Akihiko Hata, Deputy Team leader/Aid Program/Budget Preparation Mr Hitoshi Toku, Irrigation and Drainage Mr Akira Nakamura, Organization/Capacity Building/Training Mr Koichi Akashi Mr Hideki Ishikawa Mr Ywodo Andrew, Research Assistant</p>
Handouts	<ol style="list-style-type: none"> 1. Program of State Focal Points Meeting 2. Expected Roles/Responsibilities of State Focal Point 3. CAMP Inception Report (Draft as of March 2013 . ppt &pdf) 4. IDMP Inception Report (Draft as of March 2013 . ppt & pdf) 5. Overview of the Situation Analysis (Methodology and Work Schedule) 6. Information Request Sheet to CAMP State-Government Focal Points
Agreements	<ol style="list-style-type: none"> 1. Objectives and process of the CAMP and IDMP presented and agreed upon 2. Roles and responsibilities of state focal persons presented and agreed upon 3. Capacity building to be a component of the master plan development 4. All data sources were to be utilized 5. Framework for facilitation of the State Focal Points was presented and agreed upon 6. Discussions on field survey methodology and arrangements by each Sub-sector conducted

Notes

- At about 9:33am, Mr Pangech announced to the participants that the meeting could not be started on time because the two undersecretaries of MAFCRD and MWRI who would open the meeting had not yet arrived due to traffic congestion. He informed the participants that the Undersecretary of MAFCRD had informed him that he was close to the venue and urged participants to wait for about 10 minutes.
- At about 9:50am, the Undersecretary of MAFCRD arrived and Mr Pangech informed the participants about his arrival. He further urged the participants to wait for a while, for the Undersecretary of MWRI.

1. Introduction to the Meeting

- At about 10:05am, the Undersecretary of MWRI arrived and Mr Pangech welcomed the Undersecretaries and the State Focal Points to the meeting for the two master plans.
- He informed the Undersecretaries that in the house there were three state focal point persons from each of the three state line ministries as well as the IDMP and CAMP Task Team (TT) members. He thanked the consultants from both projects and introduced himself as the Team Leader for the CAMP, Mr William Olami and Mr Makuac as the Deputy Team Leaders from MARF and MWRI respectively.
- He informed the house about the purposes of the meeting that were:

1. To introduce the State Focal Points as key stakeholders to the CAMP/IDMP process.
2. To discuss and have a clear understanding of roles and responsibilities of the State Focal Points
3. To build partnership, ownership and commitment in the process.

- He further informed the house that the CAMP and IDMP TTs were trying to build and adopt a bottom-top approach because implementation of the plans would be at the state, county, payam and boma levels.
- He read through the program for the day and introduced the Undersecretary of MAFCRD to officially open the meeting. The two Undersecretaries however agreed that the MWRI Undersecretary would speak first.

2. Opening Remarks by the Undersecretary of MWRI

- The Undersecretary for MWRI informed the house that earlier on, they had an agreement that the Undersecretary for MAFCRD would be responsible for chairing the CAMP activities and he would facilitate some sessions and Ms Jaden as well.
- He narrated a scenario where he attended a presentation organised by the Norwegian People's Aid on natural resource utilization particularly land resources. In the presentation, it was outlined that oil resource would decline but land resource would take longer. He was therefore very sure that the two TTs were doing the correct thing with the CAMP/IDMP development. He urged the states to collaborate with the counties, payams and bomas.
- Mr Isaac pointed out that CAMP could not be realised without the IDMP and similarly, the two master plans could not be realised without the cooperation of the states, counties, payams and bomas. He therefore welcomed the State Focal Points to the meeting.
- He informed the house that a few years back, the government lacked formative projects to assimilate the funds. One must have a proper financial investment plan to assimilate the funds, and what the Norwegian People's Aid did was very important.
- He further said that everyone was there to project what land and water could do if combined together. About 80% of the farmers were in the villages and only 20% were in towns.
- He emphasised the need to have a proper budgeting because without it, one could not produce enough. He applauded the Japanese experts that were in the two master plans to help the TTs with the development of the plans.
- He spoke against TT members who are always on Skype and Facebook because he didn't think they would have information to inform the IDMP. He concluded that many people thought that information was on the internet, but he didn't think so. Real information is on hard copies and people should take the hard copies and read.
- Mr Pangech thanked the Undersecretary and quoted from the Undersecretary's speech that indeed 80% of the farmers were in rural areas and 20% in urban. The master plan document would be a document that would change the face of South Sudan. He thanked Mr Isaac once again and welcomed Prof Udo, the Undersecretary for MAFCRD to give his opening remarks.

3. Opening Remarks from the Undersecretary of MAFCRD

- Prof Udo welcomed everyone to the meeting. He continued that based on the information from the facilitator (Mr Pangech) and the Undersecretary for MWRI, the aim of being at the venue was to build information for the CAMP/IDMP. The technical teams for the CAMP and the IDMP had done a lot of paper work, reviewed literature and came up with a way forward which had been shown to the TT members.
- He informed the house that developing a document without involving people from the state would be a waste of time. The document would be looked at as a paper. The teams were involving the

state focal persons because they knew the real situation on the ground. The teams were planning to develop the master plan based on information that would be collected at the states for instance rainfall information. When one mentions the CAMP, it involves a lot of things such as natural resources, water and so forth, and the reason for being at the meeting was to contribute ideas.

- He posed a question: Why two master plans? He then explained that it is because one could not develop agriculture without water. That is why the teams want to develop master plans for the usage of water as well as for developing agriculture. There could be one team but the administration said since they are two different things, they could have two teams; one for developing water and the other for developing agriculture. And that is why the state focal persons came three in number; each for agriculture, water, and animal resources and fisheries. He urged the need for participation of the state focal persons, and he asked them not to be shy. They had a lot of information that the consultants didn't have. He wished that they could stay in Juba and contribute many ideas. He finally thanked everybody.

4. Self-introduction of Members

- Mr Pangech thanked the Undersecretaries and requested the participants to give a hand of applaud to them. He then requested for quick self-introductions.
- After the self-introductions Mr Pangech said that he would like to mention a few things with respect to two states: Lakes and Western Equatoria. The State Focal Points from these two states travelled by road in respect to their commitments to the process. He added that the participants from Eastern Equatoria also travelled by road but with not much challenges as those from the other two states. He therefore requested for a hand of applaud to the commitment by the participants from those two states. He however pointed out the lack of gender balance in the representatives from the states and urged the states to nominate more ladies in the next events.
- He requested the house to move onto the next agenda item.

5. Objectives and Process of the CAMP

- Mr Pangech presented to the participants the progress of the CAMP, and after, he invited for comments.
- The participants however requested both presentations of the CAMP and the IDMP to be made, followed by questions and comments.
- Mr Makuac announced that the IDMP presentation would be made after a tea break for 10 minutes.

6. Objectives and Process of the IDMP

- At about 12:06, Mr Pangech invited Eng Makuac to present the objectives and process of the IDMP.
- Mr Makuac presented the objectives and process of the IDMP on power point slides, and after, Mr Pangech thanked him and commented that the participants now knew what had been undertaken and what had not been done, and that the state representatives would comment on what was missing in the presentations. He invited for questions and comments.
- Mr Olami commented that his concern was the formal land area of South Sudan. The formal land area was 640,000km² and that for Abyei was 18,000km². He stressed that it was important for the teams to stick to the formal figure- the figure implied to FAO and NBS.
- The participants from the states raised the following concerns:

- What type of quality of data were they going to collect? They had data of 1960 and 1970 but the methods used for collecting were not up to date
 - Officials from the meteorological department were supposed to be a part of the focal point meeting attendees but had not been invited.
 - There were many rivers in Northern Bahr el Gazal and a rain gauge was supposed to have been installed to collect rain data but it was not installed.
 - People in Aweil were suffering from floods. Studies needed to be carried out to collect data, and dams needed to be constructed for collecting water.
 - Boreholes were very limited all over South Sudan, with limited and undependable water. There were also problems of water quality.
 - Mr Atem Gak Atem from Jonglei State raised two concerns. Firstly the CAMP coordination mechanism seemed to have been incomplete. The teams could have gone down to counties, payams and bomas, forming steering committees of payams. Payams would have regulations among themselves, including chiefs, and through them, information could be obtained.
 - Secondly, Mr Atem commented about Irrigation. The Jonglei Canal did not appear in the presentations and yet it was causing problems. The eastern part stood as an embarkment. He asked what the plan of MWRI was to utilize the water.
 - Mr John Tombe from Central Equatoria asked if the composition of the CAMP and the IDMP represented all levels of governments. He added that if capacity building was a part of the process, would the training cover all levels of government?
- Mr Richard from Central Equatoria commented that they had been called from all the ten states to have their contributions, but the document (inception report) could not be read in just 10 minutes, thus they could not be able to make any inputs. Secondly, he did not know whether the highest institution of learning had been involved. Thirdly, in the IDMP presentation, it was said that rainfall ranges were between 1000-1800mm². He asked whether the figure included that of north Sudan. Mr Makuac responded to some of the questions as below:
 - Regarding the quality and type of data to be collected, he said that there was no useless/outdated data. The data went back to history and the team had to utilize it. He pointed out that it was difficult to collect data but informed the focal persons that if they were willing to collect data and send to the TT members, they were welcome.
 - Regarding the floods in Aweil, he said that he had been there for two years conducting a study, and they came up with an excellent result. There was a good interconnection between the three ministries but what was unfortunate was the shortage of finances. He however added that there had been several studies done by people but unfortunate part was that people came up with comprehensive reports instead of reports focusing on the stream only.
 - Regarding the Jonglei Canal, a team had been sent recently to conduct a study.
 - Regarding the composition of levels of government, he said that not everyone could be like the other, everyone had their own ages. The master plans would train national ministries and these would in turn train the others in the states. He added that as Mr Pangech had stated earlier, the JICA was responsible for sponsoring the processes, and the government had no resources.
 - Regarding land use, the teams would include everyone and would use satellite in developing the whole area of South Sudan. He added that when he said South Sudan, he meant the whole nation, including all directions. However, he pointed out that South Sudan needed north Sudan too and that it cannot stay alone.

- Mr Pangech announced that there would be more discussions in the afternoon. He highlighted a few issues as follows:
 - Regarding the kind of data, he said that there was more data even before every participant was born. The team was however looking at existing data and primary data.
 - Regarding the invitation of meteorology department, MWRI is well versed in meteorology and it was therefore covered by MWRI.
 - Regarding boreholes, the government agreed that it did not need boreholes anymore but rather dry yards. Boreholes ran out of water faster and some drilling companies did not drill deeper.
 - Regarding the inclusion of bomas, payams and counties in the coordination mechanism, they were linked to the states and the states are linked with the bomas, payams and counties.
 - Mr Pangech also said that there was a question related to the invitation of state Ministers to the meeting, and why pretend it's a bottom-up approach. He responded that the team could start from villages and these would inform the counties. Farmers differed from village to another, thus if the team needed to address issues, they needed to approach the people affected on the ground.
 - Regarding training/capacity building, Mr Pangech said that after the formulation of the CAMP document, the team would look into the issue of capacity building i.e. how many PhDs would be needed and etc.
 - Regarding the involvement of higher institutions, he responded that they were a part of the master plans and on the next day, the institutions would be in the meeting, and the team would read the list of stakeholders. He added that universities were not involved in many of the issues affecting the country e.g. they were not writing about the issues affecting the people, yet in other countries, when universities write about issues affecting the nation, they shake the government and prompts it to act on that particular issue.
- Mr Simon from the IDMP TT clarified a few issues as follows:
 - Regarding meteorology, he said that in South Sudan, there were lots of meteorological stations, but currently, those that were operating were those in Juba, Malakal and Aweil. He however said that the Ministry was working with the Ministry of Transport, on the meteorological data. Currently, they were working on soft copies and would produce hard copies of the data. They were planning for 100 stations but changing the data to hard copies would allow only for 34 stations. He said that they were working on installation of instruments and would decide which stations to install.
 - Regarding water quality, Mr Simon said that the Ministry had the standard measures but the problem was that most people/drilling companies would go and fix boreholes without consulting with the Ministry. He urged people to always consult with the Ministry for standard measures.
- Mr Pangech apologised for not to have forwarded the inception report and other documents to the State Focal Points at an earlier time, so that they could read and familiarise themselves with them. He informed them that it was because their contacts were not known before their appointment was done, but he said the documents would be owned by the states because they were the legs of South Sudan. He urged them to always correct the TT members.
- Mr Pangech announced an hour lunch break from 13:10pm to 14:10pm.
- After the lunch break, Mr Pangech checked the attendance of participants and invited Mr Erneo to clarify an issue that had been raised in the morning session, concerning the rainfall variations in the country.

- Mr Erneo clarified that the rainfall variation that had been mentioned earlier in the meeting (i.e. from 500-1800mm) only implied to South Sudan as an independent nation but rather not to north Sudan (Republic of Sudan), as had been asked by one of the participants. He pointed out that in most parts of north Sudan (Sudan), almost the entire country received 0mm of rainfall. He had stayed in north Sudan for quite a long period of time and had not witnessed any rainfall. It was only on the day when the late Dr John Garang passed on, when he witnessed rainfall in Sudan.

7. Expected Roles/Responsibilities of State Focal Points

- Mr Pangech invited Mr Nakanishi to facilitate the session.
- Mr Nakanishi thanked Mr Pangech and everyone for their efforts in the meeting and invited Mr JoeJoe to give a presentation on the expected roles and responsibilities of the State Focal Points, and he did.

8. Overview of the Field Surveys

- Mr JoeJoe's presentation was followed by another presentation by Mr Serizawa on the overview of field surveys, and invited for questions and comments.
- One of the State Focal Points from Warrap asked what was the commonality between the state and the national governments regarding the CAMP and IDMP? Mr Serizawa answered that both governments would implement the master plans together.
- A participant from Central Equatoria commented that the CAMP/IDMP were for 2014, yet the president had made a call that by 2014, South Sudan should be food secure. What was the plan B that would enable the achievement of the president's call for food security?
- Mr Pangech answered that indeed the participant was right to point out the issue. He had forgotten to narrate to the participants about the new developments of the EAT which was changed to the ZEAT and finally the NEAT. He informed the participants that there was a program known as the ZEAT (Zonal Effort for Agricultural Transformation) which was developed to answer the president's call. The ZEAT was a part of the CAMP, and it divided the country into specific zones for agricultural development and mainly focused on specific crop varieties. After the development of the CAMP, the CAMP would take over the ZEAT. He urged the participants not to worry about the President's call but rather to concentrate on what had been presented and ask questions along that line.
- He pointed out that the President understood what was in the policy documents because it was indicated in the documents that by 2013, South Sudan would be food secure and able to export, which was not the case. He therefore had to extend one year and put the concerned Ministers to the task. He informed the participants that the issue was raised in the 2012 South Sudan International Agricultural Trade Fair and it raised a lot of concerns among the population.
- He expressed happiness over Mr Serizawa's presentation; it was one of the best and systematic presentations, with well organised questions and answers. He praised Mr Serizawa as one of the most experienced consultants and added that if he was to conduct a study; such questions asked by Mr Serizawa were the kind he would like to answer.
- Mr Onishi made explanation on the framework for facilitation of the State Focal Points at states. He informed the State Focal Points that they would be provided with 75SSP per day for collecting data requested by the CAMP for a maximum of 10 working days, totalling to 750SSP per person. And a daily allowance of 75SSP would be provided to the State Focal Points when they accompany TT teams for their field survey in their states, and an accommodation fee of 150SSP would be provided in case the survey includes overnight stay.
- Mr Duku from Central Equatoria asked if tools for data collection would be provided.
- Mr Nyuol asked if transport-commutation allowances would be provided.

- A participant requested that 30 minutes to be allocated after the meeting, to discuss the issues raised. Mr Pangech however referred to the CAMP values, among which included transparency and he urged the participants to raise their issues openly.
- Mr Joejoe responded that regarding the question of providing data collection tools, it would be arranged by sub-sectors. He informed the State Focal Points that they would be able to discuss within the sub-sectors and they would be provided with the tools and stationary.
- Regarding communication fee, Mr Onishi informed the State Focal Points that it is included in the facilitation allowance. In regard to transport to collect data in the field, he informed the focal persons to wait for the national TT members to arrive at the states, as they would be able to travel together as a team. Mr Onishi informed the State Focal Points that he would expect them to collect data within state capitals and he did not think it required transportation.
- Mr Pangech commented that it would not be good to call a person from counties to state capitals because the teams needed to interview the people on the ground.
- Mr Akim commented that money issues were always a problem. He recommended that all issues discussed to be documented. He pointed out that extra 30 minutes may be set to discuss the issues as requested by a participant, but the most important point was to document everything.
- Mr Nakanishi thanked Mr Akim's suggestion and informed the participants that there was not enough time left.
- Mr Atem Deng commented that the master plans needed to clarify emergency, short term and long term programmes, because in his area, there was a flood and immediately the water dried up and there was drought, thus what would be the short term plan?
- Mr Pangech responded that the team would not avoid short term programs but the Ministry of Disaster could address such cases raised by Mr Atem. He stressed the need for a comprehensive document and asked if the participants were contented with the presentations made so as to adopt them.
- One of the State Focal Points commented that the facilitation fee of 75SSP would not be enough for Northern Bahr el Gazal State, because transportation cost from NBG to Aweil is 50SSP, and the return trips would cost 100SSP.
- Mr Pangech clarified that 75SSP was not inclusive of transport.
- Mr Deng Deng commented that he had accepted all of the presentations except for the facilitation framework.
- Mr Pangech explained that due to austerity measures, the government could not fund the two processes and the JICA funds them. They also have limited budget. The teams tried their best to negotiate but that was what they could offer, and the participants had to appreciate it.
- Mr Achuil commented that in his area there was no internet and he did not know where to report and which means they would use for reporting (i.e. envelopes)?
- Mr Pangech responded that it was such an important question and the team would internalise it in administrative matters.
- Mr Jallab commented that 150SSP allocated for people who would be called from the counties would not be enough and in such cases, it should be taken into considerations.
- Mr Pangech responded that Mr Jallab's question was related to logistic issues and he shouldn't worry about it, the team would communicate to them.
- Another State Focal Point commented that communication and transport costs were not considered, and in case one needed to send something what would they do?

- Mr Pangech answered that the question was related to that asked by Achuil and it needed to be addressed administratively, otherwise the team would not expect the State Focal Points to go to the internet in case of exchange of documents/communication.
- One of the State Focal Points asked whether the CAMP team would provide training to the county officials.
- Mr Pangech responded that it was why the State Focal Points were called and if they knew that there was no one capable in the counties, they had to inform the CAMP team.
- Mr John Costa commented that the way NGOs did their assessments and their allowances in the state was different from the figures indicated. They could accept the rates of allowances indicated but other state officials might not accept them.
- Mr Pangech asked Mr John to give examples of NGOs that provided different rates. Mr John listed WFP, FAO among other NGOs. Mr Pangech informed the participants that JICA was not a UN agency and thus could not offer such high amounts of allowances. He further advised the state focal persons that they would be the responsible persons to facilitate the CAMP activities in the field and the allowances provided applied to them.
- One of the focal persons requested Mr Pangech to move onto the next agenda item and stop the issue of arguing over figures for the allowances. Mr Pangech requested the participants to adopt the presentations and they did.

9. Discussion on Field Survey Methodology and Arrangements by Each Sub-sector

- Mr Onishi informed the State Focal Points that CAMP process could not be done without their support and the team would like to collect data from the states. The data to be collected by the State Focal Points was explained based on the information request sheet handed out to them.
- A state focal person asked that if there was no data available at the state office regarding their budget procedures, would he leave the question unanswered. Mr Onishi responded that they would leave the question unanswered.
- Another state focal person asked whether he needs to fill in the form at the meeting. Mr Onishi answered that the request sheet would be filled in at states because the State Focal Points didn't have their own information at that moment of the meeting.
- Mr Akim requested Mr Onishi to include "Area under cultivation" on the information request sheet. Mr Onishi responded that he would modify the request sheet and include Mr Akim's request.
- Mr Nakanishi announced that he had allocated 10 minutes to each of the crop, livestock, forestry and institutional teams to discuss with each of the state focal point persons, and they should utilize that time.
- At 17:24 hours, the discussions ended and the Undersecretary for MARF entered the meeting hall for the closing session.

10. Wrap-up

- Mr Pangech welcomed the Undersecretary and reviewed to him what had happened in the meeting. He informed the Undersecretary that there were two Undersecretaries who opened the meeting in the morning and he was welcome to close. In the morning, the presentations on the objectives and process of the CAMP and the IDMP were given, and comments were made which indicated the way how the teams would work. He further informed him that in the house there were state focal point persons from all ten states but with poor gender representation. Then in the afternoon, the roles and expected responsibilities of the State Focal Points were presented as well as the overview of the field survey. Then the group was divided into sub-sector groups and discussions were made. And he emphasized that what comes next is the start of work. He added that the participants were very happy to hear that the Undersecretary of MARF had come to close the meeting, and he invited him to close.

11. Closing Remarks

- The Undersecretary thanked Mr Pangech for the brief introduction, and apologised for not to have made it in the morning because he had another commitment.
- He informed the participants that the CAMP was very important and was being designed by the two Ministries complementing each other. He pointed out that the majority of people were agriculturalists and they were in the states. That was why the state focal persons were invited. They depend mostly on crop and livestock, and to address the challenges, the team had to focus on those two areas, and that is the reason for developing the CAMP.
- He proceeded that if one went to the market, most of the goods were imported and if one didn't control their production, they would be in problem.
- He expressed his thanks to the government of Japan for developing the master plan, it was a real support, and that the attendance of each participant was to show that the success of the CAMP lied in their hands. With long sitting and responsibilities assigned, he mentioned that the success of the CAMP depended on everyone that participated. He urged the State Focal Points and every participant to go and rally in their places with the message that they were developing a master plan.
- He pointed out that South Sudan had resources, and as the late Dr John Garang had said, the citizens had to mobilise their natural resources and develop agriculture. When oil would be extracted, it would get finished and that was why the citizens had to develop agriculture because oil was a non-renewable resource.
- He emphasised the master plan development and informed the participants that resources were in the states, and had to be developed. He urged the teams to go and collect data, analyse, and come up with conclusions, so that at the end the nation will have something that will change the livelihoods of the people.
- He pointed out that so many projects had been developed but without achievements, but the way the CAMP project was designed was like it was for everyone and at the end, the government would achieve what it wants.
- He declared the meeting closed at about 17:42hours.

<END>

6. FIRST STAKEHOLDERS (SHS) MEETING OF CAMP AND IDMP, 26th MARCH 2013, JUBA BRIDGE HOTEL

The Republic of South Sudan (RSS)
Comprehensive Agriculture Master Plan (CAMP)
The Project for Irrigation Development Master Plan (IDMP)
 Prepared by IDMP Task Team (IDMP-TT)

Memorandum of 1st Stakeholder Meeting

Purpose	The 1 st Stakeholder (SH) Meeting of CAMP and IDMP
Date and Time	Tuesday 26 th March, 2013, 9:00-17:00
Venue	Juba Bridge Hotel
Agenda	1-Introduction to the Stakeholder Meeting 2-Presentation on the CAMP Progress 3-Presentation on the IDMP Progress 4-Methodology of Situation Analysis 5-Presentations by three subsectors-Institutional development, Crops and Animal Resources 6-Presentations by Two Subsectors-Forestry and Fisheries and IDMP Task Team
Participants	Please see the attached participant list
Note taker	Ywodo Andrew Oyer, Secretary of IDMP-TT
Handouts	Inception Reports of CAMP and IDMP, Copies of presentation materials

1. Introduction to the Stakeholder Meeting

1. The session was started by John Pangech, the leader of national CAMPT-TT, with warm welcome to the attendants. He mentioned that the purposes of this meeting were to explain progresses of CAMP and IDMP. He mentioned that there were attendants from all ten States.
2. Mr. Atsushi Hanatani, Chief Representative of JICA South Sudan Office, said that the two projects started last year and their processes have been reaching to next stages, and then he expressed gratitude to the Government of South Sudan, adding that the two teams of IDMP and CAMP have to work together to complete their tasks. He also mentioned JICA would continue the support and encouraged stakeholders to work hard for the benefit of the people in South Sudan.
3. Eng. Isaac Liabwel, Undersecretary of MWRI spoke on behalf of Minister of MWRI.
4. Hon. Martin Elia Lomuro, the Minister of MARF, thanked the Japanese experts and stakeholders from the States. He also mentioned that CAMP would become a dictionary for agriculture in South Sudan. In addition, he encouraged stakeholders to help experts. Regarding team work, he mentioned that the ministries related to CAMP and IDMP should work as one team for obtaining good conclusions.
5. Hon. Betty Achan Ogwaro, the Minister of MAFCRD, expressed her happiness to see the progress of CAMP. She emphasized working as one team was important. She encouraged the CAMP team to make the implementable Master Plan with a simple methodology. She concluded her remarks by saying that the President has been much interested in seeing the agriculture sector to be improved.

2. Presentation on the CAMP Progress

John Pangech, the leader of CAMP-TT, presented the Inception Report (IcR) of CAMP and he gave the outline including objectives of the CAMP process, the target areas, the implementing Ministries, the guiding principles, the values, the coordination mechanism, the methodology, the challenges and the limitation on the Master Plan formulation.

(Questions and Answers)

The questions and comments raised by the attendants were as followings;

1. Marti Deng from Warrap State asked how to cover remote areas. John Pangech answered that it would be covered by National staff.
2. The next question was related to JICA's security regulation with Japanese experts for visiting fields. Hon. Minister of MAFCRD said that she has not accepted JICA's regulation with difficulty for Japanese experts to go to fields since the formulation of master plan were a government priority.
3. Regarding the utilization of data, John Pangech said that they would settle the issue.
4. Another question from the representative of Action Against Hunger was about cooperation for the common purposes. John Pangech agreed that they would take data from Action Against Hunger.
5. Some attendants asked about time frame for collecting data in different States
6. Hon. Minister of MAFCRD pointed out that organizations and/or officials sometimes kept collected data with them without submitting and reporting to the government.

3. Presentation on the IDMP Progress

The presentation was done by Makuac Malek, the acting leader of national IDMP-TT. He gave a brief outline on IcR.

(Questions and Answers)

1. The head of FAO South Sudan inquired about how to deal with water use for livestock and small-scale irrigation development. She added that the movement of animals along the water resources potential areas should be taken into consideration in irrigation development. Hata, moderator of the session, replied that the Study will consider other water use than irrigation, i.e. human, livestock, industry and environmental maintenance by sub-basin level and those water demands will be subtracted from the available water supply so that the available water supply for irrigation can be defined by sub-basin level. Hata also assured that the Master Plan will include from micro-scale level to large-scale level.
2. Hon. Minister of MARF inquired about the challenges facing the irrigation sector. Regarding challenges, Makuac said that there are so many challenges facing them. Hata added that IDMP shares the same challenges with CAMP and they will cooperate with CAMP to tackle the challenges.
3. Hon. Minister of MAFCRD said that IDMP is not only for Irrigation but also for other sectors. She also said that progress of IDMP has done more than CAMP whereas CAMP Team need to

lead IDMP since IDMP is subsector of CAMP.

4. Fascaa Modinga mentioned missing points in the two presentations: a) how to link the master plans with universities and research institutions and b) how to relate them with Water Agreements. Regarding research centres, Makuac said that there is no research center in South Sudan. That is why RSS depends on other countries. As for Water agreements he said that they are not part of it. Hata added that the understanding of the Task Team is to study the irrigation potential from technical point of view in order to help decision makers to make decision.
5. One of participants mentioned involving famers as part of Water Users of Nile were important.
6. Martin from Warrap State said that his State experiencing changes that some rivers became seasonal. He asked that it occurs from environmental impacts or global changes.
7. Hon. Minister, MAFCRD said that some questions were not answerable because the Teams have still been in stage of Inception Report.
8. FAO advisor said that socio-economic perspective should be incorporated in the Study.
9. A participant commented that environmental aspects, e.g. sedimentation of channels, transformation of perennial river to seasonal river should be taken into consideration.
10. Emmanuel from JICA South Sudan commented that the study conducted by NBI for irrigation development potential should be well utilized.

4. Methodology of Situation Analysis

Toshifumi Serizawa gave summaries on overview of the situation analysis (Methodology and Work schedule).

5. Presentation by three subsectors-Institutional development, Crops and Animal Resources

5-1. Presentation on Institutional Development Sub-Sector

Olami, CAMP-TT gave summaries on Institutional Development Sub-sector.

5-2. Presentation on Crop Sub-Sector

Erneo, CAMP-TT gave a brief on this sector.

5-3. Presentation on the livestock Sub-Sector

Sara, CAMP-TT made a presentation on the live stock sub-sector.

6. Presentation by Two Subsectors-Forestry and Fisheries and IDMP Task Team

6-1. Presentation on Forestry Sub-Sector Situation Analysis

Bolan, CAMP-TT made a presentation on the situation of the forestry sub-sector.

6-2. Presentation on Fisheries Sub-Sector

Mr. Robert made a presentation on the fishery sub-sector.

Following are major comments given from the participants:

1. Rain-fed cultivation areas will also need supplemental irrigation considering the Climate

Change.

2. It needs to consider the dry season situation as well as flood season in Aweil irrigation scheme. As for Renk, what is required is renovation of the existing infrastructures.
3. Cross-sectoral aspects, e.g. linkage with forestry sector, should be taken into consideration.
4. Smallholder farmers who might be left out of the development of large irrigation scheme should also be paid attention.

6-3. Presentation on Organization Management Structures for Irrigation Schemes

Robert, CAMP-TT made a presentation on organization management structure.

Questions on five sub-sectors and Irrigation Schemes

No	Questions	Answers
1	How to improve local seed?	By encouraging farmers
2	What to be done in regard to crop losses?	This problem could be solved by providing enough awareness to farmers.
3	How to encourage local farmers to produce more?	The government should provide them with good quality of seeds and storages.

Other suggestions on five subsectors and Irrigation Schemes

1. Issues on agricultural trading between South Sudan and Uganda.
2. Government of South Sudan should depend on local seeds.
3. Farmers should attend in workshops to complement the lack of awareness to farmers.
4. Garbage into rivers is occurring environmental issues.

<END>

Participant list of the 1st SH meeting

Development Partners		
1	Atsushi Hanatani	JICA
2	Emmanuel Minari	JICA
3	Takanobu Nawashiro	JICA-Yei
4	Sue lautze	FAO
5	Jan Helson	FAO
6	Alemu M Gelbre	WFP
7	Marc Sauveur	WFP
8	Chris Nikoi	WFP
9	John Spilsbury	EU
10	Ines Wiedemann	GIZ
11	Justin M. Amos	SNV-Netherland
12	Megan Willis	USAID
13	Johannes Sperfechle	Jordan Embassy
14	Severin Kabakama	World Vision International
15	Dauda Koroma	Action Against Hunger
16	Gerald W. Jadgman	VSF-German
17	Dived Wani	VSF Belgium
18	Morris Surer	DFID South Sudan
19	Pasquale Moilinga	University of Juba
20	Joseph Chepkoreor	KCB
21	Zoran Djrod Jevic	SS Football Association
22	Idor Makanda	AGEA
23	Peter Kiheka	Equity Bank
24	Onyanga W. Bangfan	Equity bank
25	James T. Mathiang	Stanbiz Bank
26	Moris P. Juma	Agrolife LTD
27	Emmanuel Gumbin	ARD Tefra tech
28	Md. Nurul Islan	BRAC
29	Sabit Abdu	Radio Miraya
30	Geri Emmanuel	SSCCIA
31	David Hogltr	FARM Project
Ministry of Agriculture, Forestry, Cooperatives and Rural Development (MAFCRD)		
32	Mathew Gordon Udo	Undersecretary
33	John Pangech	Director for Planning
34	Erneo Balasio Tombe	Director of Mechanization
35	Joseph Akim Gordon	Deputy Director of Extension
36	Kenyi Bullen Baggu	Director for Agroforestry and Extension
37	Suzan F Gore	Assistant Inspector for Food Nutrition
38	Frazer Andrea	Community Development/Dean of Studies
39	Ezbon Lodu	Deputy Director
40	Noel Bangaza Cleopas	A/ Director
41	Justin Igu Eric	Conservator of Forestry
42	Flora Joseph Loki	Assistant Inspector of Mechanization
43	Innocent O Kitara	Assistant Researcher of Extension
44	Martin Lohere Jobwlo	KFTC/MAF
45	Clement Wani Modi	-
46	Marry Benjamin Lok	-
47	Loro George Leju	-
48	Francis Andrea	-
Ministry of Animal Resources and Fisheries (MARF)		
49	Makwei Malual Kaang	Undersecretary
50	William Olami	Acting DG/Director of Planning, Statistics and documentation
51	German Tom Lado	Laboratory Technician
52	Esther Kaku	A/inspector for planning
53	Nyajok Kulang	Veterinary officer
54	David Lual	Livestock officer
55	Samson Bringi	Inspector for Livestock
56	David Peter Mina	Assistant Researcher

57	Amal Mogga Sebit	Inspector for Fisheries and Statistics
58	Eva Ceaser	Inspector of Extension
59	Stanislaus Tombe	Inspector for Animal Production and Range Management
60	Suzana Gabriel	Inspector for Fisheries and Statistics
61	Louis Kayanja	-
62	Lewis K. Jaja	-
63	Antaony Ray Tumbra	-
64	Ann Felix Bango	-
65	Agustino Atillo	-
66	Sarafino Almos	-
67	Jacob M. Korok	-
Ministry of Water Resources and Irrigation (MWRI)		
68	Isaac Liabwel	Undersecretary
69	Ephraim Modi	Acting Director General of Irrigation and Drainage
70	Makuac Ador,	Assistant Director for Irrigation and Drainage
71	Andrew Yunda	Deputy Director of Planning
72	Philip John Akol	Assistant Inspector for dams and dikes
73	Wol Gordon Tong	Inspector for Planning and Programming
74	Jal Panom	Senior Inspector for Irrigation and Water Control
75	Simon Otoung	Deputy Director of Hydrology
76	Robert Peter Zakayo	Inspector of Hydrology
77	Chut Isaac Chol	Inspector for Water Resources Management
78	Malual Deng Mayol	Irrigation Specialist
79	Gai Simon Reath	Assistant Inspector for Hydrology
80	John Lew Thor	Inspector of M&E
State Focal Points		
81	Julius Duku Anania	Ministry of Agriculture and Forestry, CES
82	John Tombe Vincent	Ministry of Animal Resources and Fisheries, CES
83	George Alphons Wani	Water Resources and Irrigation, CES
84	Timateo Amanamoi	Ministry of Agriculture and Forestry, EES
85	Isaac Oduho Leuterio	Ministry of Animal Resources and Fisheries, EES
86	Nyika Charles Jacob	Water Management and Irrigation, EES
87	Atem DeGak Atem	Ministry of Animal Resources and Fisheries, Jonglei
88	Yohana Mayol Pach	MLF Livestock staff, Jonglei
89	Jackson Kwaje Laku	Department of Physical Infrastructure, Jonglei
90	Kerubino Dut John	Ministry of Cooperative and Rural Development, Lakes
91	Aggrey Gabriel Makuac	Ministry of Animal Resources and Fisheries, Lakes
92	John Chanyok Mayen	Irrigation (MOPI), Lakes
93	Deng Deng Bol	Ministry of Agriculture and Forestry, NBG
94	James Mou Chan	Ministry of Animal Resources and Fisheries, NBG
95	Picos Ariath Ngor	Ministry of Water and Rural Development, NBG
96	John Gatlel Wich	Ministry of Agriculture and Forestry, Unity
97	Angelo Thuok Buom	Ministry of Animal Resources and Fisheries, Unity
98	Polis Machar Majak	Ministry of Water Resources and Irrigation, Unity
99	Gano Wilson Akush	Ministry of Agriculture and Forestry, Upper Nile
100	Denis Tipo Arop	Ministry of Animal Resources and Fisheries, Upper Nile
101	Yak Stephen Lam	Ministry of Water Resources and Irrigation, Upper Nile
102	Achuil Kuch Chol	Ministry of Agriculture and Forestry, Warrap
103	Ibrahim Abdalla Deng	Ministry of Water Resources and Irrigation, Warrap
104	Martin Nyuol Deng	Ministry of Physical Infrastructure/Irrigation, Warrap
105	John Costa Senda	Ministry of Agriculture and Forestry, WBG
106	Alexander Upiou Angelo	Ministry of Animal Resources and Fisheries, WBG
107	Abaker Jallab Khadam	Department of Rural Water and Sanitation, WBG
108	Peter Uchalla	Ministry of Agriculture Cooperatives and Environment, WES
109	Clement Mkorondere	Ministry of Agriculture, Cooperatives and Environment, WES
JICA CAMP Task Team		
110	Satoko Emoto	Team Leader/Agricultural Policy
111	Yasuo Ohno	Agricultural Development/Rice Development Policy
112	Toshifumi Serizawa	Administrative and Financial Management/Forestry Development
113	Masafumi Nakanishi	Research/Training/Extension

114	Hironari Onishi	Administrative and Financial Management/M&E
115	Takao Inamori	Rural Development/Land Tenure/Rice Development Policy
116	Sarah Ossiya	Livestock Development
117	Dickens M. Chibeu	Animal Health Officer
118	Robert Lindley	Inland Fisheries Development
119	Yukie Machidori	M&E4/Project Administration 3
120	JoeJoe Wani Lemi	Researcher
121	Jenny Coghlan	Knowledge Management/IT Specialist
122	Samuel Nyika	Research Assistant
123	Ayo Peter Wani	Research Assistant
124	Baityo Sande	Secretary
JICA IDMP Task Team		
125	Kazumitsu Tsumura	Team Leader/Development Policy
126	Akihiko Hata	Deputy Team leader/Aid Program/Budget Preparation
127	Hitoshi Toku	Irrigation and Drainage
128	Akira Nakamura	Organization/Capacity Building/Training
129	Toru Nakagawa	Meteorology & hydrology
130	Hideki Ishikawa	Irrigation Facility (Supplement) /Cost Estimate
131	Koichi Akashi	Coordinator for Training
132	Ywodo Andrew Oyor	Secretary of IDMP-TT
Other Participants		
133	Mukasa Joseph	-
134	Logers Hamgto	-
135	Bidal Justin	-

7. THIRD TC (FIRST TC MEETING OF IDMP), 22nd APRIL 2013, NILE BEACH HOTEL, JUBA

**The Republic of South Sudan (RSS)
The Project for Irrigation Development Master Plan (IDMP)
Memorandums of the 1st Technical Committee (TC) meeting of IDMP**

Agenda	A. Opening Remarks B. Presentation and Discussion on the IDMP Inception Report C. Closing Remarks
Date and Time	Monday, 22th of April, 2013 (11:00 ó 13:00)
Venue	Nile Beach Hotel Hall no.3
Participants	See the attached participant list
Handouts	The Presentation Material of the 1 st TC meeting

A. Opening Remarks

1. Preliminaries

After welcoming the participants, Andrew Yunda, the moderator, outlined the agenda of the 1st TC meeting. He then asked participants to introduce themselves after which he invited the undersecretaries of both MWRI and MAFCRD to steer the session.

2. Introductory Remarks by Eng. Issac Liawel C. Yol, Undersecretary of MWRI

The undersecretary of MWRI justified IDMP by mentioning that irrigation is necessary because rainfall is either insufficient or unreliable in supporting agriculture. In this regard, irrigation needs to address the two components of agriculture (crops and animals) by involving relevant stakeholders.

He concluded his introductory remarks by encouraging all the TC members: MAFCRD, MWRI, MARF and other relevant ministries to work as one team and showing his application for the support of Japanese government.

3. Introductory Remarks by Prof Mathew Gordon Udo, Undersecretary of MAFCRD

The undersecretary of MAFCRD emphasized that IDMP was a sub-sector of CAMP and should therefore assume a broad planning approach that would include the use of not only surface water but also seasonal floods to support irrigation.

He concluded his remarks by highlighting the importance of irrigation for agriculture since rain is not dependable.

B. Presentation and Discussion on the IDMP Inception Report

1. Presentation on the Inception Report

Using a power-point format, Mr. Makuac, the acting team leader of IDMP RSS-TT, proceeded to present the Inception Report on behalf of IDMP Task Team. Starting with the background information, he covered the Project's objectives, scope of work and methodologies as well as two days meeting with östate focal pointsö and other stake holders. In conclusion, he outlined the key challenges facing IDMP and presented a plan of activities scheduled to be executed during phase 2 of the IDMP project.

2. Discussion on the contents of IDMP Inception Report

The participants expressed their appreciation of the depth and breadth of the presentation. However, they raised a number of issues and observations as outlined below:

1.1 Need for additional capacity for hydrometric monitoring

- A participant underlined the need to expand the current network of hydro-metric stations in order to improve the accuracy of water resources assessment. This was particularly important in areas where domestic and livestock water needs have been prioritized. In such areas, an expanded network of gauging stations would then assist in determining more correctly the amount of water available for irrigation.
- Simon Otoung, a member of IDMP RSS-TT, explained that IDMP Task Team had discussed and agreed to install three new hydrometric stations at locations to be agreed with the D.G for Water Resources Management.
- The co-team leader of IDMP further explained that although the ToR did not include installation of new hydrometric stations, the need for additional hydrometric stations in the country would be assessed and included in IDMP final report.

1.1 Capacity building

- Dr. Elkamil, the Head of the Department of Agricultural Engineering, University of Juba, noted that a realistic plan for building capacity of technical personnel should be done in cooperation with all the TC stakeholders. He gave the example of Juba University where the output of agricultural engineers was declining from 21, 17, 14 and 7 over the next four years.
- Mr. Alier suggested that the objectives in the ToR should be modified a little to include building human and physical resources capacity.
- Mr. Minari, Advisor to JICA projects, urged caution, since such a change could have considerable financial implications.

1.2 Drainage

- A participant noted that the issue of drainage was not covered in the presentation.
- In reply, Mr. Makuac explained that conventionally, drainage is always implied in irrigation planning.

1.3 Livestock water requirements

- Since a recent study has recommended establishment of seasonal migratory routes for livestock, a participant wondered how this would affect water availability for irrigation along the Nile and other river courses.
- In reply, Mr Andrew Yunda indicated IDMP TT members would liaise with MARF in order to determine how planned livestock migratory routes would affect irrigation potential.

1.4 Aspects of the IDMP process requiring serious attention during phase 2

- Mr. Minari, the advisor to JICA projects, highlighted some aspects that would need special attention during Phase 2 of the Project, as follows:

- Mapping of stakeholders who had an interest in IDMP
- Defining the scope of capacity building as well as identification of capacity gaps, in close consultation with CAMP and other stakeholders
- Formulating criteria for arriving at project models, in liaison with CAMP
- Advance Planning of and notification on field visits in order to allow sufficient time for JICA office to assess security risk and subsequently decide whether or not to authorize a field visit
- Determining IDMP expected impact on food security, GDP and household incomes at different time horizons

1.5 Water sources other than the Nile River

- The undersecretary of MAFCRD advised that assessment for irrigation water potential should be extended beyond River Nile and should include River Sobat, Bahar El Ghazel as well as lakes.
- A similar view was held by the undersecretary of MWRI and some participant who urged IDMP to include ground water, run-off and storage reservoirs.
- In this connection, Mr. Tsumura, IDMP Team leader, disclosed that a ground water specialist was scheduled to arrive in Juba from Japan that day. He, in consultation with MWRI, would then assess ground water resources for its potential in supporting irrigation. Finally, He reminded all the participants that the primary source of Irrigation water for IDMP is the surface water.

1.6 Feasibility Study level: Pre-Feasibility Study or Feasibility Study

- The Under-secretary, MWRI, expressed his expectation that an annex in the IDMP final report would contain priority projects with detailed feasibility studies, ready for implementation. There was some discussion regarding whether a semi-detailed or detailed feasibility study was implied in the TOR.
- In this connection, Ms. Yamada, JICA Project formulation advisor, suggested that the issue could be handled administratively between JICA and MWRI sometime later.

1.7 JICA's security measures

- Mr. Minari, the advisor to JICA projects, advised IDMP team to apply in advance for field surveys, since JICA is not in a position of forbidding every application.

C. Closing Remarks

The undersecretary of MWRI advised participants who might have any other outstanding issues or observations to communicate them in writing to the IDMP team through e-mail. He then closed the Technical Committee meeting and invited the attendants for lunch.

End

The Participants List of the 1st Technical Committee Meeting

Name	Position
MWRI	
Isaac Liabwel	Undersecretary
Alier Oka	DG WRM
Ephraim Modi	Act. D/G for Irrigation and Drainage
Makuac Ador	A/Director for Irrigation and Drainage
Andrew Yuonda	D/D for Planning
Simon Otoung	D/D for Hydrology
Thomas Jang	D/D for WRM
Isaiah Seme	Inspector of WIMS
John Lew	Inspector for M&E
Gai Simon	A/Inspector for Hydrology
MAFCRD	
Mathew Udo	Undersecretary
George Tadu	Researcher
MARF	
Anthony R. Tombura	DG, states & spc
Lewis K. Jaja	D/G
Augustino Atilio	Ag DG
James Guma Mark	D/D for Planning
Other Ministries and Related Institutions	
M. Lamo	The Ministry of Housing , D/G
Samuel Taoban	SSUWC DG, Administration and Finance
Mojwok Jgawi	MOT, Director
Dr. Elkamil	University of Juba, Head of Engineering Department
JICA South Sudan Office	
Sachi Yamada	Project formulation Advisor
Emmanuel Minari	Advisor to JICA
JICA CAMP-TT	
Toshifumi Serizawa	Forestry/Institutional Development
JICA IDMP-TT	
Kazumitsu Tsumura	Team leader/Development policy
Akihiko Hata	Co-team leader /Aid program /Budget preparation
Hitoshi Toku	Irrigation & Drainage
Akira Nakamura	Organization/Capacity Building /Training
John Kibunga Kimani	Irrigation institution /Operation and Maintenance (OM)
Hideki Ishikawa	Irrigation facility (Supplement) /Cost estimate
Koichi Aakashi	Coordinator for training

8. FOURTH TC (SECOND TC MEETING OF IDMP), 13th SEPTEMBER 2013, REGENCY HOTEL, JUBA

**The Republic of South Sudan (RSS)
The Project for Irrigation Development Master Plan (IDMP)
Memorandums of the 2nd Technical Committee (TC) meeting of IDMP**

Agenda	A. Opening Remarks B. Presentation and Discussion on the IDMP Progress Report 1 (PR1) C. Closing Remarks
Date and Time	Friday, 13 th of September, 2013 (10:00 ó 14:00)
Venue	Regency Hotel
Participants	See the attached participant list

A. Opening Remarks

The meeting started with a word of welcome to all by Andrew of IDMP RSS-TT, after that undersecretary of MEDIWR Eng. Isaac Liabwel was introduced to make opening remarks. He express his pleasure to see the Technical Committee meeting, after that he gave a chance to Dr. Udo undersecretary of MAFTARFCRD to say his remarks. He thanked JICA and RSS-Task Team (TT) counterparts for the job what they were handling with adding that we should look carefully to the presentation in order to enable us to implement it effectively.

B. Presentation and Discussion on the IDMP Progress Report 1 (PR1)

1- Eng. Jiben presented the IDMP PR1 with following steps:

A. Situation Analysis on:

1. Existing Irrigation Scheme
2. Irrigation Development Potential Assessment
3. Capacity Needs Assessment

B. Issues for Irrigation Development

C. Schedule

2- Question (Q) and Answer (A), and Suggestions (S) on IDMP PR1

1. (Q) Undersecretary of MEDIWR asked why Dikes in Aweil Irrigation Rice Scheme (AIRS) was not mentioned in the presentation.

(A) The answer came from Simon that: Dyke is one of the main structures in AIRS but it was damaged and need to be rehabilitated, and is included in the PR1.

2. (Q) Researcher from MAFTARFCRD asked why there was not much information about Dams.

(A) Simon mentioned that it was not easy to find data so that the government should make more efforts for that.

3. (Q) Deputy Director of Urban Water asked why groundwater was not included in the presentation.

- (A) Andrew answered it was included and also mentioned we are concentrating on surface water since usage of the groundwater is very expensive.
4. (S) Mr. John Kasnisio said that we should included climate change and EIA in the presentation.
5. (S) Dr. Kamal from University of Juba mentioned that the number of students in Department of Agricultural Engineering has been declining gradually since transferring to the University of Khartoum to Juba is not constant.
6. (S) Professor from University of Juba inquired for the model to be used for filling the missing rainfall data.
7. (S) Undersecretary of MEDIWR commented that information for small scale schemes is not enough, and he added that since small scale schemes would be high priority, they should be pointed out clearly and assessed in this study.
8. (Q) What is the impact of stoppage of Irrigation Schemes in Northern Upper Nile Irrigation Schemes (NUNIS)?
- (A) Erneo answered that it has direct impact to farmers and some of them migrated out from their farms.
9. (Q) Eng. Garang, Technical advisor of MEDIWR on irrigation system asked why the disputed areas were excluded from investigation.
- (A) The Chief Representative of JICA South Sudan Office explained JICA's position that since JICA has been assisting both governments of South Sudan and Sudan, he is waiting for answer from Ministry of Foreign Affairs in Japan regarding this matter with his understanding that the disputed areas were very sensitive.
10. (S) Adviser Garang of MEDIWR commented on transferring roles to farmers up to secondary level that it would be beyond their capacities; also he added that more study was required on Sudd wetland.
11. (S) Mr. Alier Bullen D.G for Water Resources Management talked about decision made by the country to join CFA. Also, he suggested that the study should make the implementation guideline that can be a part of water act.
12. (Q) Mr. Albert asked why water use for drinking is not included in the presentation.
- (A) Jiben answered that it would be considered in IDMP.
13. (Q) Director General for electricity asked how far IDMP Team that visited Renk has gone in study of using electricity in irrigation and what are the constraints?
14. (A) Answered that it has been attempted in (Brka el-Ajab), however, due to limitation of farmer capacities, it was not worked well by them.
15. (S) Dr. Yath commented about history of Jonglei Canal which implemented long time ago. During its construction, expansion of river water to the villages was challenges so that the local people practiced small irrigation scale. Then he added that it is very important to consider of investing on our human resources that has been already available in the country.
16. (S) Mojok from University of Juba commented regarding the role of his university that they

have trained two persons last times in cooperation with MEDWRI.

17. (S) Animal Resource Sector's member of CAMP Team commented that during the war, people were using rainfall water for cultivation and the time has come to educate people to use for irrigation.
18. (S) George from MAFTARFCRD asked reasons why we do not plan harvest water from hill and mountains instead of depending on rivers only.

Brief Remarks from Chief Representative of JICA South Sudan Office

The chief representative of JICA Office in South Sudan said brief words he thanked both IDMP and CAMP for their efforts.

C. Closing Remarks

Closing remarks was done by Undersecretary of MEDIWR Eng. Isaac Liabwel by saying "IDMP itself will be the Irrigation Development Strategy".

<END>

The Participant List of the 2nd Technical Committee Meeting (13/09/2013)

Name	Organization	Position
Prof. Mathew Udo	MAFTARFCRD	Undersecretary
Eng. Isaac Liabewl	MEDIWR	Undersecretary
Atem Gaul	MAFTARFCRD	D.G of Plant
Rev. Oneil Yosia	MAFTARFCRD	D.G
Lewis Jaja	MAFTARFCRD	D.G/ Research
Dr. Agol M. Kwai	MAFTARFCRD	D.G/Investment and marketing
Victor Silvawo	MAFTARFCRD	Ag/DG Research
Augustino Atilio	MAFTARFCRD	Ag DG Extension and PD
Anthony Tomura	MAFTARFCRD	D.G
Dr. Loro Leju	MAFTARFCRD	D.G/ Agriculture
Angelo Olumy	MAF/T/ARF/MID	Director
Vector Mabrouk	MAFTARFCRD	Principle
Patric Taban	MAFTARFCRD	Agro-forestry Director
Dr. Yath Awan	MEDIWR	D.G
Alier Bullen	MEDIWR	D.G
Albert E	MEDIWR	Director RWSS
Makal Ter Goal	MEDIWR	Director/ RWSS
Garang Yowg	MEDIWR	A.D for Irrigation and Drainage
Tom Remis	MEDIWR	D.G
Charles Loperio	MEDIWR	Ass. Director for water Supply
Eng. Wani Kanyi	MOTRD	D.G Cooperate
John O. Kanisio	RSSFSC	Secretary general
Gyvaira Wani	Juba University	Associate Professor /Civil Engineering
Dr. Elkamil	Juba University	Head department of Agri. Engineering
Atsushi Hanatani	JICA	Chief Representative
John Pangech	CAMP TT	Rss-TT. Leader
Joejoe Wani	CAMP.TT	Member
Kuaji Bullen	CAMP.TT	Member
Toshifumi Serizawa	CAMP.TT	JICA-TT Leader
Yasuo Ohno	CAMP.TT	Member
Hionari Onishioh	CAMP.TT	Member
Jiben Jeremiah	MEDIWR	Dg. Irrigation and Drainage
Andrew Yunda	MEDIWR	Co. Team Leader
Simon Otoung	MEDIWR	Deputy Director for Planning and Programming
Makuac Ador	IDMP.TT	A/Director
Robert Zakayo	MEDIWR	Inspector for Hydrology
Chut Isaac	MEDIWR	Inspector for Water Resources Management
Pagan John	IDMP TT	Inspector for Irrigation
Wol Gordon	IDMP.TT	Inspector for planning
Gai Simon	MEDIWR	Assistant Inspector for Hydrology
Malual Deng	MEDIWR	Senior Inspector for Irrigation
Philip John Akol	MEDIWR	Assistant Inspector for Hafirs, Dams and Dikes
Doki Lako Bushuk	MEDIWR	Assistant Inspector for Hafirs, Dams and Dikes
Erneo Bakasio	MAFTARCRD	Director for Agricultural Mechanization
Moses Mogga	MAFTARCRD	Inspector for Mechanization
Kazumitsu TSUMURA	IDMP.TT	Team Leader
Akhiko Hata	IDMP.TT	Co-team leader /Aid program /Budget preparation
Hitoshi Toku	IDMP.TT	Irrigation and Drianage
Akira NAKAMURA	IDMP.TT	Organization /Capacity building /Training
Shigeru Otsuki	IDMP.TT	Irrigation Facility
Yuichi MATSUMOTO	IDMP.TT	Water Resources Potential
Kenichi Kuramoto	IDMP.TT	Environment
Koichi Akashi	IDMP.TT	Coordinator for Training
Ywdo Andrew Oyor	IDMP	Secretary

9. SECOND SFPS AND TTS MEETING (IDMP), 16th - 17th SEPTEMBER 2013, JUBA BRIDGE HOTEL

**STATE FOCAL POINTS (SFP)
The Republic of South Sudan (RSS)
The Project for Irrigation Development Master Plan (IDMP)
Memorandums of the 2nd State Focal Point**

Agenda	1. Opening Remarks 2. IDMP Presentation for Progress Report-1 (PR1) 3. Question and Answer Session 4. Information correction and discussion for future irrigation schemes 5. Closing Remarks
Date and Time	16-17 of September, 2013
Venue	Juba Bridge Hotel
Participants	See the attached participant list

1. Opening Remarks

Eng. Jiben declared opening of State Focal Point (SFP) meeting.

2. IDMP Presentation for Progress Report-1 (PR1)

Eng. Jiben presented Progress Report (1) in which she went through following outlines:

a. Situation Analysis on:

1. Existing Irrigation Schemes
2. Irrigation Development Potential Assessment
3. Capacity Needs Assessment

b. Issues for Irrigation Development

c. Schedule

3. Question and Answer Session

Many questions and comments emerged after presentation.

1. (Q) David from MAFTARCRD asked why water for livestock is not mentioned in the presentation?

(A) Erneo said that it is mentioned in the PR1.
2. (Q) Joseph Atem from Junglei state asked which authority AIRS belongs either national or state?

(A) Deng Deng from NBG State said that the AIRS operated under national government authority according to the new policy. Also, Deng said that the correct location of AIRS is in east of Aweil County.
3. One of the SFPs, Regarding tractor in AIRS; One of the challenges facing the scheme is

shortage of tractors.

(A) Regarding tractors Erneo said that the problem with it is not shortage of tractor but lack of spare parts. Most of tractor provided to AIRS were designed without consideration of conditions of Aweil such climate, soil and so on.

4. Joejoe asked about the month nominates from Sudan start moving into South Sudan.

(Q) Jackson from Jonglei asked how to control flood in Jonglei state?

(A) Simon answered that flood warning system by Installation of river gauging measurement stations is one of the solutions.

(A) Regarding flood control Makuac said that the ministry has a planning for that and it will be included in the future.

5. (Q) Mr.Yohana from Gunglei State asked what is the meaning of Umm Ruwaba shallow?

(A) Philip answered that this term came as a classification for Sudd Basin depending on its depth.

6. (Q) Tuna from WES said that small scale schemes are not mentioned in the presentation.

(Q) Do you have strategic framework for small scale Irrigation?

(A) Makuac said that since small scale scheme is included in the report, it is not mentioned in the presentation.

7. (S) What does the presenter mean by dry season? It should be clearly mentioned.

8. (Q) Joseph from CAMP asked why IDMP Team did not visit Jebel Lado scheme?

(A) Andrew mentioned that many sites were visited in ten states and regarding Jebel Lado he said that it depends on rainfall, not for irrigation scheme.

9. (Q) Atem from Jonglei why IDMP's task is formulating a strategy only for irrigated agriculture and what about Jongei canal?

(A) Andrew said that IDMP is working on Irrigation Development Master Plan.

The other questions asked by the participants are as follows:

10. Justin from CAMP asked why no trees were planted in irrigated areas of AIRS.

11. Nyka from EES asked how far IDMP formulated strategic plan?

12. Bullen from MAFTARFCRD asked about Rehabilitation plan of small irrigation scheme

13. Martin from WBGs asked what the requirements for strengthening state irrigation department are.

14. Deng Deng from NBG asked about the capacity of canals of AIRS

4. Information correction and discussion for future irrigation schemes

Hata distributed sheets to be filled by State Focal Point members, the sheets concerned Proposed Irrigation Schemes in ten states and was collected from the 6 SFP members. Remaining and updated ones for 10 states will be collected later on.

5. Closing Remarks

Undersecretary of MEDIWR closed the SFP meeting.

<END>

The Participants List of the 2nd SFP Meeting
(Date: 16th and 17th of September, 2013 Place: Juba Bridge Hotel)

Name	Organization/State	Position
Chair Members:		
Isaac Liabwel C. Yol	MEDIWR	Undersecretary
State Focal Points:		
Julius Duku Anania	CES	SFP of Agriculture
John Tombe Vincent	CES	SFP of Animal Resources
George Alphons Wani	CES	SFP of Water/Irrigation
Taban James	EES	SFP of Agriculture (Acting)
Isaac Oduho Lauterio	EES	SFP of Animal Resources
Nyika Charles Jacob	EES	SFP of Water/Irrigation
Atem De Gak Atem	JS	D.G for Agriculture SFP
Yohana Mayol Pach	JS	SFP of Animal Resources
Jackson Kwaje Laku	JS	SFP of Water/Irrigation
Kerubino Dut John	LS	SFP of Agriculture
Gabriel Makuac Aggrey	LS	SFP of Animal Resources
John Chanyok Mayan	LS	SFP of Water/Irrigation
Deng Deng Bol	NBG	SFP of Agriculture
James chan Mau	NBG	SFP of Animal Resources
Picos Ariath Ngor	NBG	SFP of Water/Irrigation
John Gatbel Wich	US	SFP of Agriculture
Angelo Thuok Buom	US	SFP of Animal Resources
James Chuol Jock	US	SFP of Water/Irrigation
Thowkuc Dak	UNS	SFP of Agriculture (Acting)
Denis Tipo Arop	UNS	SFP of Animal Resources
Yak Stephen Lam	UNS	SFP of Water/Irrigation
Achuil Kuch Chol	WS	SFP of Agriculture
Ibrahim Abdalla Deng	WS	SFP of Animal Resources
Martin Nyoul Deng	WS	SFP of Water/Irrigation
John kamilo Zwibier	WBG	SFP of Agriculture (Acting)
Abaker Jallab Khadam	WBG	SFP of Water/Irrigation
Clement F. Mokorondere	WES	SFP of Agriculture
Peter Uchalla	WES	SFP of Animal Resources
Tuna Francis	WES	SFP of Water/Irrigation
CAMP and IDMP:		
John Pangech	MAFTARFCRD	CAMP TT Leader/ Institutional Development Subsector
Frazer Andrea	MAFTARFCRD	CAMP TT member/Livestock Subsector
Erneo Balasio Peter	MAFTARFCRD	CAMP TT member/Crop Subsector Leader/ IDMP TT member
Noel Bangaga Claspas	MAFTARFCRD	CAMP TT member/Forestry Subsector
Esbon Ladu Abuto	MAFTARFCRD	CAMP TT member/Forestry Subsector
Justin Igu Eric	MAFTARFCRD	CAMP TT member/Forestry Subsector
Suzan Fanduesio Gore	MAFTARFCRD	CAMP TT member/Crop Subsector
Clement Wani	MAFTARFCRD	CAMP TT member/Crop Subsector
Flora Joseph Loki	MAFTARFCRD	CAMP TT member/Crop Subsector
David peter	MAFTARFCRD	CAMP TT member/Fisheries Subsector
Amal Mogga Sabit	MAFTARFCRD	CAMP TT member/Fisheries Subsector
Suzana Gabriel	MAFTARFCRD	CAMP TT member/Fisheries Subsector
Eva Ceaser	MAFTARFCRD	CAMP TT member/Livestock Subsector
German Tom Lado	MAFTARFCRD	CAMP TT member/Livestock Subsector
Esther Kaku henery	MAFTARFCRD	CAMP TT member/Fisheries Subsector
David Lawrence Lual	MAFTARFCRD	CAMP TT member/Livestock Subsector

Samson Brind Francis	MAFTARFCRD	CAMP TT member/Livestock Subsector
Taban Tereka	MAFTARFCRD	CAMP TT member/Livestock Subsector
John Iew Tour	MEDIWR	CAMP TT member/Institutional Development Subsector
Jiben Jeremiah	MEDIWR	IDMP TT member/CAMP TT member
Andrew Yunda	MEDIWR	IDMP TT member/CAMP TT member
Simon Otoung Awijak	MEDIWR	IDMP TT member
Deng Santino	MEDIWR	IDMP TT member
Makuac Ador Malek	MEDIWR	IDMP TT member
Jal Panom Kuacjath Thiec	MEDIWR	IDMP TT member
Robert Peter Zakayo Galla	MEDIWR	IDMP TT member
Chut Isaac Chol	MEDIWR	IDMP TT member
Pagan John Okwach	MEDIWR	IDMP TT member
Wol Gordon Tong	MEDIWR	IDMP TT member
Malual Deng	MEDIWR	IDMP TT member
Gai Simon Reath	MEDIWR	IDMP TT member
Philip John Akol	MEDIWR	IDMP TT member
Doki Lako Busuk	MEDIWR	IDMP TT member
Moses Mogga Mikaya	MAFTARFCRD	IDMP TT member
Toshifumi SERIZAWA	CAMP TT	Administrative and Financial Management/Forestry Development
Hironari Onishi	CAMP TT	Administrative and Financial Management/M&E
Yasuo OHNO	CAMP TT	Agricultural Development/Rice Development Policy
Sarah OSSIYA	CAMP TT	Livestock Development
Robert Lindley	CAMP TT	Inland Fisheries Development
Masafumi NAKANISHI	CAMP TT	Research/Training/Extension
Koji ISHIKAWA	CAMP TT	TT Value Chain/Agricultural Finance
Keiju Motegi	CAMP TT	M&E/Administration
Ayo Peter Wani	CAMP TT	Ass. Researcher
Joejoe Wani	CAMP TT	
Kuaji Bullen Baggu	CAMP TT	
Baityo Sande	CAMP TT	
Jenny Cocha	CAMP TT	
Kazumitsu TSUMURA	IDMP TT	Team leader /Development policy
Akihiko HATA	IDMP TT	Co-team Leader / Aid Program / Budget Preparation
Hitoshi TOKU	IDMP TT	Irrigation and Drainage
Akira NAKAMURA	IDMP TT	Organization /Capacity building /Training
Kenichi KURAMOTO	IDMP TT	Environmental and Social Consideration
Koichi AKASHI	IDMP TT	Coordinator for training
Ywod Andrew Oyor	IDMP TT	Secretary

10. THIRD SHS MEETING (IDMP), 18th SEPTEMBER 2013, JUBA BRIDGE HOTEL

**STAKEHOLDER (SH) MEETINGS
The Republic of South Sudan (RSS)
The Project for Irrigation Development Master Plan (IDMP)
Memorandums of 3rd Stakeholder Meetings**

Agenda	1. Opening Remarks 2. IDMP Presentation for Progress Report-1 (PR1) 3. Questions and Answer Session 4. Closing Remarks
Date and Time	18th of September, 2013
Venue	Juba Bridge Hotel
Participants	See the attached participant list

1. Opening Remarks

The meeting started with remarks from Chief Representative of JICA South Sudan Office. Then Eng. Isaac undersecretary of MEDIWR followed by Jadin undersecretary of MAFTARFCRD and Ambassador Charles Manyang opened the Stakeholder meeting.

2. IDMP Presentation for Progress Report-1 (PR1)

Eng. Jiben presented progress of IDMP.

3. Questions and Answer Session

Only one suggestion was made.

1. One of Participant commented that it is better to concentrate on findings the challenges found during the study.

4. Closing Remarks

Eng. Isaac made closing remarks

<END>

The Participants List Of the 2nd Stakeholder Meeting
(Date: 18th of September, 2013 Place: Juba Bridge Hotel)

Name	Organization/State	Position
Chair Members:		
Isaac Liabwel C. Yol	MEDIWR	Undersecretary
Charles Manyang	MFA&IC	Undersecretary
Development Partners, Private Companies or Media:		
Atoshi Hanatani	JICA	JICA Representative
Emmanuel Minari	JICA	Advisor
Takanobu NAWASHIRO	JICA/Yei	Agriculturist
Sue Lautze	FAO	
Dace Moeas	FAO	
Dalmar Ainashe	FAO	
Severino Opio	FAO/ZEAT	
Martin Kabaluopa	WFP	
Charles Yoere	World Bank	
Paolo Girlando	EU	
Jurgen Koch	GIZ,FSAD	Project Manager
Jurgen Koch	GIZ,FSAD	Project Manager
Nancy Belhocine	Canadian Embassy	
Pietvan Ommerer	SNV	Country Director
Maruti John	NPA	
Peter Major Ador	NPA RO	
Emmanuel Lasuba Lita	VSF-Belgium	
Michael Otto	VSF.Germany	
Nqoble Nlube	World Vision	
Christine Abina	DCA	Program Officer
Thedras	Intermon Oxfam	
Laura Ehisama	FARM Africa	
Opira Kizito	FARM Africa	
David Hughes	FARM	Chief of party
Pitia Ben Wani	CoopBank	Cooperating desk
Maina Mudirangu	Coop Bank SS	
Mary Achini	Cooperative Bank of SS	
Pual Makwai	Agricultural Bank	
Morris Pliy Tuma	Agroliik LTD	
Samson Lomoro	Agrlife Co.LTD	
Ware Anru	Country Seed Co.LMT	
Suzan Flixosman	SOGORKVFT/Drug Store	
Peter Scoyt	Lonaero South Sudan	
Edward Ugo Bassa	Tombura Bee Keeping	
Batilul musa Ahmed	Rajaf Poultry Farm SS	
Anthony Tabia Tukube	YARC	Director
Dr. Newton Ochanda	AGRA	
John Garang Dut	GSTU	Deputy Chairman
Simon Iorally	NFG	
Ajiga Habib	BRAC	
Andrew Noah Kateu	C/I SSADP/MS/Plan	
Ambrose Lomin Pitia	Lojury Atagro.Fary	

Shahidur Rashid	IFPRI	
James Walla	TETRA TECH ARD	
John Taban Jacob	KFTC	
Dara Elishs	UMCOR	
Elizabeth A. Lawrence	Joitor DEERE	Administration Manager
Dr. Legesse Kennenni	Ambolopi Integreted Rural Development Group	
Rose John	CTV	
Estella Kalek	CTV	
Jemes Deng	SSTV	
Poth Johnson Matur	SSTV	Reporter
Jemes Deng	SSTV	
Moses Michael Legge	Eye Radio	
Emmanuel Data	The New Nation	
Kandiga Jaelay	Citizen Newspaper	
Hatima Juba	Juba monitor	
National Ministries or Other national Institutions:		
Eirino Oketayot	MAFTARFCRD	
Dr. Agol Malak Kwai	MAFTARFCRD	
Nugeht Dob	MAFTARFCRD	
Jaden Torgum	MAFTARFCRD	
Atem Garang	MAFTANFCORD	
Philip A. Boldit	MAFTARFCRD	
Jabir Ezzdin Jabir	MAFTARFCRD	
Silvano Sapana	MAFTARFCRD	
Ephraim Modi	MEDIWR	
Augustino Yohanes	MEDIWR	
Garang Yong Deng	MEDIWR	
AMB.Akwoch D. Deng	MFA&IC	
Aban Akwtker Juknyal	Ministry of Environment	
Roda Achol Joseph	M/Housing	
Angelo Beda	Council of States	
Dr. James Thuk	Council of States	
Dr. Malok Malok	SSBF	
Butrus Apollo	SS Land Commission	
Mike Andruga	Catholic University of South Sudan	
Beda Angelo	Juba University	Student
State Focal Points:		
Julius Duku Anania	CES	SFP of Agriculture
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Deng Deng Bol	NBG	SFP of Agriculture

James chan Mau	NBG	SFP of Animal Resources
Picos Ariath Ngor	NBG	SFP of Water/Irrigation
John Gatbel Wich	US	SFP of Agriculture
Angelo Thuok Buom	US	SFP of Animal Resources
James Chuol Jock	US	SFP of Water/Irrigation
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Clement F. Mokorondere	WES	SFP of Agriculture
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CAMP and IDMP:		
John Pangech	MAFTARFCRD	CAMP TT Leader/ Institutional Development Subsector
Frazer Andrea	MAFTARFCRD	CAMP TT member/Livestock Subsector
Erneo Balasio Peter	MAFTARFCRD	CAMP TT member/Crop Subsector Leader/ IDMP TT member
Noel Bangaga Claspas	MAFTARFCRD	CAMP TT member/Forestry Subsector
Esbon Ladu Abuto	MAFTARFCRD	CAMP TT member/Forestry Subsector
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Suzan Fanduesio Gore	MAFTARFCRD	CAMP TT member/Crop Subsector
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Flora Joseph Loki	MAFTARFCRD	CAMP TT member/Crop Subsector
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Gai Simon Reath	MEDIWR	IDMP TT member
Philip John Akol	MEDIWR	IDMP TT member
Doki Lako Busuk	MEDIWR	IDMP TT member

Moses Mogga Mikaya	MAFTARFCRD	IDMP TT member
Toshifumi SERIZAWA	CAMP TT	Administrative and Financial Management/Forestry Development
Hironari Onishi	CAMP TT	Administrative and Financial Management/M&E
Yasuo OHNO	CAMP TT	Agricultural Development/Rice Development Policy
Sarah OSSIYA	CAMP TT	Livestock Development
Robert Lindley	CAMP TT	Inland Fisheries Development
Masafumi NAKANISHI	CAMP TT	Research/Training/Extension
Koji ISHIKAWA	CAMP TT	TT Value Chain/Agricultural Finance
Keiju Motegi	CAMP TT	M&E/Administration
Ayo Peter Wani	CAMP TT	Ass. Researcher
Joejoe Wani	CAMP TT	
Kuaji Bullen Baggu	CAMP TT	
Baityo Sande	CAMP TT	
Jenny Cocha	CAMP TT	
Agmenathee jouan	CAMP TT	
Wassua peter	CAMP TT	
Remic. Ronald	CAMP TT	
Samson bring francis	CAMP TT	
Lagu Joseph	CAMP TT	
Kazumitsu TSUMURA	IDMP TT	Team leader /Development policy
Akihiko HATA	IDMP TT	Co-team Leader / Aid Program / Budget Preparation
Hitoshi TOKU	IDMP TT	Irrigation and Drainage
Akira NAKAMURA	IDMP TT	Organization /Capacity building /Training
Yuichi MATSUMOTO	IDMP TT	Water Resources Potential
Shigeru Otsuki	IDMP TT	Irrigation Facility / Cost Estimate (Main)
Kenichi KURAMOTO	IDMP TT	Environmental and Social Consideration
Koichi AKASHI	IDMP TT	Coordinator for training
Ywod Andrew Oyor	IDMP TT	Secretary

**11. THIRD SFPS AND TTS MEETING (IDMP FIRST TECHNICAL SEMINAR), 19th
SEPTEMBER 2013, JUBA BRIDGE HOTEL**

**The Republic of South Sudan (RSS)
Ministry of Water Resources and Irrigation (MWRI)
The Project for Irrigation Development Master Plan (IDMP)**

Prepared by Ywodo IDMP RSS-TT

Memorandum of the Technical Seminar for State Focal Points (SFP)

Purpose	Technical Seminar (TS) for SFP
Date and Time	19th of September, 2013
Venue	Juba Bridge Hotel.
Participants	

1. Opening Remarks

Opening Remarks was said by Eng. Isaac Liabwel Undersecretary of MEDIWR

2. Seminar no. 1: Help for Catubig Agricultural Advancement Projects (HCAAP)

In the presentation, Toku explained HCAAP which was integrated rural development project implemented by the province of Northern Samar in Republic of the Philippines, Supported by Government of Japan.

Questions and Comments

S1.1- Anderw commented that irrigation is not only for the areas with no rainfall it is also applicable for the areas with high rainfall as example of Philippines.

Answered by Toku: Re. Irrigation in wet climate area

Previously, most of farmers in the Project area cultivated rice once a year only in rainy season. However, farmers can cultivate even in dry season after the development of irrigation facilities because river water can be utilized as supplemental irrigation water instead of rainwater.

S1.2- Martian, SFP from Warrap, commented that area with heavy rain like Philippines, what the type of soil is and what is the measure against erosion and sediment.

Answered by Toku: Re.Erosion and sedimentation of earth canal

Earth canal should be in good condition by periodical and proper maintenance.

At the same time, the design velocity of canal should be decided in consideration of the allowable maximum and minimum velocity in order to avoid dysfunction of canal due to erosion and sedimentation. According to "Engineering Manual for Irrigation & Drainage" Canal Works prepared by the Ministry of Agriculture and Forestry and Fisheries of Japan, the maximum allowable velocity of canal against erosion shall follow the values shown in below table in accordance with types and materials of canal surfacing:

Table Maximum Allowable Velocity

Types & Materials	FlowVelocity (m/sec)	Types & Materials	FlowVelocity (m/sec)
Sandy soil	0.45	Thick concrete (approx. 18 cm)	3.00
Sandy soil	0.60	Thin concrete (approx. 10 cm)	1.50
Loam	0.70	Asphalt	1.00
Clayey loam	0.90	Hollow block masonry (Buttress less than 30 cm)	1.50
Clay	1.00	Hollow block masonry (Buttress more than 30 cm)	2.00
Sandy clay	1.20	Block masonry with concrete filled	2.50
Soft rock	2.00	Reinforced concrete pipe	3.00
Semi-hard rock	2.50	Steel pipe, ductile cast iron pipe	5.00
Hard rock	3.00	Petrochemical pipe (polyvinyl chlorid pipe, reinforced plastic composite tube)	5.00
		Reinforced concrete secondary puroduct canale (excluding fence culvert)	3.00

In case of HCAAP, the maximum velocity should be less than 0.70 m/sec because material of canal is categorized as "Loam".

On the other hand, "Engineering Manual" shows the minimum allowable velocity of canal against sedimentation as shown in below table:

Table Minimum Allowable Velocity

Conition of Canal	FlowVelocity (m/sec)
Canal where concerns regarding sedimentation of floating sand and soil	0.45 – 0.90

In case of HCAAP, the minimum allowable velocity should be between 0.45 and 0.90 m/sec.

Therefore, design velocity of canal of HCAAP was aimed at 0.5 m/sec in consideration of the maximum and minimum allowable velocity and decided through hydraulic study.

S1.3-John Pengach asked if the case of Philippines is applicable for the same areas in south Sudan like green belts and River Yei.

Answered by Toku: Re. Irrigation at green belts and River Yei

Concept of HCAAP as supplemental irrigation system can be applied in South Sudan, especially in green belt zone.

S1.4- Kabojei commented that the issue of using fertilizers is not recommendable for the case of South Sudan.

Answered by Toku: Re. Fertilizers

In HCAAP area, amount of fertilizer and pesticide has been limited in accordance with the guidance by the Department of Agriculture of the Philippines. In addition, irrigation and drainage canals are arranged independently. Therefore, negative impact to the environment by fertilizer and pesticide, such as water contamination, human damages, etc. has never been reported so far.

S1.5- Robert asked what the topography of the study area is, what the elevation is and which material is used for construction of canals and roads and is there drainage canal.

Answered by Toku: Re. Topography and Geology of the Project Area

Catubig valley is a relatively flat terrain covered with forest almost half of the area. Catubig valley has an average elevation of 5 -10 meters and is surrounded by low mountains with an elevation of around 100 ó 150 meters.

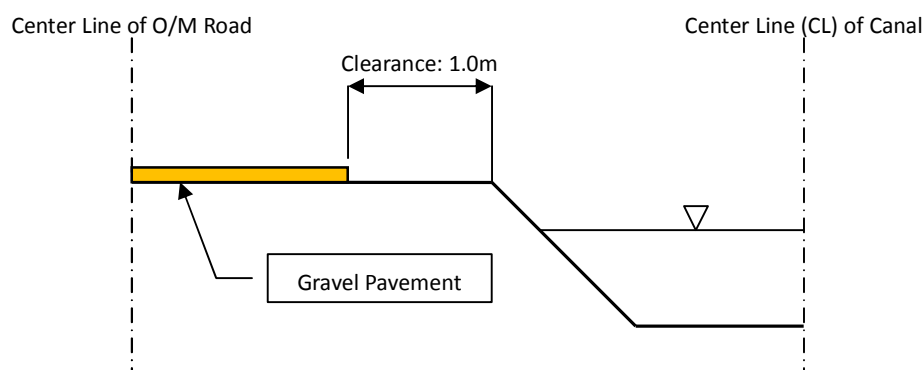
Foundation bedrock is coral limestone, and is covered in alluvium consisting of silt and clay.

Answered by Toku: Re. Materials of Canal

Excavated soil was mainly used as embankment material for irrigation and drainage canals.

Answered by Toku: Re. Clearance between O/M Road and Canal

In order to avoid damages on O/M road due to canal erosion, 1 meter of clearance was set up between O/M road and canal and as shown in below figure.



S1.6- Jojo asked what the incentive for reduction of Schistosomiasis is.

Answer) Re: Incentive for reduction of Schistosomiasis

Schistosomiasis (snail fever) is one of the parasite diseases prevails in the Philippines, and prevalence rate in the Project area reaches 2 ó 10 % more than double of national average. The infected patients show symptoms of skin inflammation, fever, run off and loss of willingness to work, and in the serious case, the infected patients fall into liver inflammation and bleeding in the brain. Therefore, the reduction of schistosomiasis can keep the willingness to work of farmers and avoid the shortage of manpower.

S1.7- Thomas Jang asked if rain water is use for the other activities and how irrigation canals near residential areas affect the people.

Answered by Toku: Re. Rainwater Use

Rainwater can be utilized as source of rural water supply system as well as spring.

Answered by Toku: Re. Accident in and out of irrigation facilities

The following methods can be considered as the countermeasures against water accident in and around irrigation facilities:

- 1) Canal alignment/route shall be selected in remote area,
- 2) Embedded type canal, such as pipeline and/or box culvert, shall be adopted instead of open type canal,
- 3) Safety facilities, such as fence/barrier and caution board, shall be installed along canals, and
- 4) Safety education residents living in the vicinity of irrigation facilities, especially for children, shall be carried out.

In case of HCAAP, only installation of safety fence and caution board around major irrigation facilities, such as head works, main intake, bifurcation, road crossing, etc., and safety education to residents were carried out because of the following reasons:

- 1) We have no other choice but to select canal alignment in both remote and residential area because command/beneficial area is very near close to residential area, and
- 2) Embedded type canal is extremely expensive than open canal.

Any accidents in and around irrigation facilities have never been reported so far.

S1.8- Abakhar Jalab asked if there is any problem with irrigation activities since turbidity during the rainy season looks high. He continued PH looked high for people to drink the river water.

Answered by Toku: Re. Turbidity of water

Turbidity of water during rainfall is serious problem for domestic use, but it is not serious for irrigation use.

Answered by Toku: Re. Quality of river water

River water can be utilized as irrigation water because it shows alkaline pH 7-8 and the toxic items for an agricultural use is not detected. However, it cannot be utilized as drinking water because pathogenic bacteria and microbe are detected.

S1.9-Jiben gave comment on gravity irrigation which the pumps are not used for. She mentioned that this is good thing because of the problem of operation and maintenance.

Answered by Toku: Re. Irrigation Method

Gravity irrigation is an irrigation system which can convey agricultural water by gravity (potential energy) only without pumping up of water by artificial force, such as electric power, animal power, etc. Therefore, operation and maintenance cost is generally lower than pump irrigation. However, suitable site for construction is comparatively limited, and layout and design of facilities should be done carefully in consideration of topographical and geological conditions.

3. Seminar no. 2: Participatory Irrigation Management

Hata presented Participatory Irrigation Management in particular Roles between Government and Farmers. He gave different examples of the Philippines, Egypt, Japan and Kenya.

Questions and comments

S2.1-Eng. Isaac gave a very long comment about the history of White Nile and opening the Nile Basin. He stated how the Nile is related to the people of Kondokoro, and how land issues and production are

related to Keji keji etc. He also mentioned the case of the Gezira Scheme and how it was related to the Funj, the four cycle crop rotation systemí cotton - sorghum ó groundnuts ó and fallow, thereafter he mentioned little about the formation of Gezira Scheme Board of Directors.

He also discussed the fact that land belongs to the community in the South Sudan. He said for identification of potential land for irrigation project, people occupying the potential land should be taken into consideration.

On Aweil Irrigation Rice Scheme: He reiterated the issue of budget sharing mechanism between farmers and government compared to Land Improvement District (LID) method elaborated by the presenter.

S2.2-John Pangech: Appreciated the presenter about the fact that the presentation was so informative. He narrated short history about Japanese agriculture and mentioned that because South Sudan has ample rainfall that is why we have less irrigation facility. He also mentioned about fighting on the limited water resources and conflicts in Kenya in the context of land issues. And he stated that South Sudan is not like Kenya on land issue because land in Kenya has been taken by the colonialists.

S2.3-John Pangech also asked how the farmersøreaction was when the Government was called back to the management of Mwea Rice Irrigation Scheme.

Answered by Hata:

I have checked the book. There were not much descriptions about it but written as follows:

As of March 2004 when the author visited the scheme, NIB had been called back to the scheme management. NIB was doing their business for O&M of major irrigation facilities by charging farmers at Ksh2,000 per acre. The book also says that the irrigation management was facing the difficulties such as the non-payment of farmers to NIB for O&M services in 2005. The book ends here so I cannot trace the situation of Mwea afterwards.

But also there were some interview records by the author in 2002. The interviews show different views of generations. Here I try to summarize that part of the book:

Major opinions to NIB after liberalization of Mwea (interview conducted in 2002)

Generation	Opinions to NIB	Remark
1 st Generation	Nothing to expect their role	They were the ones under much control of NIB and therefore, they rather refused NIB.
2 nd Generation	Started expecting NIB to return to take some role since they have well experienced staff in rice irrigation.	Although they led the uprising to remove NIB, they admitted the role of NIB. Mismanagement of farmers cooperative drove them in this direction, too.

It seems that managing all the scheme of 12,000 ha was somehow beyond the capacity of farmers (farmers cooperative). Hence the role of NIB was recognized and started the structuring the Government ó Farmer joint management of Mwea Rice Irrigation Scheme.

Anyway, I do not have information on the latest situation of Mwea. So it is interesting to know about the present situation.

S2.4- One of participants commented that compared to other countries farmers in South Sudan should

be involved in irrigation management, making of water pumps and gradual involvement of farmers until they understand the practice.

S2.5- Deng Santino talked about the three levels of government, the question was which level of government will be engaged with the farmers and who will be responsible for O&M, and in the case of Egypt which level is responsible for O&M?

Answered by Hata:

It is the Ministry of Water Resources and Irrigation in the Arab Republic of Egypt. In order to promote the Irrigation Improvement Project in Egypt, the Ministry established two new sector / department in 1990, namely Irrigation Improvement Sector (IIS) and Central Directorate for Irrigation Advisory Services (CDIAS).

IIS is in charge of physical improvement of minor irrigation structures and terminal facilities (Meska and one-point lifting pump) and CDIAS is in charge of establishing Water Users Association (WUA) and Branch Canal Water Users Association (BCWUA).

The Ministry (Central Government) has branch offices in each Governorate (Province). Provincial administration is not much related to the O&M.

S2.6-Andrew Yonda: asked about the merits of IMT, that it has fewer conflicts. But it did well in places and not in other places? On farmers management he asked that the government is said not to deny water services to farmers; what about if its farmers managing water what will happen. When farmers pay their water duties is at the beginning or at the end of the season?

Answered by Hata:

Factor for successful IMT is described below. As for the unsuccessful IMT in the Pilot Project in the Philippines, there was a case that the one of the directors did mismanagement in running Federation Irrigator Association (FIA). Instead of ostracising this person (as he has no where to live), they passed the incidence with silence and abandoned the FIA.

There will be many factors that lead to unsuccessful. But the case indicates the importance of human factors.

About the fact that National Irrigation Administration (NIA) cannot stop supplying water though the farmers do not pay Irrigation Service Fee (ISF), NIA could condemn the land of farmers who are not paying ISF, but this was never enforced. Instead, NIA records all the payment and non-payment for each farmer and NIA keeps collecting the ISF for 2 years ago, 3 years ago, ,, (delinquent ISF is called back account). NIA considers the farmers situations and rural society and try not to exercise the forcible execution. This is a part of human relationships.

By the way the level of ISF in the Philippines is about 6% of Gross Income of farmers. In Japan it is about 8% of Gross Income. ISF collection efficiency in Japan is almost 100%.

As for ISF payment in the Philippines, it is collected after the harvest. In case the yield is lower than the defined certain amount, the farmer is exempted from the ISF payment.

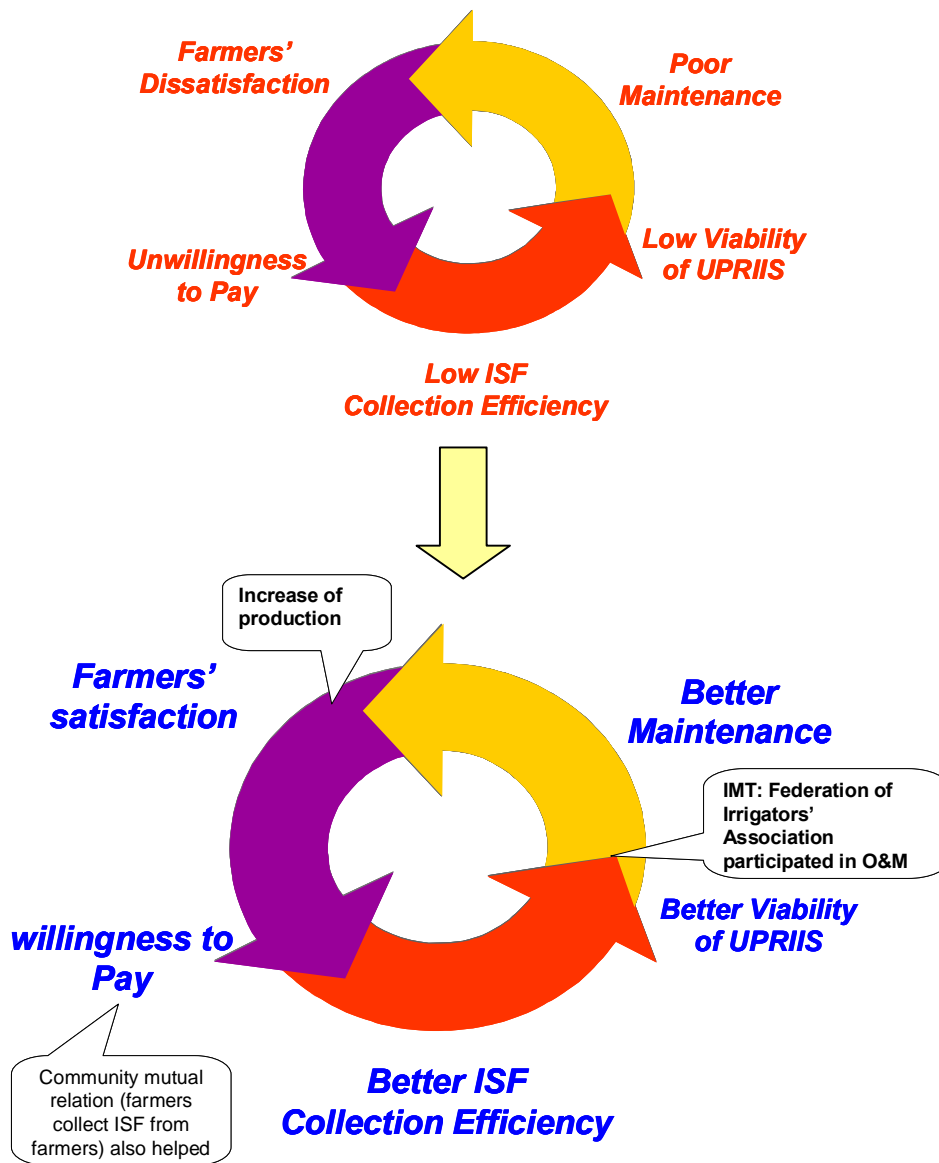
S2.7-Andrew Yonda asked why IMT pilot succeeded in increasing the Irrigation Service Fee Collection.

Answered by Hata:

On this question, I have responded as saying the concept of IMT worked. I would like to add some detail. In the presentation material, I showed UPRIS management was in a vicious circle.

It can be said in the successful sites, IMT contributed to changing this to upturn as shown below. Intervention of IMT made better O&M, better production, willingness of farmers to pay (mutual relationship of community would have also helped), and better payment of ISF.

UPRIIS in a Vicious Circle



S2.8- Deng asked on why water losses are greater at on-farm level in Egypt.

Answered by Hata

It is the management issue. The upstream farmers overtake water and this excessive amount of water goes into drain without effect to crop, while the downstream farmers are suffering from water shortage. Therefore, water management among upstream and downstream farmers will be critical for equitable water distribution and increase of irrigation efficiency.

4. Seminar no. 3: Facility Design for Dams

Otsuki introduced in his presentation 1)Dams as Irrigation Facility, 2)Type of Dams, 3)Facilities of Fill Dams, 4)Case of Dams Project in Myanmar and 5)Design of Dams in case of Small Dams at Oromia in Ethiopia.

Questions and comment

S3.1-Eng. Isaac undersecretary of MEDIWR commented that we are facing problem for construction of dams due to flat slope. The connection between irrigation and hydropower potentials should be considered in the planning for dams e.g. Multi-purpose projects (Irrigation and hydropower).

Answered by Otsuki:

The site for large scale dam is usually located at mountain area, because the river valley is deep and wide, the geological condition is strong and hard rock foundation generally. Moreover, it is possible to get the high potential for hydropower at mountain area. The other hand, there are a few sites for large scale dam at plain field area which has no deep and wide valley.

South Sudan is the wide and large country but almost areas are the plain and hilly lands. It is difficult to find out the site for large scale dam and a number of small scale dams for irrigation areas are built at first stage. The sites for large scale dams are investigated and surveyed at mountain area.

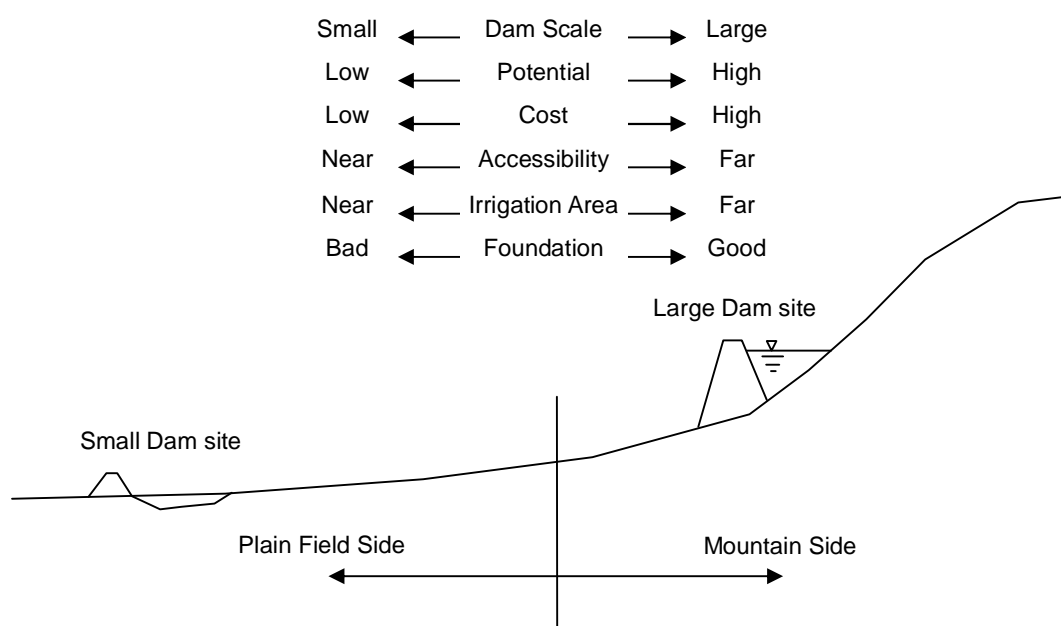


Figure 1.1 Selection of Dam Site

S3.2- Mr. Thomas Jang asked four questions

- (a) What are the procedures for site selection of the dam?
- (b) What are the criteria for choosing the dam's height?
- (c) What is the design period of the dams?
- (d) How the Seepage control in the dam?

Answered by Otsuki;

- (a) What are the procedures for site selection of the dam?

The followings are essential factors in considerable for dam-site selection.

1) Adaptability to Development Purpose

The dam-site should be as near as possible to the benefit area and feature a sufficient catchment area (including indirect catchment) to water the development objective. In the case of direct diversion of water from the dam, the location of the dam must be selected so that diversion to the benefit area may be by gravity flow. It is most important to collect the meteorological data including rainfall and river discharge.

2) Relationship with rural Society and Economy

Even if the dam-site seems preferable from engineering points, the scale of compensation and influence to farm land, forest, village, road, fisheries, cultural assets, natural monuments, etc. must be carefully examined. In the preparation of the compensation program for the submerged area, resettlement of households and regional development around the dam-site and reservoir area must also be considered.

3) Relationship with Other Long Term Development Plans

The project under consideration must be integrated with existing projects and future development plans. Therefore, these projects and plans must be carefully studied.

4) Topographical and Geological Conditions

A wide valley with gentle longitudinal gradient is preferable as a reservoir site; while a narrower valley is preferable as a dam-site. The cross sectional view of the valley, longitudinal gradient, relationships between ridge and gap, slope and configuration of river bank, etc. are carefully considered in determination of the proposed dam-site. Sufficiently strong bed rock and lesser river bed deposits are preferable conditions for the dam-site. The need for improvement of ground by foundation treatment must be confirmed in cases where any deficiency in dam foundation exists. Possible flank-slip and leakage problems in the reservoir basin are also examined. As the construction cost of the spillway occupies a considerable proportion of the entire cost, the location of the spillway must be examined carefully.

5) Construction Works

Studies on the following items are required for fill dam material:

- Existence of natural material and quantity and quality thereof;

- Distance between dam-site and borrow area and/or quarry site;
- Transportation method

The following are studied with regards to temporary works:

- Location of temporary facilities;
- Constriction of access road; and
- Cofferdam and diversion works during construction

6) Environment Considerations and Preservation

Compatibility with the natural environment should also be taken into account in the selection of location and type of dam. The enrichment phenomena caused by the development of watershed area and contamination and turbidity due to decomposition of the vegetation in the submerged area should also be examined in addition to conventional studies regarding water temperature change and turbidity due to inorganic particles.

(b) And what are the criteria for choosing the dam's height?

Although any type of fill dam may be applicable from a strictly structural view point, in the case of a dam which is lower height, the homogeneous type, i.e., the simple zoning of dam section, is advantageous in its simple construction work and easy provision of an adequate water barrier.

The type of fill dam other than the homogenous type, are generally selected for dams higher than 30 meters for reasons such as shearing strength of materials, effect of pore pressure, etc. In general, a zone type fill dam is widely adopted for a higher dam, due to more prompt dissipation of pore pressure by means of the impervious zone and use of material of higher shearing strength.

According to past experience, approximately 70 meters is the maximum dam height for the facing type fill dam, since deformation, which presumably effect the water barrier wall, increases in proportion to the height of the dam.

In additional points of geology, any type of fill dam is generally applicable for rock foundation. However, a core wall or facing type employing artificial material is not applicable to a site of highly deformable rock, soft rock, or previous or well jointed rock. The homogeneous type is most appropriate for a foundation of soil ground. The homogeneous or zone type is applicable to impervious zone type is structurally advantageous where a blanket is employed.

(c) How long are the periods of the design dam?

The dam designs are as follows:

- 1) Feasibility Study: for 3 years
- 2) Preliminary Design: for 1 year
- 3) Basic Design: for 1.5 years
- 4) Detailed Design: For 1.5 years

Total: 7 years excluding the investigation and survey period.

(d) How does the Seepage control in the dam?

For control of seepage, the following methods are generally considered:

Dam Embankment

- 1) Installation of filter zone to prevent piping or boiling
- 2) Installation of core (impervious) zone to reduce of seepage water
- 3) Installation of drain zone for safe drainage of seepage flow

Dam Foundation

- 1) Construction of grouting works or earth blanket works for reduction of seepage

S3.3- Robert asked what the classifications of dams based on 1) Construction materials 2) Purpose and 3) Hydraulic Structures are.

Answered by Otsuki;

- 1) Construction Materials

Fill materials shall be classified into soil materials and rock materials, and the latter is further classified into sand and gravel, and rock. Soil is employed as an impervious material, and sand, gravel and rock are utilized as semi-pervious or pervious materials. In view of this general concept, a suitable dam type shall be selected in accordance with the type and quantity of the materials.

Fill materials include various grain sizes ranging from fine grain to large rock fragments. From a soil mechanical point of view, these materials are classified by grain sizes into soil materials such as clay, sand and gravel, and rock materials, and also are classified into the three and categories of impervious, pervious and semi-pervious materials at design and construction stages according to the permeability of materials after being compacted.

Impervious shall be defined as those materials where the coefficient of permeability after compaction is less than 1×10^{-5} cm/sec, and pervious as those where soil coefficient is more than 1×10^{-3} cm/sec. Semi-pervious are those materials with a coefficient of permeability between the impervious and pervious materials.

- 2) Purpose

A zone type fill dam is generally composed of impervious, semi-pervious and pervious zones. Zones are arranged with the impervious zone in the centre and successively moving outward therefore, are zones of increasing larger coefficient of permeability, and shearing strength and elasticity constants.

- a) Impervious Zone

A permeability coefficient less than the order of 10^{-5} cm/sec must be achieved. Careful consideration is necessary of cross section and materials to prevent seepage failure due to cracking and piping during embankment or earthquake occurrence.

- b) Semi-pervious Zone (Transition Zone)

Semi-pervious zones may be categorized into transition and shell zones. Materials used for transition zone include gravel, weathered rock crushed rock, etc. For shell zone, materials of coarser grade than that for impermeable material are used such as talus and highly weathered material.

c) Filter

In the case of coarse grade materials are placed adjacent to impervious material, the fine grained portion is washed in the direction of the coarser material, resulting in piping. In order to prevent this, a filter of intermediate granularity is placed between the boundaries of fine and coarse grade zones. The filter is particular important in the case of the fill dam which in comparison to order dam types uniquely tolerates seepage within the dam body.

d) Pervious Zone

The pervious zone supports the water pressure bearing on the impervious zone and maintains stability of the dam body (including the pervious zone itself) against slip and earthquake induced failure. It is consequently necessary that the zone be of extremely high shearing strength.

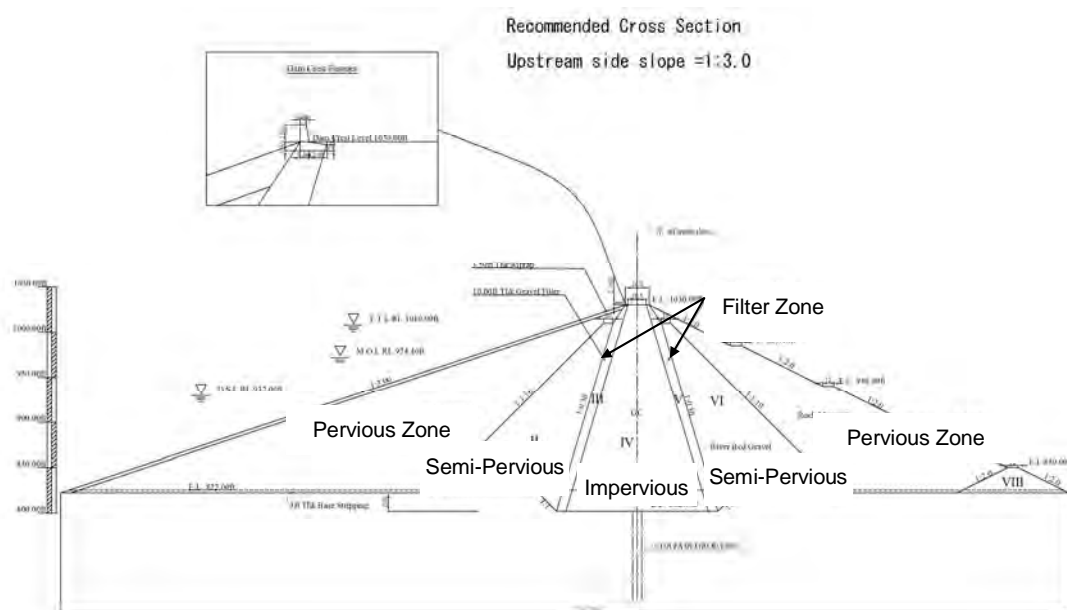


Figure 3.1 typical Cross Section of Myittha Dam

3) Hydraulic Structures

Outlet works and intake facilities are as follows:

1) Spillway

Spillways are the facilities provided to ensure the safety of dams against floods. Therefore, spillway should be of such structure that outlet capacity of spillway is sufficient to release safely the design flood discharge.

2) Out let works for downstream maintenance flow

An outlet work is installed at the dam to furnish necessary flow required to maintain the prior function of stream flow downstream from the dam site.

The downstream flow maintenance includes satisfying such aspects as water quality, water temperature, acceptable degree of turbidity, etc. as well as discharge quantity. However there are occasions where such the outlet works need not be installed if intake facilities are established or the downstream river is well maintained without special consideration for outlet works.

3) Outlet works for reservoir level control

Outlet works are installed to evacuate reservoir storage for inspection and repair of dam embankment or other facilities. Such facility need not be considered, however, when the water level of reservoir can be controlled by intake or other discharge passing facilities.

4) Intake facilities

An appropriate intake facility is to be installed when reservoir water is intended for irrigation or other uses.

In general, the said intake facilities perform simultaneous the above described outlet works function for downstream maintenance. Part of or all functions of outlet works for water level control of the reservoir are likewise incorporated in the design of the intake facilities.

5) Outlet works for flood control

Outlet works for flood control are installed in a flood control dam.

The outlet works should have functions satisfying the predicted flood control plan, and the scale of the facility should be determined by considering various factors including the initial reservoir level for flood control operation, surcharge water level, maximum design outlet discharge, flood control and regulating systems.

6) Outlet works for O&M and for sand flush

Outlet works may be installed for inspection, repair and O&M of the intake tower and other facilities. A facility aiming at sand flush is included in the works.

S3.4- In section 2; Dam as Irrigation facility, the drainage canal in the irrigation system return back to the river and it will not be source of point contamination?

Answered by Otsuki;

The reduction of pollutants such as nitrogen, phosphorus, organic matter, and suspended soils is an important aspect of improving water quality of downstream water area. Cyclic irrigation (reuse of drainage water as irrigation water) is considered an effective water management practice for saving irrigation water resources and reducing effluent load from a paddy-field district.

Cyclic irrigation is also expected to decrease pollutants loads because less water leaves the district and some of the pollutant in the drainage water a recycle ratio (the ratio of reused water to drainage water) of 34 % reduced nitrogen loads by 29 % and phosphorus loads by 37 %. However, it is necessary to check the water quality regularly.

S3.5- Martin, S.F.P of Warrap, commented that since most of the dams are in rocky areas to choose the dams, we are interesting in the dam capacity which has not been clear in the presentation.

Answered by Otsuki;

Reservoir Capacity

1) Gross Reservoir Capacity

Gross reservoir capacity of a reservoir is determined by adding dead storage including sediment to reservoir capacity (required storage capacity). Effective reservoir capacity is required for agriculture,

industry, power generation, river maintenance and flood control uses. With regard to dams for agriculture use, such capacity is required for irrigation water and for flood control in order to protect agriculture related facilities from damage. Sediment volume is the estimated volume of sedimentary soil carried into the reservoir.

Dead storage is considered necessary to ensure required water intake level and head for power generation and generally is storage not subject to intake or outlet of water.

2) Effective Reservoir Capacity

Required reservoir capacity for irrigation water supply is generally calculated in such a way that, despite 10 year probable drought, maximum diversion water requirement can be obtained at the intake point.

Additionally, river channel loss (in case the intake point is installed downstream to divert water after discharge from the dam), reservoir evaporation and seepage loss through the dam body are taken into account.

S3.6- SFP from WBG State asked how the maintenance of the dam carries out in terms of silt removal.

Answered by Otsuki;

The loose silt layers can be removed by equipment but the deep silt layers cannot be removed and another countermeasures are needed, for example, foundation treatment works and surface protection works. If possible, the designers or structure engineers must not select such loose silt foundation for important facility of irrigation and drainage.

S3.7- SFP from Lake State asked what the types of formation suitable for dams are.

Answered by Otsuki;

The typical dam plain map of fill dam case is shown at Figure 7.1 Formation of Typical Dam site. As mentioned above, the typical dam formation includes main dam, spillway, intake and outlet and temporary works (diversion tunnel and coffer dam etc.).

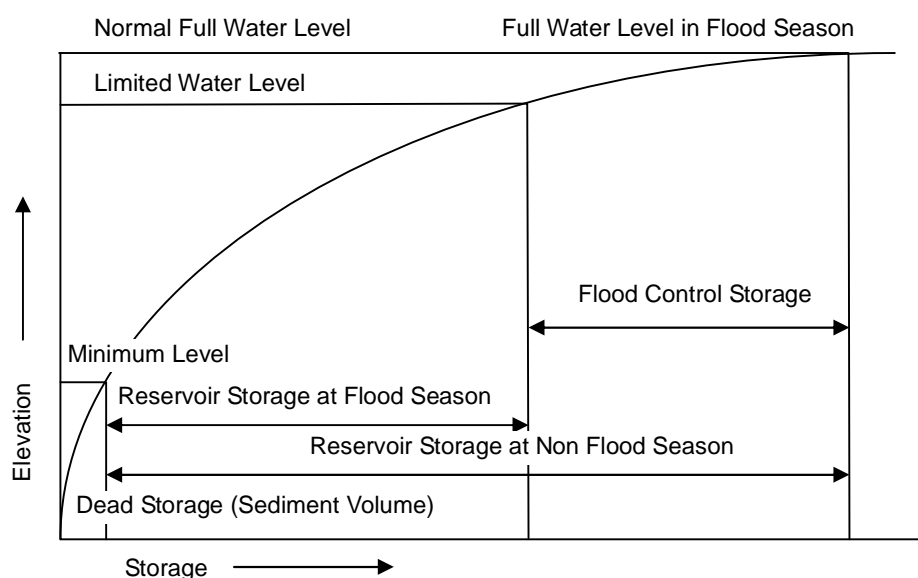


Figure. Relation Curve between Water Level and Reservoir Storage

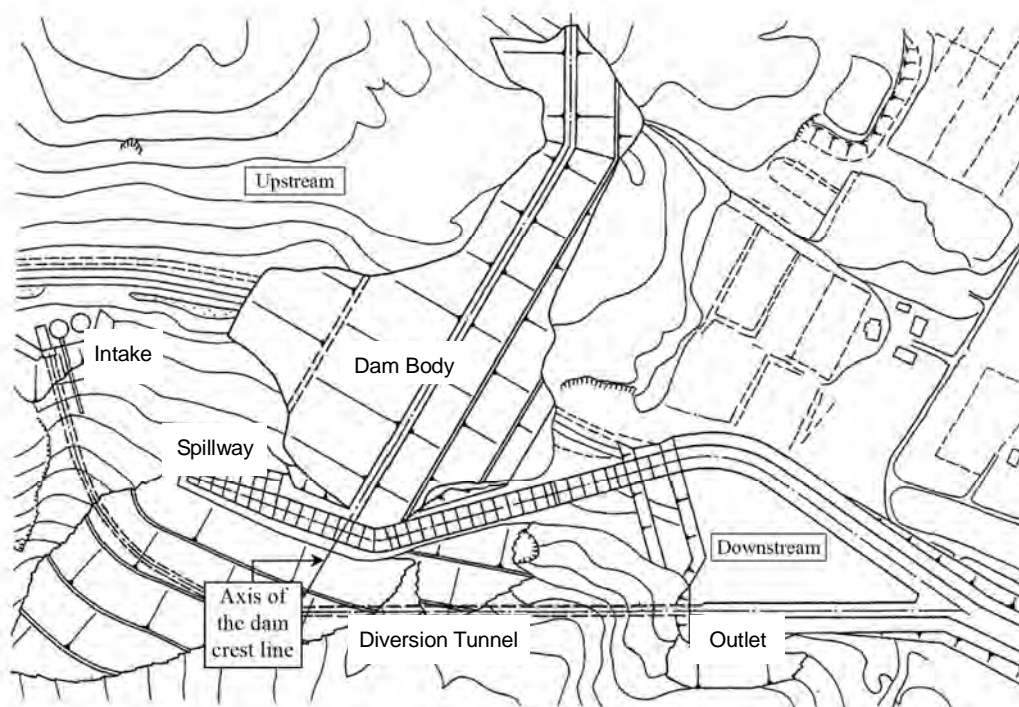


Figure. Formation of Typical Dam Site

S3.8- Representative of MoFCEP asked that the situation of dam facilities is not seen in South Sudan. How we move forward?

Answered by Otsuki;

South Sudan becomes independent at 2011 and irrigation development master plan has just started. Although many irrigation projects will make plans which are the big project and the small project in future, the water resources should be necessary to every irrigation project. The dam or reservoir is one of the water resources and South Sudan will need the excellent engineers, dam engineers, engineering geologists, hydrologists and structure engineers. They would obtain marvelous and huge technology of dam or irrigation system.

5. Seminar no. 4: Guidance and Workshop on Environmental and Social Considerations for Irrigation Development

Kuramoto presented Guidance and on Environmental and Social Considerations for Irrigation Development (ESCID), he gave 1) Principle of ESCID, 2) Procedures of ESCID and 3) Method of ESCID Process.

Also, he conducted workshop for case study of ESCID scoping.

6. Closing Remarks

Eng. Isaac Liabwel the undersecretary of MEDIWR gave the closing remarks.

<END>

The participant list for the 1st Technical Seminar for State Focal Points (19/09/2013)

Name	Organization	Position
Isaac Liabewl	MEDIWR	Undersecretary
SFP for Water/Irrigation Sector		
Georg Alphons	CES	
Nyika Charles Jacob	EES	
Jackson Kwaje	JS	
John Chanyok	LS	
Picos Ariath	NBG	
James Chol Look	US	
Yak Stephen Lam	UNS	
Martin Nyuel	WS,	
Abaker Jallab	WBG	
Tunna Francis	WES	
National Ministries		
Peter Bol	MEDIWR	A/Director for Water
Thomas Jang	MEDIWR	D/D for WRM
Koboji Charles	MEDIWR	Ass. Inspector for hydrology
Philip Mbata Aban	MOFL.I.EF	Deputy Director
CAMP-TT		
John Pangech	CAMP TT	TT. Leader
Joejoe Wani	CAMP TT	TT Members
Koji Ishikawa	CAMP TT	JICA Consultant
IDMP-TT		
Jiben Jeremiah	MEDIWR	Dg. Irrigation and Drainage
Andrew Yunda	MEDIWR	Co. Team Leader
Simon Otoung	MEDIWR	Deputy Director
Deng Santino	MEDIWR	A/D for Hydrology
Makuac Ador	MEDIWR	A/Director
Jal Panom	MEDIWR	Senior inspector for Irrigation and Water
Robert Zakayo	MEDIWR	Inspector for Hydrology
Chut Isaac	MEDIWR	Inspector for Water Resources Management
Pagan John	MEDIWR	Inspector for Irrigation
Wol Gordon	MEDIWR	Inspector for planning
Gai Simon	MEDIWR	Assistant Inspector for Hydrology
Malual Deng	MEDIWR	Senior Inspector for Irrigation
Philip John Akol	MEDIWR	Assistant Inspector for Hafirs, Dams and Dikes
Doki Lako Bushuk	MEDIWR	Assistant Inspector for Hafirs, Dams and Dikes
Erneo Bakasio	MAFTARCRD	Director for Agricultural Mechanization
Moses Mogga	MAFTARCRD	Inspector for Mechanization
Kazumitsu TSUMURA	IDMP.TT	Team Leader
Akhiko Hata	IDMP.TT	Co-team leader /Aid program /Budget preparation
Hitoshi Toku	IDMP.TT	Irrigation and Drianage
Akira NAKAMURA	IDMP.TT	Organization /Capacity building /Training
Shigeru Otsuki	IDMP.TT	Irrigation Facility
Yuichi MATSUMOTO	IDMP.TT	Water Resources Potential Analysis
Kenichi Kuramoto	IDMP.TT	Environment
Koichi Akashi	IDMP.TT	Coordinator for Training

12. FOURTH STAKEHOLDERS MEETING OF CAMP AND IDMP, 26th FEBRUARY 2015, JUBA GRAND HOTEL

Formulation of the Comprehensive Agriculture Master Plan (CAMP) of the Republic of South Sudan

Minutes of Stakeholder Meeting in Juba

Agenda	<ol style="list-style-type: none"> 1. Registration 2. Introduction to the meeting by Mr John Pangech 3. Introductory remarks by JICA Chief Representative 4. Introductory remarks by Prof Mathew Udo 5. Opening Remarks by Hon Lily Albino Akol 6. Opening Remarks by Hon Jemma Nunu Kumba 7. Presentation on CAMP Finalization process 8. Update on IDMP Process 9. CAMP Implementation Mechanism 10. Resource Mobilization and buy-in process 11. Presentation on Way Forward and Future CAMP and IDMP Activities 12. Discussion (Q&A) 13. Closing Remarks
Date and Time	Thursday, 26th February, 2015, 8:30 am . 2:00 pm
Venue	Juba Grand Hotel
Attendees	<u>Ministry of Agriculture, Forestry, Cooperatives and Rural Development</u> Hon Lily Albino Akol, Deputy Minister Prof Mathew Udo, Undersecretary Dr Loro George Leju, DG for Agricultural Production and Extension services Mr John Pangech, CAMP TT Leader/DG for planning Mr Cirino Oketayot, DG for Research Mr Atem Garang, DG for Plant Protection Mr Erneo Balasio, Director for Mechanization Mr Kenyi Bullen Baggu, Director of agroforestry and Forest extension Mr Joseph Akim, D/Director of Extension Mr Noel Bangaza Cleopas, Assistant Director of Forestry Mr Ezbon Lodu Abuku, Deputy Director of forestry survey Ms Monica Mario, Gender Ms Suzan Furidnesio, inspector of foods and nutrition Ms Winnie Richard, senior tutor Ms Flora Joseph Loki, Assistant Inspector of mechanization Mr Moses Mogga Mikaya, IDMP Task Team Member Mr Christopher Lemi Mr Jacob Mogga Mr Joseph Batista Yashika Mr Sulaiman O. Legge, training Ms Dominic Sinicio Mr Mindo Odrande James Mr John Deng Ayau Mr Majak Ngor Mr Abdou Ayuen Kuol, DG for Cooperative Development Mr Mikaya Gande Mr Daniel Akim Mr Kenedy Alfred, Forestry Department Mr Stephen Lomeling Mr John Rithi Solomon Mr Angelo Olleny Langalanga Mr Patrick Taban Ms Mary Benjamin Ms Pietros Kidane

<p><u>Ministry of Livestock, and Fisheries Industry</u> Dr Makwei Malual Kaang, Undersecretary Mr William Olami, Acting DG for Planning/CAMP Co-team leader Ms Suzana Gabriel, Inspector for Fisheries and statistics Ms Eva Ceaser Mr Bringi Samson, Inspector for Livestock Mr German Tom, Veterinary Officer Ms Amal Mogga, Inspector of fisheries Mr Stanislaus Tombe, Inspector for Animal Production and Range Management Mr David Lawrence Lual, Livestock Officer/CAMP TT Mr David Peter Mina, Assistant Researcher/CAMP TT Mr Lewis Jaja Mr William Atiki Mr David Adwok Mr Jabir Ezadin N Mr Augustino Atilio Mr Pio Anthony</p> <p><u>Ministry of Electricity, Dams, Irrigation and Water Resources</u> Eng Isaac Liabwel, Undersecretary Eng Jiben Jeremiah, DG for Irrigation and Drainage/IDMP TT Leader Mr Peter Mahal Dhieu, DG Mr Gai Simon Reath Mr Pagan John Okwach, IDMP TT member Mr Makuac Ador Malek Mr Wol Gordon Toung Mr Deng Santino Ater Mr Chut Isaac Chol Mr Deng Chol Maurter Mr Malual Deng Mayol, IDMP TT</p> <p><u>Ministry of Lands, Housing and Physical Planning</u> Mr George Rithi Richard</p> <p><u>Ministry of Foreign Affairs and International Cooperation</u> Ambassador Akwoch D Ding</p> <p><u>Ministry of Trade, Commerce and Industry</u> Eng Moses Kur Kucha</p> <p><u>Republic of South Sudan Food Security Council</u> Mr John Ogoto Kanisio, Secretary General</p> <p><u>JICA Consultant Team</u> Mr Toshifumi Serizawa, Team Leader/Administrative and Financial Management Mr Yasuo Ohno, Co-Team Leader/Agricultural Development Mr Masafumi Nakanishi, Research/Training/Extension Mr Shigenobu Handa, Administrative and Financial Management 2/ Rural Developments 1/ Land Tenure Mr Kazuhiro Inoue, Agricultural Finance/Coordinator 1 Ms Abiko Misa, Rural Development 2/Coordinator 2 Mr Justen Smith, Livestock Development Mr Robert Lindley, Inland Fisheries Development Ms Jenny Coghlan, knowledge Management Mr Joe Joe Lemi, Agricultural Expert Mr Ayo Peter Wani, Research Assistant Ms Baityo Sande, secretary</p> <p><u>IDMP Consultant Team</u> Mr Kazumitsu Tsumura Mr Rya Toshima Mr Nakamura Akira Mr Shigeru Otsuki Mr Kotaro Kikuchi Mr Hitoshi Toka</p>

	<p>Mr Haruo Hiki <u>Development Partners</u> Mr Tomoki Kobayasi, Deputy Chief Representative, JICA Mr Kuwabara Tomohiro, Representative, JICA South Sudan Ms Etsuko Osumi, JICA South Sudan Mr David Deng, JICA South Sudan Mr Paolo Girlando, EU Ms Linda Ehrichs, Embassy of Canada (DFATD) Ms Cheryl Bawdre, USAID Ms Mary Lako, USAID Ms Sue Lautze, UNFAO Head of Office Mr Nyabenyi T Tipu, UNFAO Mr Wani James, UNFAO Mr William Hakim, UNFAO Mr Isaac Bazugba, UNFAO Mr Felix Dzvurumi, UNFAO Mr Justin Miteng, SNV Mr Daniel Kir, UNDP Ms Poni Rose, AGRA Mr Isaac Kuou Buom, AGRA <u>Non-Governmental Organizations</u> Mr Bart Dorsman, Country Director ZOA Mr Rhodes Ndolvu, Food Security and Livelihoods Advisor, CARE International Mr Stephen Maina, World Vision Mr Leonoor Ahhermans, CINOP Mr Dara Elisha, UMCOR Mr Marko Lesukat, CORDAID Mr Salva Dut, Water for S.Sudan organization Mr Tim Michael, Tetra Tech Mr Duke Burrus, DAI Mr Lubajo Moses, CEDASS Ms Christine Abina, Danish Church Aid <u>Private sector</u> Mr Fred Otim Tartisio, Cooperative Bank of South Sudan Mr Thelweng Mathiang, Senior Manager, Stanbic bank Ms Edna Tobs, South Sudan Business Forum Mr Gabriel Aliga, Equity bank Mr Ukuni Paul, South Sudan Business Forum Mr Majak Mayom, Farmers Union Mr Makur Joseph Lueth, South Sudan General Farmers Union Ms Florence Hezekia, South Sudan General Farmers Union Mr Monywac Tior Ajak Kur, Farmers Union Mr Junior Saba Malik, Rial Seeds Company Limited <u>Universities and Institutions of learning</u> Dr Peter B.S. Gama, University of Juba, Department of agriculture Mr Milton Melingasuk, University of Juba Mr John Morris Togo, University of Juba Mr Solomon Ewol, Catholic University of South Sudan <u>Media</u> Mr Emmanuel George, CTV Mr Marial Wen Deng, Juba Telegraph Mr Kidega Livingstone, Juba Monitor Mr John Madol Panther, SSTV Reporter Mr John Magot, SSTV Cameraman Mr Philip Richard</p>
Handouts	<ol style="list-style-type: none"> 1. Presentation on CAMP Finalization Process 2. Update on IDMP Process 3. CAMP Implementation Mechanism 4. Resource Mobilization and buy-in Process

	<ul style="list-style-type: none"> 5. Presentation on Way Forward and Future CAMP and IDMP Activities 6. CAMP Document (Draft) 7. Agenda/Program 8. Compact Disk Containing soft Data of CAMP Documents
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Introductory remarks by the TT leader

- Excellences, distinguished participants, ladies and gentlemen, it gives me great pleasure to extend to you all a very warm welcome on behalf of the CAMP TT members.
- It's an opportune time to renew contacts and discuss problems of mutual interest with participants from government, international experts and DPs.
- It is gratifying to note that the agenda of the stakeholder meeting covers a wide range of very interesting items, especially those directly related to aspects of crop, forestry, livestock and institutional development.
- We are aware of the tremendous effort made, and the large investment in funds and specific effort by a number of member DPS in CAMP formulation already. We are only too anxious to hear our distinguished colleagues report on their recent comments in the presentation coming later.
- No matter how much we can do by our-selves on the national level, whether it be research or development, it is never enough. In a spirit of true cooperation, we in the national ministries of the government of the Republic of South Sudan, proud of nurturing all past and present agricultural sector and reports, must join in an action-oriented effort to attack and solve the problems that beset lack of agricultural production and water for irrigation development.
- If on the national level we can, and must pursue agricultural developments as a multi-dimensional concept, encompassing the economic, social, institutional and physical elements of development, in a wider sense, it would be relatively easy to effect the necessary adjustments for a truly effective cooperation on the national basis. This is fully consonant with our official position taken and the full support of the concept of transformational agricultural adjustment at the recent past CAMP meetings.
- In concluding, I wish you every success in your deliberations and a very pleasant way forward therefore.

Introductory remarks by JICA Chief Representative

- The deputy chief representative, Mr. Tomoki Kobayasi gave opening remarks in absence of the chief representative.
- He recognized the presence of the Hon Deputy Minister, Undersecretaries, Representatives of Development Partners, NGOS and government officials, and gave remarks as follows:
- Honour and pleasure to have opportunity to give opening remarks on behalf of JICA. Apologies for absence of Mr. Furukawa Mitsuaki, the chief representative, who is outside the country.
- A few years ago, South Sudan got independence and immediately started rebuilding. Development needs coordination and partnership therefore JICA decided to support South Sudan for long term development.
- The CAMP process was established on a principle of government led and government owned and JICA has been keeping the principle. The Task Team was appointed and JICA provided support with the international experts.
- The CAMP process is developed based on the presence of evidence based situation analysis. The Task Team made evidence based situation analysis in all the ten states of South Sudan. Such a document, based on evidence based situation analysis should be implemented.

- CIDA, EU, GIZ have been fully involved in the process, and other partners as well. Thanked all stakeholders for fully participating in the CAMP process and urged for their continuous support to the CAMP and IDMP processes.

Introductory remarks by Prof Udo

- Recognized the presence of all invited guests and gave introductory remarks as follows:
- Have been supervising the CAMP and IDMP processes. The processes started in 2012. The Ministry of agriculture decided to have a comprehensive agricultural master plan that can develop all agricultural sectors. The idea was sold to DPS and JICA decided to support the plan, assisted by other DPS. The CAMP and IDMP Teams have been working on the documents, collected and analyzed information and presented to stakeholders on several occasions. The team also visited states for consultations. Now the team has invited stakeholders to analyze the document so that it can be comprehensive for implementation in the coming financial year. All strategic plans and budgets will be developed from the CAMP document. The CAMP document will be a focal document for all partners. The government is looking forward for more partners to come on board to contribute to the CAMP implementation. All partners interested in the development of South Sudan should participate in the implementation of CAMP.

Opening remarks from Hon Jemma Nunu Kumba

- Undersecretary Isaac Liabwel gave introductory remarks on behalf of Hon Minister.
- Observed protocol
- Explained why the Ministry of water Resources is important to the CAMP and IDMP development as follows: The CAMP is addressing 4 sectors of agriculture but if it's not raining well, all the 4 sectors will not perform well. The Ministry supports the productivity of agriculture.
- The Minister for Electricity, Dams, Irrigation and Water Resources went to officiate a workshop on commissioning of irrigation water dam in Wau.
- He invited Honorable Deputy Minister to give opening remarks.

Opening remarks by Hon Deputy Minister on behalf of Hon Minister Bead Machar Deng

- Observed protocol
- Conveyed greetings from the honorable Minister and gave opening remarks as follows:
- CAMP has been an enormous undertaking supported by JICA, GIZ, CIDA, EU, FAO. The Task Team has travelled the whole country and collected data.
- The mission of the ministry is food security for all. How to do it is what has brought participants together for the meeting.
- Thanked JICA for supporting the CAMP process and the CAMP Team for working hard to develop the process.
- Wished participants a fruitful discussion and declared the meeting open.

Session 1: CAMP Finalization process (10:00am-10:10am)

- Presentation by Mr. Pangech (please refer to hand-out of CAMP Finalization process)

Session 2: IDMP Update (10:10-10:23)

- Presentation by Engineer Jiben (Please refer to hand-out of IDMP update)

Session 3: CAMP Implementation mechanism

- Presentation by Mr. Pangech (Please refer to hand-out of CAMP Implementation mechanism)

Tea break

Speech by Mr Robert Lindley

- Has been working with CAMP team since 2012, and visited states and collected a lot of data. Knowledge is power and if participants know all the information provided in the Compact Disk, they will have a lot of information.
- Anybody involved in development work in South Sudan should read the information provided. The CAMP team has been good at data base. The team has analyzed data from the National Bureau of Statistics. The data provided in the Compact Disk cannot be found anywhere but the CAMP team has provided it free of charge. Participants should utilize the data maximally. It's very important data.
- State profiles contain a description of the features of the state and agricultural productivity.

Additional comments from Undersecretary Isaac

- Explained the relationship between CAMP and IDMP using the power point presentation of the strategic framework of IDMP (for more information please refer to the strategic framework of IDMP).
- Commented that on slide 6 of CAMP implementation mechanism, a column should be added for counties, whereas on slide 11, %County annual budgets+should be added.
- Informed participants that he had a discussion with Undersecretaries of agricultural ministries in Sudan, Kenya, Ethiopia, on where irrigation component should belong? e.g. should it belong to the Ministry of Agriculture or Ministry of Water. They noted that budgets for CAMP and IDMP should be planned together so that none of the master plans misses a budget. It's also difficult for the agriculture staff to drive water to the farm. They will have to invite personnel from irrigation Ministry to provide technical support.

Q&A Session

Comments by DG for national projects and donor coordination, MAFCRD

- What was the mechanism for distribution of irrigation projects/schemes? Is it a long term or short term?
- The IDMP Task Team leader responded that the IDMP team proposed short, medium and long term programs. Some sites for the schemes were selected by the counties and states, where as some were selected using the irrigation potential assessment map. Some schemes were old existing schemes.
- Undersecretary, Isaac, added that all CAMP subsectors should have dialogue with the IDMP team to identify if each sub-sector needs water for implementation of its programs.

Comments by DG for Research, MAFCRD

- The document is comprehensive. Anybody who wants to do development in South Sudan should look at this document. The document should be shared at all levels so that all stakeholders take it seriously. So many documents have been developed but not implemented.
- Irrigation is very intensive and cannot be managed by states because state government budgets come from national government in a ration. Irrigation should be considered by the private sector.
- The co-team leader of IDMP responded that the IDMP team has developed a budget plan for the states to implement irrigation projects. States are capable of implementing irrigation projects with support of the national ministry.

- The leader of the IDMP Task Team added that although there will be schemes for the states, the national government will provide support, and the roles and responsibilities are clearly defined in the framework.
- Project officer, Norwegian Forestry Group
- The implementation coordination structure at national level and state level is very clear but coordination between the national government and state government is very poor.
- Undersecretary Udo responded that there is a deficiency in coordination mechanism between state and national government, and this has to be addressed by CAMP and IDMP. The deficiency is created by the government running on 3 levels of administration. There are qualified people at the national government level but there are none at the state. States would like to employ their own natives; however, this limits the availability of personnel. Employment for a national position should not be based on original background of a person. This needs to be addressed in Inter-ministerial steering committee meeting.

Representative from South Sudan Business Forum

- Practically, the implementation coordination structure seems clear but the private sector policy has no direct coordination. There is need for promotion of local products. There is need for promotion of integrated private sector policies. Coordination of government structures is very important. The relationship between state, county and national government is not clear. Flow of national policy to states is not clear. The master plan should clarify the roles of government structures.
- IDMP co-team leader responded that the team will engage the Ministry of justice to provide the laws for private sector.

Representative of FAO

- IDMP selected 3 areas for irrigation scheme projects. Is there any plan to integrate fish farming in the schemes? The IDMP Task Team leader responded that the IDMP Task Team held discussions with the CAMP fisheries sub-sector. The CAMP fisheries sub-sector is yet to identify potential areas. Fisheries will be integrated into the irrigation schemes proposed by IDMP.

UNDP

- The ministry of trade, commerce and Industry just finalized a study on diagnostic trade. Agriculture, Livestock and fisheries sub-sector were the key areas looked at. The CAMP and IDMP should be harmonized with the study by the ministry of trade, commerce and Industry.

Embassy of Canada

- CAMP and IDMP are ambitious programs. The presentations were very impressive. Hope to take full ownership and in-depth understanding of the programs. The documents should be used for information management capacity. All projects that are on-going in the country could be merged and integrated with the CAMP programs.
- In the crop sub-sector, there are numerous programs that support subsistence farmers and food and nutrition security where as in other sub-sectors there are limited projects. Would like to know whether the subsistence component in other sub-sectors is hidden in other components?
- The Co-team leader of CAMP TT responded that there are projects in other sub-sectors that are addressing the needs of subsistence farmers on the ground. If such projects will be implemented, they will create change in the livelihoods of farmers. Deployment of technical and skilled staff at the implementation level is a key issue which needs to be discussed at the inter-ministerial steering committee meeting.

CARE International

- CAMP and IDMP documents are setting up a road map for the development of South Sudan. However, how do we deal with the land issue between county and national level. How do we meet

with the private sector in terms of interests e.g. the aim of the private sector is profit making. How do we engage with stakeholders to promote local production? Government needs to take a center lead in engaging stakeholders.

- The IDMP co-team leader responded that the IDMP Task Team engaged the land commission, and the land Act is in the parliament for passing into law. Undersecretary Isaac added that the only way to deal with land issues and have land for investment is to initiate a process of consultation with communities, counties, states and the final process is approval by the ministry of justice.

USAID

- Private sector is very important in driving development. The role of infrastructure and markets is very important in agricultural development. Need to think about how to link infrastructure to markets.
- A member of the CAMP crop sub-sector team responded that even though agricultural production is increased to 100%, without infrastructure development, nothing will be done. Infrastructure development has been included by the CAMP team into the master plan document.

Representative from the Dutch gov't

- Very impressed with the presentations. The Dutch government is currently implementing two capacity development projects in Marial Lou livestock training center and Amadi Rural Development Institute. Capacity development is very important to the private sector because if there are no trained personnel, South Sudan will still have to import expertise to implement development activities.
- The IDMP co-team leader responded that capacity development is a key issue and the capacities of implementing personnel will have to be developed.

SNV

- It's a role of all participants to market the master plan document, including the government. The role of the private sector is very important. Several government ministries are responsible for convincing the private sector to come and invest in agricultural development. There are so many small projects on-going with different partners. There is a need to insert these projects into the master plan.

Cooperative Bank

- Cooperative bank has been involved in the development of the CAMP document. The bank has been mandated to train and develop cooperative societies. The bank will support what the CAMP team has been doing. The bank has been following the progress of the CAMP and will come in at the right time as a private sector player.

Session 4: Resource mobilization and buy-in process (12:00pm-12:19 pm)

- Presentation by Prof Udo; (please refer to hand-out of Resource Mobilization and buy-in process)

Session 5: Way forward and future activities of CAMP (12:20pm-12:30pm)

- Presentation by Mr Olami; (please refer to hand-out of way forward and future activities of CAMP)

Comments by Undersecretary Isaac

- Implementation Coordination Task Team should be written to include both CAMP and IDMP projects i.e. CAMP and IDMP Implementation Coordination Task Team.
- Annual work plans should be written as %National, State and County Annual Work Plans+.
- There should be additional coordination structure for counties as independent level.

Comments by Secretary General of the South Sudan Food Security Council

- Commended the excellent work of the CAMP and IDMP Task Teams.
- There is need for a massive and robust information and advocacy strategy and campaign to be planned and included into the way forward. This should include the mass media, seminars, consultations, invite parliamentarians and present to them. Need to aware the people on the ground so that they know about the CAMP. If people on the ground understand about CAMP, they will pressure politicians to implement.
- Development Partners (DPS) should internalize the document and re-align their programs to the master plan. Caution and appeal to DPS not to be demoralized by the little support the government puts into the master plan. DPS should put whatsoever little support they have to implement the master plan.
- CAMP is comprehensive with in the agricultural sector, not across all other sectors with in the macro-economy of South Sudan. Therefore, CAMP should liaise with all the other sectors to tie all the loose ends, so that if there is any other program in the other macro-economy sectors that needs to be done alongside CAMP, it can be done simultaneously for the benefit of CAMP.

Remarks from Mr Paolo Girlando, EU

- The work that has been done by the CAMP team is huge. He did not have time to read through each project but from the few points he looked at, the document has been prepared in a professional way. If there are any points of disagreement in the document later, they can be corrected. He is ready to implement the master plan. How the money for the CAMP will be used in a proper is a very important issue and CAMP team has to work it out. Approval of program and annual work plan needs to be worked by CAMP team. Roles and responsibilities of each person need to be included. Monitoring of the project cycle needs to be included and state clearly.
- Undersecretary Isaac responded that the government, CAMP, and IDMP Task Team is ready to negotiate with DPS on funding mechanism for the master plan.

DG for Plant Protection, MAFCRD

- IDMP strategic goal is only narrowed down to agriculture. It should mention all other sub-sectors.
- Undersecretaries Isaac and Udo responded that the word %agriculture+ covers all other sub-sectors i.e. crop, livestock, forestry and fisheries.
- FAO definition for %agriculture+ includes crop, livestock, forestry and fisheries.

Closing remarks by Undersecretary Makwei on behalf of Hon Minister Beda Machar Deng

- Dr Makwei Malual Kaang, the undersecretary for the ministry of livestock and fisheries industry gave closing remarks as follows:
- Recognized and greeted the invited guests and participants.
- The aim of the meeting is to enrich the CAMP and IDMP documents.
- Appreciated the contribution of stakeholders to the CAMP and IDMP documents for efficient implementation.
- Government has shut down oil production because of the current conflict and therefore, government may not be able to fully contribute to the CAMP and IDMP. Therefore, government will be looking towards to the support of Development Partners.
- DPS would like to see full support and commitment of government so that they can provide support but with the current economic situation, the government is hand caped. There is a need for support of DPS to realize implementation of document.

- Appreciated support of JICA and the Japanese government to the CAMP and IDMP projects, and also the attendance of Development Partners and their contributions to the CAMP and IDMP documents.
- Declared the meeting closed.

<END>

13. FIFTH TC (JOINT TC OF CAMP AND IDMP) FOR DISCUSSIONS WITH JICA, FOLLOWING THE ERUPTION OF CRISIS IN RSS, 14th TO 15th MARCH 2014, AFRICANA HOTEL, KAMPALA, UGANDA

**The Republic of South Sudan (RSS)
Comprehensive Agriculture Master Plan (CAMP)
The Project for Irrigation Development Master Plan (IDMP)
Memorandums of the 5th Technical Committee (TC) meeting of CAMP and IDMP**

Agenda	<ol style="list-style-type: none"> 1. Update each other on the work progress 2. Update on the current situation with emphasis on food security and agricultural production 3. Discussion (Relevance) 4. Discussion (Scope of planning) 5. Discussion (Timeframe of MP formulation) 6. Discussion (Modality and process of MP formulation, including operational issues)
Date and Time	14-15 of March, 2014
Venue	Africana Hotel, Kampala, Uganda

1. Relevance

The meeting confirmed that CAMP/IDMP are still relevant to RSS, because;

- CAMP/IDMP are expected to offer a roadmap of agriculture sector development and investment
- GRSS needs to prepare itself for the rehabilitation/development phase while they deal with emergency situation at the moment

Hence, there is a case for JICA to continue to support CAMP/IDMP

2. Scope of planning

- (1) CAMP/IDMP will continue to focus on short, medium and long term development-oriented programmes as planned.
- (2) CAMP/IDMP will make provisions for resilience building in addressing natural and man-made disasters by prioritizing appropriate programmes and projects in all states.

3. Operational Modalities and Timeframe (CAMP)

- (1) CAMP TT will operate from two locations, Juba and Kampala (effective May 2014).
- (2) Tentative schedule of activities (see attached) were discussed and agreed except for the modality and frequency of consultation at state level which would be agreed later.
- (3) CAMP formulation will be completed by April 2015.

4. Operational Modalities and Timeframe (IDMP)

- (1) IDMP office in Juba will be made operational as soon as possible.

- (2) IDMP TT will focus on two activities (March - July 2014)
 - Finalize analysis of High Resolution Data (Expert Team)
 - Review of Progress Report #2 (National Team)
- (3) It was proposed to accommodate the following activities during phase 2:
 - Procurement process of local sub-contractors to carry out surveys (as per JICA regulation);
 - Selection of priority areas.
- (4) All other remaining activities will be carried out in phase 3 (as per attached schedule).
- (5) IDMP formulation will be completed by June 2015.

5. Next Step

- (1) Recommendations of this meeting will be discussed with JICA Headquarters for reflection in the contracts with the consulting firms.
- (2) Necessary feedback and consultations with GRSS will be made accordingly.

<END>

14. FOURTH TASK TEAM JOINT MEETING OF IDMP, 8th - 13th JULY 2014, FAIRWAY HOTEL, KAMPALA, UGANDA

**The Republic of South Sudan (RSS)
The Project for Irrigation Development Master Plan (IDMP)**

Date: 15/07/2014 prepared by IDMP-TT

Memorandum of IDMP TT Joint Meeting in Kampala

Agenda	<ol style="list-style-type: none"> 1. Programme Adjustment 2. Briefing on the status of the last meeting held in Kampala (March) 3. Activity report of RSS-TT 4. Finalization of PR2 and Further work 5. Selection of priority project area 6. Assessment of sub-contractors 7. Outline of Scope of Preliminary Environment Survey 8. Discussion on further schedule 9. Finalizing PQ
Date and Time	8-13 July, 2014 (09:00-17:00)
Venue	Conference hall of Fairway Hotel, Kampala
RSS-TT	<p>(MEDIWR)</p> <p>Isaac Liabwel C. Yol, Undersecretary</p> <p>Jiben Jeremiah, Acting Director General for Irrigation and Drainage</p> <p>Andrew Yunda Stephen, Deputy Director for Planning and Programming</p> <p>Makuac Ador Malek, Assistant Director for Irrigation and Drainage</p> <p>Robert Peter Zakayo Galla, Inspector for Hydrology</p> <p>Simon Otoung Awijak, Deputy Director for Hydrology</p> <p>Gai Simon Reath, Assistant Inspector for Hydrology</p> <p>Chut Isaac Chol, Inspector for Water Resources Management</p> <p>Pagan John Okwach, Inspector for Irrigation and Drainage</p> <p>Wol Gordon Tong, Inspector of Planning and Programming</p> <p>(MAFTARFCRD)</p> <p>Dr. Erneo Balasio Peter, Director for Agricultural Mechanization</p> <p>Moses Mogga Mikaya, Inspector for Mechanization</p>
JICA-TT	<p>Kazumitsu TSUMURA, Team Leader / Development Policy</p> <p>Akihiko HATA, Co-team leader /Aid program /Budget preparation</p> <p>Hitoshi TOKU, Irrigation & Drainage</p> <p>Akira NAKAMURA, Organization /Capacity building /Training</p> <p>Toru NAKAGAWA, Meteorology & Hydrology</p> <p>Hideki ISHIKAWA, Irrigation Facility / Cost Estimate (Supplement)</p> <p>Ayako OCHI, Remote sensing /GIS</p> <p>Kenichi KURAMOTO, Environmental and social consideration</p> <p>Koichi AKASHI, Coordinator for training</p>
JICA South Sudan Office	<p>Tomoki KOBAYASHI, Acting Country Representative</p> <p>Etsuko OSUMI, Project Formulation Advisor of Agricultural Sector</p> <p>Emmanuel MINARI, Expert</p>
Attachment	<ol style="list-style-type: none"> 1. PPT No.1 for the IDMP TT Joint Meeting 2. PPT No.2 for activity report of RSS-TT

	3. PPT No.3 for Procedure of Subcontracting
	4. PPT No.4 for Discussion on further schedule

I. The first day (on the 8th of July)

1. Programme Adjustment

Tsumura explained the adjustment that has been made to the programme, as well as the whole schedule of the IDMP TT Joint Meeting from the 8th to the 12th of July 2014 (See PPT No.1), and it was revised as following table on the 10th.

Date	AM (9:00 to 12:30)	PM 13:30 to 17:00
July 08 T	1. Program adjustment 2. Briefing on the status of the last meeting held in Kampala (March) → Hata 2. Works done in Jube → Makuac 3. Finalization of PR2 (Chap-1) → Tsumura	3. F.of PR2 (Chap-2&3) and further works → Nakagawa, Toku 3. F.of PR2 (Chap-4) and further work → Nakamura 3. F.of PR2 (Chap-5) and further works → Kuramoto 3. F.of PR2 (Chap-6) and further works → Hata Confirming IDMP Goals → All TT
July 09 W	4. Selection of priority area (1/5) 1) Prioritizing IDMP → Tsumura 4. Selection of priority area (2/5) 2) High resolution procedures done in Japan → Ochi	3) Land cover/use classification 4) Criteria for selecting the area → Toku
July 10 T	4. Selection of priority area (3/5) → All TT	4. Selection of priority area (4/5) (Continue) → All TT
July 11 F	4. Finalizing selection of priority project areas (5/5) with deciding IDMP proposed goal. 5. Outline of Scope of Preliminary Environmental Survey (draft) → Kuramoto	(PM 13:30 to 15:00) 6. Assessment of sub-contractors → Simon, Ishikawa, Toku
July 12 S	(AM 9:00 to 12:30) 7. AOB (if any) 8. Briefing to Undersecretary what we did → RSS-TTs	(PM 13:30 to Open) 9. Discussion on further schedule → Tsumura, JICA SS 10. Conclusion → Hata, Andrew

2. Briefing on the status of the last meeting held in Kampala (March)

Hata explained the progress as of March, 2014 (at the time of the last meeting in Kampala), RSS-TT's suggestions on the implementation of the remaining tasks, timeframe, operational modalities, and so on, based on PPT No.1.

3. Activity report of RSS-TT

By showing PPT No.2, Makuac explained how the RSS-TT members had been working themselves since the time of the IDMP office reopening.

1. Encouragement
2. The tasks resuming
3. The working hours
4. Responsibility and roles
5. Conclusion and remarks

4. Finalization of PR2 and Further work

(1) Cover Page and Chapter 1: Introduction

On cover page, MAFTARFCRD has been changed to MAFCRD. Regarding Chapter 1, the time frame will be revised when IDMP-TT discuss the further schedule.

Progress Report2 Reviewing table

Chapter	Annex	Chapter Presenters	Annex Presenter	Date	Remarks
Chapter1	cover	Jiben/ Moses	Doki	Chapter1 09/05/14 Annex 0 01/07/14	The chapter presented by Eng. Jiben and Moses, in addition to that it reviewed by the RSS- TT Members with remakes points, care track changes, fair discussions and attention as stated in the report, over all the reviews done as scheduled
Chapter2	1&2	Simon, Chut Deng, Gai, Doki ,Robert G(B)	Chut	Chapter2 13-16/2014 Annex(1&2) 03/07/2014	Same as above
Chapter3	3&4	Simon, Chut Deng, Gai, Doki ,Robert G (B)	Robert	Chapter3 20/05/2014	Same as above
Chapter4	5&6	Pagan, Wol& Moses	Gai	Chapter4 20- 23/05/2014	Same as above
Chapter5		Erneo& Makuac		Chapter 27- 30/05/2014	Same as above
Chapter6		Andrew& Wol		Chapter6 13,23&30/06 /2014	Same as above
Chapter7		All RSS-TT Members			Same as above

(2) Chapter 2: Irrigation Development Potential Assessment

1) Revision of Chapter 2

Comments were given by RSS-TT on Section 2.4.2 River Discharge Analysis and the following parts of Chapter 2. Nakagawa agreed with incorporating their comments to revise the chapter. Regarding the comments on Section 2.6 Selection of High Potential Areas for the Detailed Assessment (High Resolution Areas), Toku explained selection criteria.

2) Further Work

Technical transfer on GIS/Remote Sensing was explained base on PPT No.1.

(3) Chapter 3: Zoning

RSS-TT commented on Table 3.1.1 Characteristics by Zone: Change in Names of Zone from Connection into Intermittent; further division of Flood plain into two zones, Flood Plain and Wetland, Sudd etc. as shown below, Moreover, they suggested considering soil type of each zone by utilizing the soil map.

Zone	Elevation	Terrain Slope	Irrigation Modes					
			Types	Techniques/methods	Sources of Water	Soil type	Land cover	Scale
Mountainous Area	More than EL. 600 m	1/500 . 1/1,500	Dominated by pressurised irrigation	Furrow, Terracing	springs, aquifers and reservoirs	TBD, By using available soil map	TBD	Micro /Small
Connection (intermittent)	EL.400 . 600 m	1/2,000 . 1/5,000	Mix of gravity and pressurised irrigation	Basin, Furrow	rainfall, rivers, lakes, reservoirs and groundwater			Micro/S mall /Medium
Floodplains,	Around EL. 400 m	Less than 1/5,000	Dominated by gravity irrigation	Basin, Furrow,	lakes, rivers and reservoirs			Micro/s mall/Me dium /Large
Wetlands and River corridors	TBD	TBD	mixed of gravity and pressurised irrigation	Basin	soil moisture, rivers and lakes			Micro/S mall

(4) Chapter 4: CAPACITY NEEDS ASSESSMENT (CNA)

1) Revision of Chapter 4

Nakamura incorporated the comments made by RSS-TT, which are mostly Name of ministries and English grammatical errors.

2) Further Work

Based on PPT No.1, Nakamura explained the current achievement and the further work regarding the formulation of the IDMP Capacity Development plan, which consists of i) Human Resource development plans for technical institutions related to irrigation development; ii) Capacity development plan for Farmers' organizations; iii) Institutional development plan for training institutions; iv) Training plan for farmers in irrigation schemes. Regarding iii) Institutional development plan for training institutions, Nakamura explained that it would be necessary to consider establishment of new training centres together with demonstration farms in the priority project areas. RSS-TT member's comments are as follows:

- All the actors for the future irrigation development need to be captured, in addition to the capacity of extension workers and farmer's cooperatives/ associations.

- The further discussion on the future roles of the actors (including farmers, farmer's cooperatives/ associations, training institutions, and extension officers, etc) is necessary. Moreover, the roles need to be documented.
- Nakamura explained these activities would be done in Phase 3.
- The existing training centres can be utilized by revising the training modules.
- In the future, MWRI can have its own training institutes for irrigation development.

(5) Chapter 5

Kuramoto explained the further work on environment and social consideration based on PPT No.1. RSS-TT asked who would facilitate the Environmental Survey, Japanese side or else. Kuramoto explained as follows:

- a. Rapid evaluation, which is rough estimate using the existing data, will be covered by this MP Study.
- b. Preliminary survey will be done for the priority projects to identify problems. This will be implemented by RSS-TT.
- c. Further study, such as EIA, will be conducted after formulation of the MP.

(6) Chapter 6

Points discussed on the first day (the 8th July) were as follows:

- Roles of actors for the future development as well as ownership of land and projects need to be considered. Moreover, Table 6.5.2 'Role of Stakeholders by Different Category of Irrigation Scheme' need to be replaced by Verbal explanations of such issues.
- Guideline for irrigation development is necessary.
- Hata suggested Tanzania's experience (zonal irrigation development) could be applicable. In this account, Andrew pointed that it would be currently challenging to South Sudan. He continued that it could be proposed for the future after the water bill is enacted.
- Regarding methods of the verification of the state proposed schemes, site survey and contacting the leadership of the state via email were suggested.
- The goal of IDMP was considered through group discussions. Most of the members suggested that IDMP, as one of the subsectors of CAMP, needed to consider short, middle and long term means to contribute to the goal of CAMP. The results of the discussion, which will be considered further later on, are shown in the following table. It will be finalized in the process of selection of priority project areas, probably on 10th July.

Proposed Goal

	Short-term	Medium-term	Long-term
CAMP	Reduction of food insecurity at national and household level	Increase in farming household income	Transformation of agriculture into export industry
IDMP			
Group 1	<ul style="list-style-type: none"> ● Increase agricultural production by irrigation (small scale, pilot projects, rehabilitation of existing scheme) 	<ul style="list-style-type: none"> ● Increase areas under irrigated agriculture 	<ul style="list-style-type: none"> ● Introduce modern irrigation technology (ensure water-use efficiency)
Group 2	<ul style="list-style-type: none"> ● Improve traditional irrigation scheme. ● Implementing pilot project and develop new small scale scheme. ● Operationalizing existing schemes. 	<ul style="list-style-type: none"> ● Promote water harvesting and water saving irrigation technologies. ● Medium scale irrigation development and introduction of mechanized irrigation. 	<ul style="list-style-type: none"> ● Large scale irrigation development. ● Utilization of groundwater. ● Private sector investment
Group 3	<ul style="list-style-type: none"> ● Improve traditional irrigation to increase household income. 	<ul style="list-style-type: none"> ● Improve water-use efficiency 	<ul style="list-style-type: none"> ● Increase area under irrigation.
Group 4	<ul style="list-style-type: none"> ● <u>Own goal</u>: develop 0.4% of national land to be irrigated. ● <u>CAMP</u>: Realize supplementary water supply and double crop season 	<ul style="list-style-type: none"> ● <u>Own goal</u>: Develop 0.6% of national land to be irrigated ● <u>CAMP</u>: Improve traditional irrigation (physical and institutional) Operationalize existing schemes. 	<ul style="list-style-type: none"> ● <u>Own goal</u>: Develop 1.0% of national land to be irrigated ● <u>CAMP</u>: Vastly increasing irrigation area and sustainable management system.

II. The Second day (on the 9th of July)

5. Selection of priority project area

(1) Explanation of high resolution procedures

Ochi explained High resolution procedures done in Japan and Land cover/use classification base on PPT No.1.

(2) Selection Criteria

RSS-TT proposed the following selection criteria:

- Areas within the 10% for high resolution satellite imagery assessment/survey
- Areas with the currently existing schemes
- Accessible areas
- Availability of a water source or possibility of controlling water (e.g. perennial rivers/ lakes); potential for water harvesting and storage; possible exploitation of ground water; possibility of controlling water with dikes/drains; possibility for introducing contour farming (terracing)
- Proposed/agreed schemes by National, State or County governments with documented evidences
- Previously proposed irrigation development schemes in the old Sudan master plan, NBI feasibility studies, IGAD projects/sites, etc.

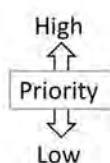
- Proposed areas should not have a record of conflict over land use (e.g. land overlapping between two different administrative units, land under different type of use (e.g. game reserve, rangeland, etc.))

IDMP-TT agreed on incorporating the aforementioned criteria into the following criteria. Besides, IDMP-TT also agreed on finalizing the criteria for the prioritization after the selection of the candidate areas for priority projects based on the high resolution map.

(1) Land Cover

The following top five (5) of land cover class will be nominated as candidate area for priority project taking into account an easiness of development.

- 1) Irrigated crop land,
- 2) Rainfed (Non-irrigated) crop land,
- 3) Grassland,
- 4) Woodland, and
- 5) Forest (Open canopy)



IDMP Land Cover Class	Score *)	North Zone		Southwest Zone		South Zone		Total	
		Area (sq.km)	Percentage (%)	Area (sq.km)	Percentage (%)	Area (sq.km)	Percentage (%)	Area (sq.km)	Percentage (%)
1 Irrigated Crop Land	10	1,847.3	6.96	0.02	0.00	1.6	0.01	1,848.9	2.86
2 Rainfed Crop Land	10	683.5	2.58	2,902.83	11.64	543.3	4.12	4,129.6	6.39
4 Forest (Closed Canopy)	3	337.3	1.27	263.68	1.06	73.9	0.56	674.8	1.04
5 Forest (Open Canopy)	3	7,966.1	30.03	9,541.51	38.26	4,091.3	31.01	21,598.9	33.40
6 Woodland (Savanna)	6	5,279.8	19.90	7,586.11	30.42	2,842.7	21.54	15,708.6	24.29
7 Grassland (Pastoral Land)	8	9,951.7	37.51	4,586.61	18.39	5,188.0	39.32	19,726.3	30.51
8 Settlements	1	115.8	0.44	50.02	0.20	113.7	0.86	279.5	0.43
10 Open Water Body	1	348.4	1.31	8.36	0.03	340.1	2.58	696.9	1.08
Total		26,529.7	100.00	24,939.1	100.00	13,194.5	100.00	64,663.4	100.00
Notes			41.03		38.57		20.40		100.00

*) Score: Used at rapid assessment.

2) River alignment and Socio-economic Conditions

Candidate area nominated based on land cover will be narrowed down further taking account of the following items:

- 1) Rver alignment (Accessibility of irrigation water resources)

: Perennial rivers, seasonal rivers, and lakes along rivers

- 2) Socio economic conditions

a. County capitals accessibility

North Zone (10 counties)

: Renk (UNS), Wuadakon (UNS), Melut (UNS), Fashada (UNS), Malakal (UNS), Panidway (UNS), Malwal (JS), Baliet (UNS), Ulang (UNS) and Nasir (UNS)

Southwest Zone (6 counties)

: Warrap (WS), Acongeong (WBGs), Tonj (WS), Cueibet (LS) Rumbek (LS) and Aduel (LS)

South Zone (3 counties)

: Bor (JS), Terekeka (CES) and Juba (CES)

b. Road accessibility

III. The Third day (on the 10th of July)

5. Selection of priority project area (Continued from the second day)

(3) Selection of the candidate areas for priority projects

By checking the high resolution map as well as the list of the existing and proposed potential irrigation scheme development sites by the states, IDMP-TT selected the candidate project areas. The results are as shown in below.

1) North Area



2) South west Area



3) South Area



(4) Prioritization of the selected candidate areas

Before the prioritization of the selected candidate areas, IDMP-TT checked the selection criteria and determined the score of each selection criterion. Based on the criteria and the scores, the 1st prioritization of the selected candidate areas was conducted. As a result, most of the areas marked the same score. Thus, IDMP-TT decided to reconsider the criteria and the scoring. This will be continued on the fourth day. Tsumura asked RSS-TT member to reconsider the criteria and scoring shown in the table below.

Score	1. Technical	(1) Water Availability	Perennial river	5	
			Seasonal River	Jur	4
				Yei	3
				Naam, Tonj	2
				Gel	1
				Gulmam	0
		(2) Main Land Cover	Irrigated Crop Land	5	
			Consolidated Rainfed Crop Land	4	
			Fragmented Rainfed Crop	3	
			Grass Land & Woodland	1	
	Others		0		
	(3) Irrigable size	More than 50 Feddan	5		
		Less than 50 Feddan	0		
	2. National Policy	(1) Proposed/Agreed schemes	Yes	4	
			No	0	
		(2) Previously proposed schemes	Yes	2	
			No	0	
	3. Socio Economic	(1) Physical accessibility (Road, County Capital,	0 - 10 km	4	
			More than 10 km	2	
		(2) Schemes with national Impact (Food security, income	High	4	
Moderate			3		
Low			2		
(3) Conflict records over land use		Yes	0		
	No	4			
Total Score					

The Forth day (on the 11th of July)

5. Selection of priority project area (Continued from the third day)

(4) Prioritization of the selected candidate areas

First of all, IDMP-TT reconsidered some of the criteria and scoring to rank the candidate areas for priority projects. Besides, IDMP-TT reconsidered our goal. The result is as shown below.

Proposed Goal

	Short-term	Medium-term	Long-term
CAMP	Reduction of food insecurity at national and household level	Increase in farming household income	Transformation of agriculture into export industry
IDMP	<p>Strategic goal: To achieve steady economic growth through efficient, effective and sustainable irrigated agriculture</p>		
	- Promotion of irrigated agriculture	- Expansion of irrigated areas and improvement of productivity	- Ensure efficient and sustainable irrigation management system

This was also taken into consideration to categorize the candidate projects into short, middle, long term targets. The result of the final criteria and prioritization is as shown below.

Score	1. Technical	(1) Water Availability	Perennial river		5	
			Jur		4	
			Yei		3	
			Seasonal River		Naam, Tonj	2
					Gel	1
					Gulmam	0
		(2) Main Land Cover	Irrigated Crop Land		5	
			Consolidated Rainfed Crop Land		4	
			Fragmented Rainfed Crop		3	
			Grass Land & Woodland		1	
	Others		0			
	(3) Irrigable size	More than 50 Feddan		5		
		Less than 50 Feddan		0		
	2. Government Plan	(1) Proposed/Agreed schemes	Yes		4	
			No		0	
		(2) Previously proposed schemes	Yes		2	
			No		0	
	3. Socio Economic	(1) Physical accessibility	Road	0 - 10 km	4	
				More than 10 km	2	
			County Capital	0 - 5 km	2	
				5 - 10 km	4	
				More than 10 km	3	
			Water point	0 - 10 km	4	
More than 10 km		2				
(2) Schemes with national Impact (Food security, income		High		5		
		Moderate		3		
		Low		2		
(3) Conflict records over land use	Yes		0			
	No		4			
Total Score						

Scoring of candidate areas									
South Zone					North Zone				
No.	Name of Area	Score	Rank	Categorizing (tentative)	No.	Name of Area	Score	Rank	Categorizing (tentative)
S-0	Rejaf-East	38	2	S (2015-2020)	N-1*	Renk-North	40	1	S (2015-2020)
S-1	Jebel Lado	39	1	P	N-2*	Renk-South-1	40	1	S (2015-2020)
S-1'	Mongalla	37	3	L (2015-2040)	N-3*	Manyo-North	40	1	S (2015-2020)
S-2	Terekeka-South	32	6	S (2015-2020)	N-4*	Manyo-South	40	1	S (2015-2020)
S-2'	Tali	33	5	S (2015-2020)	N-5	Manyo-West	28	23	M (2015-2027)
S-3	Terekeka-North	31	7	M (2015-2027)	N-6	Renk-South-2	32	8	M (2015-2027)
S-3'	Mingkaman	31	7	M (2015-2027)	N-7	Jelhak	37	7	S (2015-2020)
S-4	Bor-East	31	7	M (2015-2027)	N-8*	Melut	40	1	S (2015-2020)
S-5	Bor-North	31	7	M (2015-2027)	N-9	Kaka-1	27	25	M (2015-2027)
S-6	Twic-East	36	4	S (2015-2020)	N-10	Kaka-2	31	14	M (2015-2027)
S-7	Wangule	30	11	M (2015-2027)	N-11	Jelhak-South	31	14	M (2015-2027)
Average		34			N-12	Fashada	30	21	M (2015-2027)
South West Zone					N-13	Akoka	30	21	M (2015-2027)
Priority, S: Short term, M: Medium term, L: Long Term					N-14	Makal	28	23	M (2015-2027)
No.	Name of Area	Score	Rank	Categorizing (tentative)	N-15	Panyidway	32	8	M (2015-2027)
SW-1	Ngop	28	4	S (2015-2020)	N-16	Nakdeir	32	8	M (2015-2027)
SW-2	Payii	29	2	S (2015-2020)	N-17	Baliet	32	8	M (2015-2027)
SW-3	Aduel	28	4	S (2015-2020)	N-18	Abong	32	8	M (2015-2027)
SW-4	Pacung	31	1	P	N-19	Adong	31	14	M (2015-2027)
SW-5	Malekajok	27	8	M (2015-2027)	N-20	Galacial	32	8	M (2015-2027)
SW-6	Cueibet-East	27	8	M (2015-2027)	N-21	Doma	31	14	M (2015-2027)
SW-7	Cueibet-West	27	8	M (2015-2027)	N-22	Ulong	31	14	M (2015-2027)
SW-8	Tonj-South	27	8	M (2015-2027)	N-23	Nasir-East	31	14	M (2015-2027)
SW-9	Tonj-North	28	4	S (2015-2020)	N-24	Nasir-West	31	14	M (2015-2027)
SW-10	Aconjeong-North	29	2	S (2015-2020)	N-25	Mohamad Ajak	39	6	P
SW-11	Toc	28	4	S (2015-2020)	Average		33		
SW-12	Cueibet-North	25	12	M (2015-2027)	Average		34		
Average		28			*Priority project is target for field surveys (topographic, geological, soil, river dischargemen etc). These areas are under Upper Nile Irrigation Scheme and necessary document to plan the rehabilitation plan is enough already. Therefore even if its rank is 1, these areas are excluded from the candidate for priority project.				
Categorizing:									
P: Priority Projects (implemetation term is short)									
S: Short Term Project									
M: Medium Term Project									
L: Long Term Project									

6. Assessment of sub-contractors

Based on PPT No.3, Toku explained Procedure of Subcontracting.

IV. The Fifth day (on the 12th of July)

7. Outline of Scope of Preliminary Environment Survey

Based on PPT No.1, Kuramoto explained his current ideas on items, key issues, and scope of work of the Preliminary Environment Survey.

Regarding public hearing, Andrew suggested it was too early to hold it at this stage. Chut raised the necessity at this stage. Andrew responded that the timing of public hearing was not at this stage;

however it would be necessary to explain the purposes of the survey to community people. Kuramoto stated that the clear explanation of the purpose would be required and IDMP-TT would discuss the purposes in the next phase.

Scope of Items and Key Issues	Outline of Scope of Work (Survey Method)
<i>Compatibility between local policy, plan, etc.</i>	<input type="checkbox"/> Interview with local gov.
Ecosystem <input type="checkbox"/> Whether endanger/rare fauna and flora live? <input type="checkbox"/> Whether habitat, harvesting or migrating of fauna exist?	<input type="checkbox"/> List endangered/rare fauna and flora <input type="checkbox"/> Delineate location of habitat, harvesting, migrating <input type="checkbox"/> Those will be based on site observation, interview to local people, etc.
Community profile <input type="checkbox"/> Number of community, tradition/life style, land ownership <input type="checkbox"/> Use of land and water body, source of income	<input type="checkbox"/> Interview with communities <input type="checkbox"/> Questionnaires
Local and social infrastructure <input type="checkbox"/> Electric line, public/religious facility, community road, etc.	<input type="checkbox"/> Interview with communities, local gov.
Community perception	<input type="checkbox"/> Public hearing

8. Discussion on further schedule

(1) Briefing of the achievement from the first day to the fourth day

First of all, IDMP-TT welcomed Eng. Issac, Undersecretary of MEDIWR (Water Sector) and Mr. Kobayashi, the acting country representative of JICA South Sudan. After that, Andrew explained the achievement of IDMP-TT Joint meeting from the first day to the fourth day: finalization of PR2, proposed IDMP goal, selection of the candidate project areas and their prioritizations including the explanation of the selection criteria, and so on.

(2) Comments and suggestions from Undersecretary

First of all, the following comments were raised by Undersecretary:

- I) The SSDP needs to be considered to decide the IDMP Goal, especially ones related to the economic sector, the infrastructure sector and the natural resource sector. Based on this comment, the goal has been revised (see the table below).

	Short-term	Medium-term	Long-term
CAMP	Reduction of food insecurity at national and household level	Increase in farming household income	Transformation of agriculture into export industry
IDMP	Strategic goal: To achieve sustainable irrigated agriculture thereby improve food security and resilience, reduce poverty and contribute to economic growth and development		
	- Promotion of irrigated agriculture	- Expansion of irrigated areas and improvement of productivity	- Ensure efficient and sustainable irrigation management system

- II) IDMP-TT needs to cross-check the relation between the administrative boundary and the hydrological boundary.

- ✓ Management bodies of the hydrological boundary have not been established yet.

- ✓ Currently, the strategic framework has been considered based on the administrative boundary.
 - ✓ It will be too early to propose the hydrological boundary management system; however, IDMP can recommend the establishment of the management office based on the hydrological boundary consisting of the central and provincial level government staff.
- III) Undersecretary emphasised that we needed to determine our future (for the scheme, we consider the administrative boundary; for the sources of water, we need to consider the hydrological boundary).
- IV) Aweil rice scheme is a good example as a national scheme. IDMP-TT needs to check the documents, such as evaluation reports done by Germany, etc.
- V) Discussion need to be made based on the land cover and soil type in each zone, in order to consider the proposed schemes for each zone. Undersecretary continued that IDMP-TT needed to select projects from the mountainous zone and other areas outside the 10% high resolution area.
- ✓ Tsumura explained the reasons of the selection of the priority projects among the 10% high resolution area: the budget, the security, the time frame and so on.
 - ✓ Emanuel questioned if it is the right thing for IDMP-TT to limit the selection among the 10% high resolution area.
 - ✓ Jiben suggested checking the list of the candidate projects.

Secondly, based on the suggestion made by Jiben, Undersecretary rechecked the 10% high resolution areas (the selected candidate projects and the areas that have not been selected) by referring to the list of the previously considered potential irrigation schemes, and he suggested the following categorization in terms of the land cover:

- i) River corridor and wetland
- ii) Grass land (without any trees or with very sparse woods or trees) or existing irrigated crop lands: Implies possibility of large scale with serious competition with livestock. **((i)Monhamed Ajak-Upper Nile)**
- iii) Savannah (less than 15% of wood/tree density): Implies possibility of medium scale with serious competition with traditional farming. **((ii)Jebel Lado-CE, (iii)Pacong-Lakes and Acongcong-Warap)**
- iv) Land under forest (open canopy: 15 - 65% of wood/tree density): Implies possibility of limited or small scale with serious competition with forest and wild life.
- v) Land under forest (closed canopy: more than 65% of wood/tree density): Implies possibility of micro scale with serious competition with forest and wild life.
- vi) Land under rain-fed agriculture **(Jebel Lado-CE, Pacong-Lakes and Monhamed Ajak-Warap)**
- vii) Mountainous Zone **((iv)Kapoeta and (v)Lafon-EE)**

	1. River corridor and wetlands	2. Grass lands or plains	3. Savanna	4. Forest (open canopy)	5. Forest (closed canopy)	6. Rain-fed	7. Mountainous
(i) Mohamed Ajak	√	√				√	
(ii) Acongcong			√			√	
(iii) Pacong			√	√		√	
(iv) Jebel Lado	√	√	√			√	
(v) Lafon		√				√	
(vi) Kapoeta		√	√			√	√

Moreover, based on 15% of high potential area map, Undersecretary checked the areas excluded. Tsumura explained the mountainous areas were excluded because the abundant rainfall makes irrigation unnecessary in the areas. He agreed with the point. Tsumura continued that the excluded areas would be considered in Phase 3 (if the security situation allows IDMP-TT to visit the areas).

Besides, Undersecretary suggested adopting the aforementioned categorization to consider the priority projects. He also suggested selecting two sites: one from Mountainous Zone; one from River corridor and wetland.

(3) Discussion on further schedule

1) Introduction (explanations were made based on PPT No.4)

Before the discussion on the further schedule, Tsumura explained the Project targets from IC/Report, the Importance of preparing priority project plans, the Positions of sub-contracting for conducting field surveys for priority project plan (Pre-F/S), and the Operational conditions of sub-contractor as per JICA regulations (Mr. Kobayashi also explained sub-contractors would be under the chain of the JICA's command and thus JICA's regulations would be applied to them.). Mr. Kobayashi explained the JICA's operation status as of July 12, 2014. The main points are as follows:

- JICA-TT of IDMP may return to Juba in January in 2015 when MOFA Japan decided to allow it.
- Difficulty by remote management from Kampala considering the following points:
 - ✓ Efficient capacity development
 - ✓ Assessment of sub-contractors based in Juba
 - ✓ Confirming realization/reality for implementation of IDMP

2) Further schedule

Tsumura explained two possible scenarios: Scenario 1, the case in which JICA-TTs will be allowed to return to Juba; Scenario 2, the case in which JICA-TTs will not be allowed to return to Juba. In case of Scenario 1, IDMP activities will be started in January, 2015 and completed in November, 2015. On the other hand, in case of Scenario 2, Master Plan (IDMP) shall be finalized by remote management from Kampala (Priority project plans shall not be prepared in IDMP process; JICA South Sudan office will consider the separate scheme for it.).

RSS-TT responded as follows:

- IDMP-TT needed to follow the schedule agreed in March, 2014.
 - ✓ Tsumura mentioned his understanding was just suggestion by undersecretary.
 - ✓ Undersecretary did not agreed it.
- Selection process can be done by RSS-TT, saying that prequalification notice (PQ) can be advertised.
 - ✓ JICA-TT mentioned the necessity of the determination of the scope of work (at the moment, the priority project have not been fixed in details.).
- Undersecretary suggested RSS-TT sending the PQ to correct company profiles and conducting the survey during the rainy season.
 - ✓ Tsumura recommended that the surveys ought to be done during the dry season, considering the efficiency of the survey efficiency.
 - ✓ Undersecretary suggested it could be done even during rainy season.

JICA South Sudan Office suggested conducting up to PQ procedure for realizing the sub-contractors for the time being.

- Undersecretary and IDMP-TTs agreed on it.
- Also it mentioned cost of notice through newspaper will be paid by JICA SS Office.
- Notice for PQ and PQ Documents for both Geological and Topographical surveys will be finalized tomorrow by selected members of RSS and JICA-TTs, with extending schedule.

V. The Sixth day (on the 13th of July)

9. Finalizing PQ

Undersecretary and IDMP-TT worked on the PQ documents for advertisement. Considering the purpose of advertisement, which is to collect information on survey companies, Undersecretary and IDMP-TT agreed that the notice would be for expression of interest (EOI) instead of PQ (The name of the documents was changed into ðEOI documentsö).

End

15. FIRST INTER-MINISTERIAL STEERING COMMITTEE (IMSC) COMBINED MEETING OF CAMP AND IDMP, 26th AUGUST 2014, CASSAVA HALL, MAFCRD PREMISES, JUBA

Formulation of the Comprehensive Agriculture Master Plan (CAMP) of the Republic of South Sudan

Minutes of 1st Inter-ministerial Steering Committee Briefing

Agenda	<ol style="list-style-type: none"> 1. Introductory remarks; Prof Udo/Eng Isaac 2. Opening remarks; Hon Ministers Beda Machar Deng and Hon Nunu 3. Presentation of CAMP and IDMP Frameworks; Prof Udo/Eng Isaac 4. Presentation of CAMP and IDMP Summary Findings; Prof Udo/Eng Isaac 5. Presentation of next steps; John Pangech/Makuac 6. AOB; Prof Udo
Date and Time	Tuesday, 26 th August, 2014, 14:30:00 hours . 19:40 hours
Venue	Cassava Hall in MAFTARFCRD
Attendees	<p>Hon Minister Beda Machar Deng, MAFCRD Hon Minister Jemma Nunu Kumba, MEDIWR Hon Minister Deng Deng Hoc Yai, Minister of Env Hon Deputy Minister Simon Mijok Mijak, Deputy Minister of Transport, Roads and Bridges Hon Waragat Gatluak, Advisor to Hon Minister MAFCRD Undersecretary Prof Mathew Udo, MAFCRD Undersecretary Eng Isaac C Liabwel Undersecretary Makuei Malual Kaang, MLFI Mr John Pangech, CAMP Task Team Leader/Acting DG for Planning MAFCRD Mr William Olami, CAMP Task Team member/DG for Planning MLFI Dr Erneo Balasio, CAMP Task Team member/Director for Mechanization MAFCRD Mr Joseph Akim, CAMP Task Team member/Deputy Director for Extension MAFCRD Mr Noel B. Cleopas, CAMP Task Team member/Assistant Director for ForestryMAFCRD Mr Samson Bringi, CAMP Task Team/Inspector for Livestock MLFI Ms Suzana Gabriel, CAMP Task Team member/ MLFI Mr Makuac Ador, Acting IDMP Task Team Leader/MEDIWR Mr Andrew Yunda CAMP/IDMP Task Team member Mr Robert Zakayo, IDMP Task Team member Mr Simon Otoung, IDMP Task Team member Mr Ayo Peter Wani, CAMP Research Assistant</p>
Handouts	<ol style="list-style-type: none"> 1. Agenda for the meeting 2. CAMP and IDMP frameworks 3. CAMP and IDMP summary findings 4. CAMP and IDMP Way forward 5. Investment Planning Space 6. Minutes of second Administrative Meeting Between JICA and Undersecretaries of MAFCRD, MLFI and MEDIWR

1. Introductory remarks by Prof Udo

- The undersecretary noted that the meeting was scheduled for the morning hours but could not be held as scheduled due to unforeseen circumstances. The president arrived at the airport from Adis ababa in the morning hours and the honourable minister was asked to go to welcome him.
- After the president arrived, there was supposed to be a council of ministers meeting but was re-scheduled. It was then decided that CAMP and IDMP meeting can still be held. There were

supposed to be several ministers to attend the meeting but they could not attend. It's upon the honourable ministers to decide if the meeting can still be held.

2. Opening Remarks by the honourable minister Beda Machar Deng

- The minister thanked and appreciated the technical team and JICA for its work and support to develop the documents. It is not a simple task to develop such technical documents, he added.
- Informed participants that the president was supposed to arrive in the evening of the day before the meeting but could not and therefore all ministers were asked to return to their respective ministries. Today in the early morning I was called suddenly and informed that the President is coming, and I had to report to the airport immediately, said the Hon Minister.
- He added that there was also supposed to be a council of ministers meeting which was postponed.
- The CAMP and IDMP meeting is a very important consultative meeting where ministers are supposed to consult among themselves. There are supposed to be about 8 ministers in the meeting but they are less. However, if the meeting is to be adjourned, it may coincide with other programs, noted the Minister.
- He requested for the views of other ministers present, regarding whether to proceed with the meeting or not.

a) Comment from Hon Jemma Nunun Kumba

- The Hon minister observed the protocol and made the following remarks;
- It's very difficult to get all ministers together at the same time. If meeting is adjourned, some members may not be available. Some ministers may travel abroad. Since three ministers are present (Note: The Minister of Environment arrived later on, making four ministers), the team could make use of the time.
- The Hon minister Beda consulted with his advisor present at the meeting regarding the meeting.
- The advisor recommended that the meeting can proceed. Those ministers not present will be briefed about the outcomes.
- The undersecretary Prof Udo invited Hon Minister Jemma Nunu to give her opening remarks.

b) Opening remarks from Hon Jemma Nunu Kumba

- The Hon minister thanked the ministers and participants, and gave the following remarks.
- It's an opportunity to meet. It is her first time to meet with the ministers and the team about the CAMP/IDMP. CAMP and IDMP are very important projects. It's usually very difficult to implement activities without a plan. There might be resources in a nation but utilization is a challenge if there is no plan.
- Implementation of the CAMP is very important. Most documents/projects have always had difficulties with implementation and ended nowhere.
- She is very happy to work with the ministry of agriculture. There has always been a question of which ministry irrigation belongs. However, since it is the same government, irrigation issues will be dealt with as a team.
- Being her first time to meet about CAMP and IDMP, she is very happy and would like to hear more about the master plans, than spending more of her time talking. She thanked the technical team for its time with the development partners to produce the CAMP and IDMP documents.

c) Additional remarks from Hon Beda

- Emphasised the importance of the CAMP to the ministry and country. Noted that it is a very important working document. However, the plan needs to be implemented. This is why it was very important for the minister of finance to attend the meeting, noted the Minister.
- He appreciated the technical team for its efforts to design the documents. He also appreciated JICA for technically and financially supporting the team.
- He noted that the master plan is a major issue lacking at the ministry. Greatly thanked the team for its work and handed over the mike to Dr Erneo to present.

3. Presentation of CAMP Framework

- The Task Team leader presented the CAMP framework (refer to hand-out for details)
- After the CAMP framework presentation, Dr Erneo presented the summary of situation analysis findings, supported by Mr Olami (Refer to hand-outs of the presentations)
- The TT leader later presented the donor buy in and way forward.

a) Comments on the presentations

I. Comments from Hon Deputy Minister of Transport, Roads and Bridges

II. Comments from Hon Jemma Nunu

- The minister made the following remarks;
- Document is okay. Implementation is key.
- It should be clearly indicated when food security will be achieved.
- Focus on subsistence farming level is very important
- Research should be an area of focus. Considering examples of neighbouring countries e.g. Kenya is very important.
- She is not sure if the fish consumption value of 17kgs/ person is a true value. Some areas e.g. Upper Nile have a lot of fish whereas other areas do not.
- Awareness on forest conservation is a very important point to be considered by the forestry team. Forest burning is a very serious environmental issue.
- Skins and hides are being wasted and it is a big challenge.
- She agrees with high labour cost in the country, for instance in Western Equatoria which has a dense network of trees and vegetation requiring a lot of labour to uproot and cultivate.

III. Comments from Hon Minister of Environment

- The Hon Minister made the following remarks;
- Congratulated the technical team for developing the CAMP. It is good that at least South Sudan has a plan to improve food security and improve land employment. It is a document that South Sudan needs.
- The team needs to cost the document so that they as ministers will be able to mobilize resources.
- Issue of feeder roads is very important to transport food to the market.
- Access to market is an issue; where are the markets and roads?

- Need to address the issue of geographical variation. Some areas produce different product at their best.
- Every developmental program must take into consideration environmental considerations. Ensure that agriculture does not destroy the forests because forests are assets. If you enter into carbon trading, you will generate millions of incomes that are more than incomes from crops.
- There is a national tree planting program developed by the ministry of Environment and the Minister of Agriculture is the chair. The project will plant trees nationwide to combat desertification.
- Need to prevent fish from overfishing and depletion. Want to caution irrigation.
- A lot of factories are being established along the Nile River and on wetlands. There is need to monitor them to ensure they do not dump wastes into the water bodies.
- He has a report that there is degradation of forests in the oil producing areas.
- Finally, the Undersecretary of the Ministry of Environment should be included into the CAMP and IDMP Technical Team so that the ministry of Environment can have technical inputs.

IV. Comments from Hon Beda

- Thanked Hon Ministers for comments and technical team for its work. Noted the following;
- Master plan affects every body/sector.
- Since master plan will last for more than 30years, there is need to consider livestock restocking.
- There is need to have terminologies in livestock, fisheries and aquaculture, forestry and crop, in terms of disease indication and pests. Degradation and deforestation/cutting of trees needs to be stopped. Need to mention wood products including medicinal plants which communities depend on.
- What is the target? Implementation by the directories to increase food production among households, education of the population, training of extension workers who will educate the farmers. The yield has to increase and production will increase. There is need to increase area cultivated by use of ox-ploughs.

4. Presentation by IDMP

- The Undersecretary Eng Isaac briefly highlighted the progress of CAMP and IDMP as follows;
- Three important things that happened; 1) Preparation for the master plans in the year 2012, 2) Launching in September 2012 by the former Vice President, 3) when the crisis occurred there was an administrative meeting to determine the modalities of how to operate the processes.
- The undersecretary proceeded to present the IDMP framework, and later assisted by Mr Andrew Yunda and Mr Makuac.
- Comments followed and finally the Action points were tabled for discussion and approval.

5. AOB;

Discussion on the Action Points

- Before discussing the action points, Undersecretary prof Udo briefly explained to the Hon ministers the results of the 2nd administrative meeting in Kampala between JICA and the Undersecretaries.
- The Hon Ministers approved the CAMP and IDMP frameworks and Summary of Situation Analysis Findings.

- They also approved the State Consultation meetings/workshops and the coordination unit that will oversee the implementation of the master plans, stressing the unit as important for the success of the master plans.
- However, the consultation workshops were temporarily approved by the ministers because they noted it required debating by the economic cluster and council of ministers, and finally taking to the ministry of Finance.
- The meeting was closed at about 7:40pm (19:40hours).

<END>

16. FIFTH SFPS/TTS (IDMP STATE STAKEHOLDERS CONSULTATION MEETING), 16th - 17th SEPTEMBER 2014, WORLD FOCUS INTERNATIONAL HIOTEL, JUBA

Formulation of the Comprehensive Agriculture Master Plan (CAMP) and the Irrigation Development Master Plan (IDMP) of the Republic of South Sudan

Minutes of Technical Consultation Meeting with SFPs and State DGs

Agenda	<ol style="list-style-type: none"> 1. Presentation and discussion on CAMP framework 2. Presentation and discussion on IDMP framework 3. Presentation on the justification of the investment intervention and Proposed Projects 4. Discussion on the investment intervention and the identified projects 5. Report on the discussion on IPS and PP . plenary 6. Resource mobilization and buy in process 7. Schedule for upcoming CAMP meetings
Date and Time	Tuesday 16th-Wednesday 17 th September, 2014, 8:30 am . 17:10 hrs
Venue	World Focus International Hotel-Juba
Attendees	<p><u>Ministry of Agriculture, Forestry, Cooperatives and Rural Development</u> Prof Mathew Udo, Undersecretary Mr John Pangech, Task Team Leader/DG for Planning Mr Kenyi Bullen Baggu, Director of agroforestry and Forest extension Mr Erneo Balasio, Director for Mechanization Mr Joseph Akim, Deputy Director of Extension Mr Noel Bangaza Cleopas, Assistant Director of Forestry Mr Ezbon Lodu Abuku, Deputy Director of forestry survey Ms Suzan Furidnesio Gore, Inspector of Foods and Nutrition Ms Winnie Richard, senior tutor Ms Flora Joseph Loki, Assistant Inspector of mechanization Ms Monica Mario Tokwaro,</p> <p><u>Ministry of Livestock, and Fisheries Industry</u> Mr Taban Tereka, Deputy Director Ms Suzana Gabriel, Inspector for Fisheries and statistics Mr Bringi Samson, Inspector for Livestock Ms Amal Mogga, Inspector of fisheries Mr David Peter Mina, Assistant Researcher Mr David Lawrence Lual, Livestock officer Mr German Tom Lado, Veterinary officer</p> <p><u>Ministry of Electricity, Dams, Irrigation and Water Resources</u> Eng Isaac C. Liabwel, Undersecretary Ms Jiben Jeremiah, IDMP Task Team Leader/DG for Irrigation and Drainage Mr Makuac Ador Malek Deng, Ass IDMP TT leader Mr Andrew Yunda, Deputy Director for Planning/TT Member CAMP/IDMP Mr Deng Santino Ater, Assistant Director for hydrology/IDMP TT member Mr Gai Simon Reath, IDMP TT member Mr James Deng Akurkwac, Director for water and Sanitation Mr Wol Gordon Toung, IDMP TT member Mr Moses Mikaya Mogga, IDMP TT member Mr Peter Mahal Dhieu, DG Mr Charles Lopero, Ass Director for water Supply Mr Robert Zakayo, IDMP TT member Mr Pagan John Okwach, IDMP TT member Mr Augustino Yohanes, M&E Mr Chut Isaac Chol, IDMP TT member Mr Ywodo Andrew, IDMP Assistant</p> <p><u>JICA Consultant Team</u> Mr Joe Joe Wani Lemi, Agricultural expert Mr Ayo Peter Wani, Research Assistant</p>

<p>Ms Baityo Sande, secretary <u>JICA South Sudan Office</u> Mr Emmanuel Minari, Advisor <u>State DGs</u> Mr George Kamilo Lado, DG for Animal Resources, CE Mr Joseph Garang Garang, DG for Animal Resources, NBG-Aweil Mr Mangok Mangok Deng, DG Agriculture Mr Kai Thiep Makuac, Director for Water and Sanitation Mr Gismala Ater Aboumtoic, DG Mr Sebit Veterino Rabih, Director, Ministry of Physical Infrastructure, WBG Mr Tiit Gabriel Akol, DG for Animal Resources-WBG Mr Carlo Kamilo Fajolo, DG for Agriculture-WBG Mr Barnaba Makuac Magol, Director for Water-Lakes state Mr Paulino Mading Meen, DG for forestry Mr Martin Madut Chan- DG for Agriculture-Warrap Mr Duer Ben Duer, DG for Animal Resources-Warrap Mr Akol Ring Achuil, Director-Warrap state Mr Geu Wunthony Gak-DG for Animal Resources-Jonglei state Mr Gabriel Gai, DG Ministry of Physical Infrastructure/Water-Jonglei state Mr Peter Ben Yango, DG for Agriculture-NBG Mr Christino Duku Boyitah, DG for Agriculture-EE state Mr Leone Kale DG Ministry of Physical Infrastructure Mr Stephen Ajok Mou, DG for Animal Resources-NBG Mr Johnson Achuk Bol, Acting Director for Agriculture-Jonglei state Mr Samuel John Awok, DG for Agriculture, Upper Nile state Mr Paul Maker Degal, Animal Resources-Lakes state Mr Edward Barnaba Kisanga, Animal Resources-WES Mr Marcelo Costantino Bakuyo, Agriculture-WES Mr Amol Deng Guiny-Director for Water and Sanitation, Warrap Mr Daniel Banda, WES Mr Donato Aparai Cholong, DG for Animal Resources, EE <u>State Focal Points Persons</u> <u>Ministry of Agriculture and Forestry</u> Mr Julius Duku Anania, Ag Director for crop production, CES Mr Deng Deng Bol, Senior Inspector of Agriculture, NBG Mr Achuil Kuch Chol, Warrap state Mr Clement Mokorondere, Director of Agriculture, WES Mr John Kamilo Zubia, Horticultural Officer, WBG Mr Kerubino Dut John, Inspector, Ministry of Coop and Rural Devopt, Lakes state <u>Ministry of Animal Resources and Fisheries</u> Mr John Tombe Vincent, Ag Director of Admin and Finance, CES Mr Isaac Oduho Leuterio, Assistant Inspector for livestock, EES Mr Atem DeGak Atem, DG, Jonglei Mr Yohana Mayol Pach, MLF Livestock staff, Jonglei Mr Aggrey Gabriel Makuac, Lakes state Mr James Mou Chan, Senior Inspector, NBG Mr Angelo Thuok Buom, Unity State Mr Alexander Upiou Angelo, WBG Dr Peter Uchalla, Director Animal Resources and Fisheries, WES <u>Ministry of Physical Infrastructure</u> Mr George Alphons Wani, CES Mr Nyika Charles Jacob, EES Mr Jackson Kwaje Laku, Deputy Director, Jonglei</p>
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	Mr Ibrahim Abdalla Deng, Warrap State Mr Martin Nyuol Deng, Assistant Director, Warrap State Mr Abaker Jallab Khadam, Department of Rural Water and Sanitation, WBG Ms Tuna Francis Badi, WIMS Supervisor, WES
Handouts	<ol style="list-style-type: none"> 1. Agenda for the meeting 2. Power Point presentation of CAMP Framework 3. Summary of situation analysis findings and IPS 4. Working sheets for IPS 5. Sub-sector IPS excel sheets 6. Resource mobilization and buy-in process 7. Schedule of upcoming meetings 8. National-state consultation IPS Component reference 9. IDMP Framework 10. IDMP Key findings

1. Agenda; Presentation and discussion on CAMP framework

- The CAMP task team leader presented a power point of the CAMP framework (refer to the power point for CAMP framework, for details).

Discussion

- The following key points were noted:
 1. The JICA advisor made an emphasis on slide 11. He emphasised to the participants that the darker portion of the graph, which is the oil sector will be shrinking. Emphasis of the government and partners should be put on the green part (agricultural sector). The future of South Sudan lies on the green part.
 2. Development Partners (DPS) are in full support of the CAMP process. The process should be state owned and therefore the full support of the states is needed.
 3. Banking Institutions on slide 16 should be changed to Financial Institutions.
 4. The framework should be straight forward. Agriculture has to be turned into a business, and must be directed by the government.
 5. In Jonglei, sorghum is the staple food. Other areas have different staple foods. Therefore, agriculture has to be directed.
 6. Jonglei is a flood zone, with exception of Boma. Planning should be done in the centres of implementation.
 7. There is no developed human resources in the states. The framework does not highlight human resource development in the states.
 8. On slide 8 of the CAMP framework, Institutional development should be at the top of the graph so that other themes can be accomplished. This is because, without ID and well-developed personnel, first, other things cannot be developed.
 9. There is need for well-coordinated roads and markets.
 10. On slide 8, phase four was poorly written in Roman Numerals as VI. A correction was made and VI was changed to IV.
 11. There is need to keep records at the states so that when there are changes in officials, a DG or any official does not leave with all the information.
 12. The master plan should spell out certain issues e.g. soil, meteorology information, livestock centres and population need to compare the number of livestock to the number of humans. The

TT leader responded that meteorology information is already articulated in the IDMP presentation. Livestock census is included in the CAMP.

13. There should be a website for CAMP, with all the data/information.
14. On slide 17 of the CAMP framework, CAMP should come up with clear policies and rules to avoid overlapping of roles and responsibilities e.g. sometimes the national government want to implement state projects. Therefore, there should be clear guidelines for implementation.
15. On slide 13, States and County governments should also be involved in the planning, financing, supervision, M&E of public-private projects because some of the private partners are found in the states.
16. How is the CAMP going to tackle the issue of land?
17. Old projects should be addressed and planned first before developing new projects.
18. Jonglei state ministry of Agriculture is in line with the CAMP framework. The ministry carried out a livelihood analysis study with a consultant.

2. Agenda 2; Presentation and discussion on IDMP Framework

Discussion/comments

- There are seasonal rivers that dry up during the dry period. What is the plan of the IDMP? IDMP team responded that the team identified seasonal and permanent rivers in its plan. The team is not recommending use of seasonal rivers for irrigation. Only rivers that have enough yields are recommended.
- Most areas in South Sudan are not receiving enough water. There was a plan for water harvesting in Jonglei. Does IDMP have any plan for it? The IDMP responded that use of water harvesting techniques is included into the plan. However, the team does not recommend it in some areas.
- Till now, there is no clear policy for water and irrigation. However, there is a document on water and irrigation, but until now there are still problems with water. The IDMP team noted that there is a WASH framework and a water policy. There is need to develop irrigation policy. The ministry is in the process of developing a Water Resource management Authority with in which irrigation is spelt.

Day 2 (17th Sep)

3. Agenda 3; Presentation on the justification of the investment intervention and Proposed Projects

- a) Explanation on IPS and PP
- A CAMP TT member presented a combined power point of the situation analysis summary and Investment Planning Space (for details, refer to power point presentation of the situation analysis findings)

Discussion/comments

- Participants noted comments as follows;

Livestock sub-sector

1. There has never been a livestock census. It's very necessary.
2. On slide 5, Diary production development should be included, to areas that show greatest potential.
3. In the conclusions of the sub-sector situation analysis findings, there is need to add the following:

4. Livestock sub-sector presentation, there is need to add ~~%inadequate pastures+~~ because there is a problem of conflicts among pastoralists and farmers.
5. Ranches are very important. There should be a policy for management of diary.
6. Community animal health workers should be incorporated and be well motivated and managed.
7. Conflict issues among pastoralists should be well managed
8. Environmental impact Assessment should recommend possible environmental issues for further consideration.

Forestry sub-sector;

9. Need to deploy rate collectors, train them and give them capacity. No need to privatise charcoal and timber production because the private sector will not sustainably manage the forests.

Crop sub-sector;

10. Use of inferior seeds should be added to the challenges. Challenges should be put clearly and be re-arranged.
11. The crop presentation indicated that 50% of land is prime agricultural land. Where are the records?
12. There is need for the crop sub-sector to identify all the areas that are good for agriculture.
13. The crop sub-sector should be careful when putting recommendations e.g. ~~%service delivery of the government is extremely weak+~~ The team needs to change this statement. The service delivery cannot be extremely weak.
14. Types of crops suitable in specific areas should be identified.

Fisheries sub-sector;

15. What is the relationship between fisheries and HIV? There is no need to copy what is happening in other countries and paste it in South Sudan. There is need to find out what is exactly happening in South Sudan regarding the HIV/Aids.

Other comments

16. From experience of old projects, there was poor and mismanagement. How sure is the CAMP regarding effective management of national projects by the government?
17. How far will national/governmental projects improve the economy of South Sudan?
18. CAMP teams conducted assessments, not studies. Would the government base the master plan on assessments?
19. A contested area is an area between one country and another. The statement in the presentation should be changed to conflicted areas.
20. Political instability is included as one of the challenges affecting agricultural activities.
21. Environmental effects of the oil production are not included, especially in the oil producing states.
22. Upper Nile state has 3 schemes but they are not featured in the master plan investment planning space.
23. There is no proper reporting system. Poor coordination is normally the cause of problems between the national and state governments.
24. Input to agriculture is expensive.

25. Improvement of animal health vaccines should be included in the constraints.
26. Awareness should be done to the cattle keepers regarding proper management of livestock.
27. Lack of access roads to livestock areas is a major challenge e.g. the slaughter house that was built at the outskirts of Wau town has poor access road.
28. Credit facilities e.g. from the agricultural bank and cooperative banks should be included into the recommendations.
29. Plant protection is a major area of concern.

b) IDMP Presentation

- 4. Agenda 4; Discussion on the investment intervention and the identified projects (group work)**
- 5. Agenda 5; Report on the discussion on IPS and PP – plenary**
 - This agenda was discussed on the 3rd day of the meeting.
- 6. Agenda 6; Resource mobilization and buy in process**
 - The CAMP TT leader presented a power point of the resource mobilization and buy in process (refer to ppt)
- 7. Agenda 7; Schedule for upcoming CAMP meetings**
 - The CAMP TT leader presented a power point of the schedule for upcoming meetings.
 - The meeting was closed at about 18:30hours.

<END>

**17. FIFTH STAKEHOLDERS MEETING OF CAMP AND IDMP, 18th SEPTEMBER 2014,
WORLD FOCUS INTERNATIONAL HOTEL, JUBA**

**Formulation of the Comprehensive Agriculture Master Plan (CAMP) and the Irrigation
Development Master Plan (IDMP) of the Republic of South Sudan**

Minutes of Stakeholders Consultation Meeting

Agenda	<ol style="list-style-type: none"> 1. Presentation of CAMP framework 2. Presentation of IDMP framework 3. Justification of the investment intervention and presentation of proposed projects 4. Discussion on the investment intervention and the identified projects 5. Feedback on the discussion on IPS and PP 6. Resource mobilization and buy in process 7. Schedule for upcoming CAMP meetings
Date and Time	Thursday 18 th , September, 2014, 8:30 am . 18:50 hrs
Venue	World Focus International Hotel-Juba
Attendees	<p><u>Ministry of Agriculture, Forestry, Cooperatives and Rural Development</u> Hon Beda Machar, Minister Prof Mathew Udo, Undersecretary Mr John Pangech, Task Team Leader/DG for Planning Mr Kenyi Bullen Baggu, Director of agroforestry and Forest extension Mr Erneo Balasio, Director for Mechanization Mr Joseph Akim, Deputy Director of Extension Mr Noel Bangaza Cleopas, Assistant Director of Forestry Mr Ezbon Lodu Abuku, Deputy Director of forestry survey Ms Suzan Furidnesio Gore, Inspector of Foods and Nutrition Ms Winnie Richard, senior tutor Ms Flora Joseph Loki, Assistant Inspector of mechanization Ms Monica Mario Tokwaro, Mr Atem Garang Malual Mr Stephen Lomeling, DG for Administration and Finance Mr Christopher B Lemi, Director Mr Abdou Ayuen Kuol, DG for Cooperative Development Rev Oneil Yosia, DG Mr Timothy Thwol Onak, DG for Forestry Mr Mindo Odrande James Mr John Rithi Solomon Mr Daniel Atem Awuol Dr Leju George Loro, DG for Agricultural Production and Extension Mr John Deng Ayar Mr Samuel Abuei Mr Joseph Yakobo Mr Ruben Abduolyol, Cooperative College <u>Ministry of Livestock, and Fisheries Industry</u> Mr Taban Tereka, Deputy Director Ms Suzana Gabriel, Inspector for Fisheries and statistics Mr Bringi Samson, Inspector for Livestock Ms Amal Mogga, Inspector of fisheries Mr David Peter Mina, Assistant Researcher Mr David Lawrence Lual, Livestock officer Mr German Tom Lado, Veterinary officer Mr Augustino Atilio, DG Dr Lewis K Jaja, DG Mr Sarafino Aloma Francis, DG Ms Anna Felix Baijo, DG Mr Anthony Raymond Tombura, DG <u>Ministry of Electricity, Dams, Irrigation and Water Resources</u> Eng Isaac C. Liabwel, Undersecretary</p>

<p> Ms Jiben Jeremiah, IDMP Task Team Leader/DG for Irrigation and Drainage Mr Makuac Ador Malek Deng, Ass IDMP TT leader Mr Andrew Yunda, Deputy Director for Planning/TT Member CAMP/IDMP Mr Deng Santino Ater, Assistant Director for hydrology/IDMP TT member Mr Gai Simon Reath, IDMP TT member Mr James Deng Akurkwac, Director for water and Sanitation Mr Wol Gordon Toung, IDMP TT member Mr Moses Mikaya Mogga, IDMP TT member Mr Peter Mahal Dhieu, DG Mr Charles Loper, Ass Director for water Supply Mr Robert Zakayo, IDMP TT member Mr Pagan John Okwach, IDMP TT member Mr Augustino Yohanes, M&E Mr Chut Isaac Chol, IDMP TT member Mr Ywodo Andrew, IDMP Assistant Mr Augustino Yohannes Mr Nyasigin Deng Bar <u>JICA Consultant Team</u> Mr Joe Joe Wani Lemi, Senior Research Assistant Mr Ayo Peter Wani, Research Assistant Ms Baityo Sande, secretary Mr David Morjan, Office Assistant <u>Ministry of Internal Affairs and Wild Life Conservation</u> Mr Matiop Philip Kur, National Wild Life Service Atem Deng Arok Buol Malual Ajok Mr Mangok Mangok A. <u>Ministry of Transport, Roads and Bridges</u> Mr Waiwai Philip Marlow <u>South Sudan Council of States</u> Mr Angelo Beda Mr Terza Nyomaro, Officer for Agriculture <u>National Bureau of Statistics</u> Mr John Maciek Acuoth Mr Richard Ambayo <u>State DGS</u> Mr George Kamilo Lado, DG for Animal Resources, CE Mr Joseph Garang Garang, DG for Animal Resources, NBG-Aweil Mr Mangok Mangok Deng, DG Agriculture Mr Kai Thiep Makuac, Director for Water and Sanitation Mr Gismala Ater Aboumtoic, DG Mr Sebit Veterino Rabih, Director, Ministry of Physical Infrastructure, WBG Mr Tiiit Gabriel Akol, DG for Animal Resources-WBG Mr Carlo Kamilo Fajolo, DG for Agriculture-WBG Mr Barnaba Makuac Magol, Director for Water-Lakes state Mr Paulino Mading Meen, DG for forestry Mr Martin Madut Chan- DG for Agriculture-Warrap Mr Duer Ben Duer, DG for Animal Resources-Warrap Mr Akol Ring Achuil, Director-Warrap state Mr Geu Wunthony Gak-DG for Animal Resources-Jonglei state Mr Gabriel Gai, DG Ministry of Physical Infrastructure/Water-Jonglei state Mr Peter Ben Yango, DG for Agriculture-NBG Mr Christino Duku Boyitah, DG for Agriculture-EE state Mr Leone Kale DG Ministry of Physical Infrastructure Mr Stephen Ajok Mou, DG for Animal Resources-NBG Mr Johnson Achuk Bol, Acting Director for Agriculture-Jonglei state Mr Samuel John Awok, DG for Agriculture, Upper Nile state Mr Paul Maker Degal, Animal Resources-Lakes state Mr Edward Barnaba Kisanga, Animal Resources-WES Mr Marcelo Costantino Bakuyo, Agriculture-WES </p>

<p>Mr Amol Deng Guiny-Director for Water and Sanitation, Warrap Mr Daniel Banda, WES Mr Donato Aparai Cholong, DG for Animal Resources, EE <u>State Focal Points Persons</u> <u>Ministry of Agriculture and Forestry</u> Mr Julius Duku Anania, Ag Director for crop production, CES Mr Deng Deng Bol, Senior Inspector of Agriculture, NBG Mr Achuil Kuch Chol, Warrap state Mr Clement Mokorondere, Director of Agriculture, WES Mr John Kamilo Zubia, Horticultural Officer, WBG Mr Kerubino Dut John, Inspector, Ministry of Coop and Rural Devøpt, Lakes state <u>Ministry of Animal Resources and Fisheries</u> Mr John Tombe Vincent, Ag Director of Admin and Finance, CES Mr Isaac Oduho Leuterio, Assistant Inspector for livestock, EES Mr Atem DeGak Atem, DG, Jonglei Mr Yohana Mayol Pach, MLF Livestock staff, Jonglei Mr Aggrey Gabriel Makuac, Lakes state Mr James Mou Chan, Senior Inspector, NBG Mr Angelo Thuok Buom, Unity State Mr Alexander Upiou Angelo, WBG Dr Peter Uchalla, Director Animal Resources and Fisheries, WES <u>Ministry of Physical Infrastructure</u> Mr George Alphons Wani, CES Mr Nyika Charles Jacob, EES Mr Jackson Kwaje Laku, Deputy Director, Jonglei Mr Ibrahim Abdalla Deng, Warrap State Mr Martin Nyuol Deng, Assistant Director, Warrap State Mr Abaker Jallab Khadam, Department of Rural Water and Sanitation, WBG Ms Tuna Francis Badi, WIMS Supervisor, WES <u>Development Partners</u> Mr John Brannaman, USAID Mr Emmanuel Mashy, WFP Mr Dayre Gabriel, EU Delegation Mr Paolo Girlando, EU Mr Sunthin gutnechl, EU Mr Morris Surur, DFID-South Sudan Mr Isaac Bazugba, FAO Mr Sabine Sigeah, FAO head of Program Mr Erminnio Sacco, FAO Chief technical Advisor Mr Michael Odhiambo, FAO Mr Joseph Logu, FAO Mr Abdala Manese, FAO Mr Mitsuaki Furukuma, JICA Mr Atsutsi Hanatani, JICA Mr Tomohiro Kuwabara, JICA Mr Emmanuel Minari, JICA Ms Poni Rose Lou, AGRA <u>Non-Governmental Organizations</u> Ms Caroline Maua, World Vision Mr Chol Abuol Chol, ACF International Ms Christine Abina, Danish Church Aid Mr Dara Elisa, Program manager, UMCOR</p>

	<p>Md Senajul Islam, BRAC <u>Private sector</u> Mr Maina Ndirangu, Cooperative Bank Mr Fred Otim Tartisio, Cooperative Bank Mr Momo James Woja, Cooperative Bank Mr Zachariah K Chianda, Cooperative Bank Mr ambrose Lomin Pitia, Lojura Agro-Farming Mr Tasnim Sulaiman, John Deere Mr Justine Saninye William, Tombura bee Keeper Association Mr Peter Bret Scot, MD Lonagro South Sudan Mr John Garang Dut, South Sudan General Farmers Union <u>Institutions of Learning</u> Prof John Apuruot Akec, VC University of Juba Mr Milton Melingasuk, University of Juba Mr Peter Gama, University of Juba Mr Vickey Lazar, University of Juba Mr Laku Erneo Lado, University of Juba Mr Taban Isaac Lomuro, University of Juba Mr Alpaya Soka, University of Juba Fr Mathew Pagan, Catholic University Mr John Kuir Kuany, Cavendish University <u>Media</u> Ms Hatim Juboiroi, Citizen TV reporter Mr Charles Philip, South Sudan TV reporter Ms Alek Malaak Ayoen, South Sudan TV reporter Mr Ajok Philip Lueth, SSTV reporter Mr Kangu Tito Justin, Eye Radio reporter Mr Oyet Alfonze, Jubo Monitor News Paper</p>
<p>Handouts</p>	<ol style="list-style-type: none"> 1. Agenda for the meeting 2. Power Point presentation of CAMP Framework 3. Summary of situation analysis findings and IPS 4. Working sheets for IPS 5. Sub-sector IPS excel sheets 6. Resource mobilization and buy-in process 7. Schedule of upcoming meetings 8. National-state consultation IPS Component reference 9. IDMP Framework 10. IDMP Key findings

Opening Remarks

Hon Bada Machar, Minister of Agriculture Forestry Cooperatives and Rural Development opened the meeting at 10:25 am.

1. Agenda 1 and 2; Presentation of CAMP Framework, Presentation of IDMP Framework

- The CAMP and IDMP Task Team Leaders presented power points of the CAMP and IDMP Frameworks.
- Comments followed as follows;
- ❖ Slides for IDMP do not include involvement and inputs of the Universities and institutions. The government tend to rely so much on international consultants without including universities which are supposed to produce technicians. The master plan should link itself to the Universities.
- ❖ There is need for a clear strategy by which universities can link to the master plans, in terms of research, extension, data collection, etc.
- ❖ What percentage is CAMP aiming at in terms of contribution of the agricultural sector to the national GDP. The TT leader responded that the CAMP will initially aim at a smaller percentage of about 5, and later will increase to about 30%.

- ❖ The Ministry of agriculture is developing its own agriculture, and at the same time the ministry of labour is managing vocational institutions without involving the Universities. This is not a good approach. The Ministries should work in collaboration with the Universities.
- ❖ The university of Juba is developing demonstration farms to develop agriculture, but it would like to see programs from the CAMP where graduates will be absorbed so that they are able to use the technologies that they are taught at University.
- ❖ The Plan is good and comprehensive but there is need to plan how to work together.
- ❖ ZEAT/NEAT is for a period longer than that stated in the CAMP framework (about 5 years).
- ❖ On slide 17 of CAMP framework, the current situation/structure is that DPS have been and are still providing services for quite long. For the proposed structure on slide 17, there is need for a stronger coordination between government and DPS. Participants would like to know how CAMP will have a stronger coordination framework. The TT leader responded that there will be a proposed CAMP coordination unit, which will be discussed.
- ❖ Why is food and nutrition security only in two phases? After the time period for the two phases elapses and food and nutrition security is not achieved, what will happen? Food and nutrition security should run from phase I to phase IV.

2. Agenda 3 and Agenda 4; Justification of the investment intervention and presentation of proposed projects; Discussion on the investment intervention and the identified projects (Q & A Session)

- Members of the CAMP and IDMP Task Teams presented the summaries of the situation analysis and IPS, and the IDMP key findings.
- **Comments followed as bellow:**
- ❖ Both small scale farmers and large scale farmers contribute to economic growth. Why did the crop sub-sector (in the situation analysis summary) categorise small scale farmers under food and nutrition security while large scale farmers are under economic growth.
- ❖ The constraint of %Weak policy+ noted in the livestock sub-sector presentation is not clearly explained. A livestock expert responded that some of the policies exist but are not enforced.
- ❖ Gender issues are not well captured throughout the presentations. Gender is very important to improve veterinary services. The TT leader responded that a gender expert will be hired by CIDA to incorporate gender issues into the CAMP process.
- ❖ A holistic approach to agricultural development should be adopted by the government.
- ❖ The government has to formulate and follow up implementation of policies.
- ❖ Livestock movement should be included into the CAMP and monitored.
- ❖ Multiple and over-taxation is a major challenge affecting the private sector.
- ❖ The master plan should have a target of budget. Unless the government is restructured, there will always be a budget constraint. The government should cut the budget of public officers beginning from ministers e.g. by 50%.
- ❖ Banks in South Sudan always provide loans to foreign citizens more easily than citizens. There is a need to look into this issue.
- ❖ The government should identify issues hindering establishment of firms in the country.
- ❖ Lack of concrete information and data is a major challenge in Africa. The lack of data hinders accurate and efficient plans. The information for CAMP should be general. It is lacking details. However, the CAMP TT leader responded that detailed information for CAMP is in the situation analysis report. Presentations were just a summary.

- ❖ Land demarcation is a major challenge. The ministry of agriculture should have a project for demarcation of land; for pastoralists and other activities.
- ❖ A TC member urged participants to contribute inputs into the CAMP and IDMP processes, instead of critics and asking questions. He noted that there is need for participants to analyse situations and put more solutions and inputs e.g. regarding production and productivity, how can it be increased? What are the required necessities and the cost of each item, etc.?
- ❖ The deputy chair of the National Bureau of Statistics (NBS) appreciated the task team for its work. He informed participants that there is a department of agricultural statistics at NBS. He noted that data production is very essential and requires support. The master plan is good, and can be improved along. Data production is not a big issue. Establishment of statistical units at each ministry should be a priority.
- ❖ A participant from EU noted comments as follows:
 - ❖ Feeder roads are a greatest challenge to agriculture development. The government should look into developing feeder roads.
 - ❖ Collection points for produce should be looked into.
 - ❖ Management of the roads e.g. the road to Yambio is inaccessible. There is overloading of roads by heavy trucks, damaging the roads.
 - ❖ There is over taxation, and where the money goes is unknown.

3. Agenda 5; Feedback on the discussion on IPS and PP

- A participant from the state (Mr Joseph Garang Garang) gave a consolidated feedback representing all states. He noted the following;
 - Appreciated the three day meeting, and the efforts of the Task Team
 - Urged participants from the states to communicate message to their respective states, particularly to the politicians
 - Highlighted some of the old projects that were established and stressed the need to revive them
 - Emphasised that there is a need to improve the standard of farmers, and the need to revive the use of ox ploughs by the government.
 - Rehabilitation of research and training centres was another important point he highlighted.
 - He noted that there is a weak coordination between the state ministries of agriculture and the national ministry. Thus there is a need to strengthen.
 - Limited training opportunities are provided to the state staff by the national ministries.
 - Late delivery of inputs to the states was another point hinted.
 - The agricultural Bank distributes tractors among politicians.
 - Regarding policies, DGS should inform legislators to pass the policies and bills.
 - Finally, Garang noted that CAMP and IDMP are government led efforts and participants should take it as a Bible for agricultural development. Government should contribute to its implementation alongside DPS.

4. Agenda 6 and 7; Resource mobilization and buy in process and Schedule for upcoming CAMP meetings

- The CAMP Task Team leader presented power point slides of agenda 6 and 7. (refer to hand outs for details).
- The honourable Minister closed the meeting at about 17:50hours.

<END>

**18. SIXTH TC (TC MEETING OF CAMP WITH PRESENTATION FROM IDMP), 28th - 29th
NOVEMBER 2014, FAIRWAY HOTEL, KAMPALA, UGANDA**

**Formulation of the Comprehensive Agriculture Master Plan (CAMP) of
the Republic of South Sudan**

Minutes of Technical Committee Meeting - Kampala

Agenda	<ol style="list-style-type: none"> 1. Confirmation on the integration of agriculture related strategies and plans 2. CAMP implementation mechanisms 3. CAMP resource envelop and buy in process 4. CAMP schedule from January to April
Date and Time	28-29 November, 2014
Venue	Fairway Hotel, Kampala, Uganda
Hand-outs	<ol style="list-style-type: none"> 1. Update on the integration of related agriculture strategies and plans with CAMP 2. CAMP Implementation Mechanisms 3. Example of Implementation Mechanism 4. Establishment of CAMP Implementation Coordination Structure (CAMP ICS) and Coordination Unit (CAMP CU) 5. CAMP resource envelop forecasting 6. CAMP project buy in process

List of the attendees

S/#	Names	Positions	Institutions
TC Members			
1	Prof. Mathew Gordon	Undersecretary	MAFCRD
2	Eng. Isaac Liabwel	Undersecretary	MEDIWR
3	Dr Makwei Kaang	Undersecretary	MLFI
4	Mr Wani Buyu Doyri	Undersecretary	MoFEP
5	Dr John Kanisio	Secretary General	SSFSC
6	Dr George Leju	Director General	MAFCRD
DPs			
1	Dr Furukawa Mitsuaki	Chief Representative	JICA
2	Ms Osumi Etsuko	Project Formulation Advisor	JICA
3	Mr Kuwabara Tomohiro	Representative	JICA
4	Mr Emmanuel Minari	Management Advisor	JICA
5	Ms Katharina Schulster	Value Chain Specialist	GIZ
6	Dr Ron Titus	Development Organization Resources	CIDA
7	Ms Unity Charity	Gender expert	CIDA
Subsectors' Representatives			
1	John Obita Pangech	Team leader,	MAFCRD
2	William Olami Aba	Co-team leader	MLFI
3	Joseph Akim Gordon	Crop subsector	MAFCRD
4	Erneo Balasio Peter	Crop subsector	MAFCRD
5	Kenyi Bullen Baggu	Forestry subsector	MAFCRD
6	Esther Kaku Henry	Fisheries subsector	MLFI
7	Andrew Yunda Stephen	Institutional Development	MEDIWR
JICA consultants			
1	Mr Toshifumi Serizawa	Team Leader/Admin. & Financial Management	

2	Mr Yasuo Ohno	Co-Team Leader/Agricultural Development	
3	Mr Hiroshi Ogawa	Agricultural Policy/M&E 1	
4	Mr Masafumi Nakanishi	Research/Training/Extension	
5	Mr Shigenobu Handa	Administrative and Financial Management 2/ Rural Developments 1/ Land Tenure	
6	Ms Riia Yamashita	Environmental and Social Considerations	
7	Mr Kazuhiro Inoue	Agricultural Finance/Coordinator 1	
8	Ms Abiko Misa	Rural Development 2/Coordinator 2	
9	Mr Justen Smith	Livestock Development	
10	Mr Robert Lindley	Inland Fisheries Development	
11	Mr Philip Penaflo	Monitoring and Evaluation	
12	Mr Wellington Masakari	Financial Audit and Management	
13	Mr Joe Joe Wani Lemi	Senior research Assistant	
14	Dr Mafa Chipeta	Forestry Expert	

Key points:

1. Presentation and discussion on CAMP IPS

- The Undersecretary Eng. Isaac proposed that IPS should be rearranged as follows:
 - IPS should be modified to Investment Programme Planning Space (IPPS)
 - Themes, Programmes, projects and activities
 - Subsector areas should be modified to read subsector programme areas
- JICA representative requested the consultants to define programme. And the TC Members concurred with the concept of programme and recommended that a number of projects could be placed under a programme and this format is widely used by development agencies and Government of South Sudan. In addition to that they also agreed on the harmonization of terminologies in the Master Plans (CAMP and IDMP).
- The Task Team Leader requested the TC to look at the document carefully and call for a retreat so that the TT and the TC could have enough time to revise the document. However, a member of TC responded that no decision could be made before proper scrutiny of the document, but the TC members were making some proposal on the issues raised by the TT.
- The Undersecretary prof. Udo commented that, livestock subsector concentrated on a traditional farming system, but the essence of the CAMP is to modernise the profession so that it becomes profitable. However, the TT representative said that traditional pastoralists have been recognised in the continental document policy, it supported and encouraged herders to water and graze their cattle traditionally. The Undersecretary prof. Udo proposed modernization of the sector in which ministry concerned to create awareness on vector control, and also construction of cattle dip close to watering points.
- JICA commented that emphases should not only be on training of community based extension workers but logistical support to them is crucial for service delivery to farmers.
- The TC suggested that each subsector should have institutional development projects within itself.
- The TC agreed unanimously that the CAMP document does not have gap, the only gap is involvement of the DPs, states and others who have not submitted their inputs, and they termed the current gap as participation gap
- The Undersecretary prof. Udo said research would be established in the six (6) agro ecological zone and this covers more than one state. He further said the following institutions should be independently administered but with some strong linkages among themselves: Research centres, Training centres and Extension services.

- He proposed that Yambio institute of agriculture should be rehabilitated to train middle cadre. However, Eng. Isaac added that the institute and the Ministry of higher education should review the curriculum.
 - The DG Dr Leju elaborated that Yambio institute of agriculture was a tertiary institution and should not be equated to a university because it offers practical training. Therefore two training centres could be established in the three former regions of South Sudan (Upper Nile, Bahr el-Ghazal and Equatoria). He explained further that, training centres were established for agribusiness, focusing on specific subsector areas but currently they are being transformed to comprehensive centres that provide training in all subsectors namely: livestock, crops, forestry and fisheries)
 - The Cooperative bank of South Sudan should be included in the report as one of the financial institutions.
- 2. Confirmation on the integration of agriculture related strategies and plans**
- Presentation was made and the TC concurred with the process of integration
- 3. CAMP implementation mechanisms**
- The TC approved the Implementation Mechanism Structure and they proposed that ~~the~~ CAMP CU ~~be~~ renamed ~~to~~ CAMP Implementation Coordination Task Team ~~and~~ They also recommended that this document would be presented to TC in Juba but no date was mentioned.
 - The CAMP Implementation Coordination Task Team would be presented to the Council of Ministers for approval than a team would be assigned to carry out the functions of this body
- 4. CAMP resource envelop and buy in process**
- The TT was requested to provide technical advice to the TC on the best scenario that could boost agriculture sector.
 - In the three scenarios presented, JICA chief asked what is the best scenario and is it time for us to talk about it. It was also suggested that best case scenario needed to be developed.
 - The Undersecretary Eng. Isaac proposed that Scenario three should not read as ~~peace dividend~~ but should read as ~~full~~ realisation of budget ~~and~~ he further requested for the removal of South Sudan donor book 2011 because it is not a strategy but information, and also ~~Annual budget~~ under CAMP be removed, and ~~the~~ Budget sector plan and Annual budget ~~to~~ be highlighted.
 - The Undersecretary of the Ministry of Finance commented that, CAMP could be funded through Public Private Partnership and DPs. However, he advised the TC/TT to put CAMP projects in the annual budget and the Ministry of Finance would allocate budget ceiling to it.
- 5. CAMP schedule from January to April**
- The consultants were advised by TC to continue working on the remaining activities in Japan during the holidays and communicate with the national TT regularly.
 - Exit strategy for CAMP formulation process should be discussed with Government of South Sudan and JICA respectively in Juba, but no date was mentioned.
 - JICA committed to finance state consultation meeting, it had agreed to cater for flights cost, DSA and accommodation only.
 - The Undersecretary prof. Udo requested the TT to develop a proposal for a meeting with private sector and present it to the TC for approval and similar presentation would be made to the DPs in the roundtable meeting on 3 December to seek their financial support.
 - The Undersecretary Eng. Isaac proposed that, another TC meeting to be held in Juba where TT would present CAMP documents that incorporated all the suggestions made during the TC meeting. This would enable the TC to brief the IMSC.
 - The Undersecretary prof. Udo said the Undersecretary of the ministry of finance would facilitate the release of the state consultation meeting funds, and if it fails he would approach some financial institutions to support the process

- The Undersecretaries agreed that the State Ministers of Agriculture and Water Resources and Irrigation should participate in the upcoming Inter-Ministerial Steering Committee (IMSC).

<<End >>

19. ROUNDTABLE WITH DEVELOPMENT PARTNERS (DPS) ON CAMP AND IDMP FORMULATION, 3rd DECEMBER 2014, JUBA GRAND HOTEL

Comprehensive Agriculture Master Plan (CAMP) and Irrigation Development Master Plan (IDMP) of the Republic of South Sudan

Roundtable with Development Partners Juba Grand Hotel – 03 December 2014

The aim of the consultative workshop is to brief participants about the process and the purpose of developing the two master plans CAMP and IDMP to get key inputs/comments from all participants from now on.

Chair: Prof Matthew Gordon Udo – Undersecretary (MAFCRD) & Chair CAMP/IDMP Technical Committee (TC)
Workshop Co-Chair: Eng. Isaac Liabwel C. Yol – Undersecretary (MEDIWR) and Co-Chair CAMP/IDMP TC

1. Agenda		
Time	Session	Speaker / Presenter
08:30-9:00	■ Arrival & Registration	All Participants
Session 1: Official Opening		
09:00-9:20	■ Round Table Introductions	All Participants
09:20-9:25	■ Welcome Remark from TT Team Leader	Mr John Pangech –DG Planning/ MAFCRD
09:25-9:35	■ Special Remark from JICA – Lead Donor	Dr Furukawa – Chief Representative/JICA.
09:35-09:50	■ Introductory Remark on CAMP & IDMP Process	Eng. Isaac Liabwel – Undersecretary/ MEDIWR
09:50-10:00	■ Official Opening	Prof Matthew Gordon Udo – Undersecretary/ MAFCRD
Session 2: Presentations		
10:00-11:00	■ The Proposed Framework for Agriculture Sector Transformation <ul style="list-style-type: none"> ▪ CAMP ▪ IDMP 	Mr John Pangech – DG Planning/ MAFCRD Eng. Isaac Liabwel – Undersecretary/ MEDIWR
Tea Break (11:05-11:30)		
11:30-12:20	■ Contents of the Investment plan <ul style="list-style-type: none"> ▪ Summary of Key Findings and the proposed Programmes and Projects ▪ Proposed Investment Planning Space (IPS) for each subsector based on the Situation Analysis (including the structure & logic of CAMP IPS) 	<i>Subsector Team Leaders</i> Mr. Joseph Akim Gordon (Crops) Ms. Eva Caesar Alexander (Livestock) Mr. Noel Bangaza Cleopas (Forestry) Ms. Esther Kaku Henery (Fishery) Dr. William Olami Aba (Institutional Development)
12:35-13:00	■ Proposed CAMP Implementation and Monitoring mechanism	Session Facilitator Dr William Olami, DG of Planning /MLFI
Lunch Break (13:00 –14:00)		
14:00-14:20	■ Proposed Resource mobilization strategy and each contribution	Session Facilitators Prof. Matthew G. Udo – U/Secretary/ MAFCRD
14:20-15:20	■ Group discussion on following 4 topics: <i>Topic 1: Framework</i> <i>Topic 2: PS and Project profile</i> <i>Topic 3: Implementation mechanism</i> <i>Topic 4: Resource mobilization strategy</i>	Session Facilitators Mr. Atillio – DG Livestock Extension Dr. Leju – DG Agriculture Prod.& Ext. Services Dr. Ann – DG of Animal Production an Animal Health Dr. Timothy – DG of Forestry
Afternoon Tea Break (15:20 –15:40)		
Session 3: Open Discussion in a Plenary		
15:40-16:00	■ Group Presentations	Session Facilitator
16:00-16:40	■ Plenary Discussion	
Closing Session		

16:40-17:00	■ Closing remarks	Eng. Isaac Liabwel – Undersecretary/ MEDIWR Dr Furukawa – Chief Representative/JICA. Prof Matthew Gordon Udo – Undersecretary/ MAFCRD
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2. Key points for Groups' Discussions:

Group 1: CAMP Framework

Moderator:

Rapporteur:

General Question:

Is the proposed CAMP framework appropriate to facilitate agriculture transformation in a devolved structure of governance?

Specific Questions:

1. Is the proposed bottom-up (pyramid) approach practically appropriate for improving planning and delivery of services?
2. Are the proposed Development Themes appropriate as a logical path for achieving agriculture transformation
3. What key roles of government and Development Partners play in agriculture transformation?

Group 2: CAMP IPS and Project

Moderator:

Rapporteur:

General Question:

Is the proposed IPS logical and appropriate to facilitate the agricultural development by increasing investment in agriculture sector?

Specific Questions:

1. Based on the proposed list of programmes/ projects, identify at least five projects under each subsector, which should be prioritised for implementation during phase 1 (1st 5 years) of CAMP/ IDMP implementation?
2. Based on the 5 priority projects you have just identified, which ones should be financed from governments', development partners' and private sectors' investments?

Group 3: CAMP Implementation and Monitoring Framework

Moderator:

Rapporteur:

General Question:

Is the proposed Implementation and Monitoring Framework appropriate for a devolved structure of governance?

Specific Questions:

1. What are the main advantages of this type of mechanism
2. What are the major challenges to implementing this type of mechanism
3. Please comment on the proposed ownership and responsibility matrix.

Group 4: Resource Mobilisation Strategy

Moderator:

Rapporteur:

General Question:

Based on the proposed conventional practice, what are the most appropriate resource mobilisation strategies

the government should adopt to achieve agriculture transformation?

Specific Questions:

What is the most appropriate resource mobilisation strategy for each of the five development themes?

1. Recovery and Reconstruction
2. Food and Nutrition Security
3. Income Growth and Livelihoods Improvement
4. Economic Growth and Agriculture Transformation
5. Institutional Development including crosscutting issues

3. List of the Participants

S/No.	Names	Organization	Position
Development Partners			
1	Paolo Girlando	EU	
2	Vincent de Boer	EU	
3	Johannes Sperrfechter	German Embassy	Head of Development Cooperation
4	J Schnurr	Canadian Embassy	
5	Morris Surur	DFID	Programme officer
6	Mam Lako	US AID	
7	Ines Wiedemann	GIZ	
8	Erminio Sacco	FOA - CTA	
9	Nyabenyi Tito Tipo	FAO	
10	Marjolaine Greentree	FAO	Advisor
11	Arshad Khan	UNEP	OIC
12	Martin Dramani	UNEP	
13	Mitsuaki Furukawa	JICA	
14	Tomoki Kobayashi	JICA	
15	Etsuko Osumi	JICA – South Sudan	
16	Joejoe Wani	CAMP/JICA	
17	Emily Addonizio	ACTED	
18	Miir M. M.	AAH-SS	
19	Ilias Gairbekov	ICRC	Delegate
20	Ezibon Kenyi Morbe	CAFOD	
21	Douglas Machuchu	VSF - Suisse	
22	Richard Ukuni	Oxfam	
23	Justin Mileng	SNV - Netherlands	
24	Tayo Alabi	CWW/Sorudev	
25	Mutumba Joseph	World Relief (WR)	
Government Institutions			
26	Hon .John Mayual	National Legislative Assembly	MP
27	Hon. Elizabeth		MP
28	Hakim Deng	Juba City Council	
29	Matthew Udo	MAFCRD/Undersecretary	
30	Abdon Ayuen	MAFCRD	
31	Daniel Atem	MAFCRD- D/G	
32	Cirino Oyiki	MAFCRD	
33	Makuei Malual	Min. of livestock & Fisheries Industry (MLFI)	
34	Lewis Jaja	MLFI	
35	Serafino Alom	MLFI	
36	John Kang	MLFI	
37	Anthony R Tombura	MLFI/Directorate of Projects	

38	Isaac Liabwel	MEDIWR/Undersecretary	
39	Ephraim Modi	MEDIWR	
40	John Pangech	CAMP-TT	
41	William Olami	CAMP-TT	
42	Joseph Akim	CAMP TT Member	
43	David L. Lual	CAMP TT Member	
44	Esther Kaku	CAMP/Fisheries	
45	Eva Cesar	CAMP TT Member	
46	Nyajok Kulang John	CAMP TT Member	
47	Jenny Light	CAMP	
48	Baityo Sande	CAMP TT Member	
49	Noel B. Cleopas	CAMP TT Member	
50	Samson Bringi	CAMP TT Member	
52	Esbon Lodu	CAMP-TT	
53	Amal Mogga	CAMP-RSS	
54	Suzan Gabriel	CAMP-TT/Member	

20. SEVENTH TC (TC MEETING OF CAMP WITH PARTICIPATION OF IDMP), 17th DECEMBER 2014, JUBA REGENCY HOTEL

Formulation of the Comprehensive Agriculture Master Plan (CAMP) of the Republic of South Sudan

Minutes of TC Meeting

Agenda	<ol style="list-style-type: none"> 1. Presentation and discussion on the CAMP implementation mechanism and coordination structure (Pangech) 2. Introduction of an example of master plan implementation coordination unit . (<i>Olami</i>) 3. Transformation schedule of CAMP TT to CAMP CU (Pangech)
Date and Time	Wednesday, 17 th December, 2014, 08:30 am . 15:30 hrs
Venue	Juba Regency Hotel
Attendees	<p><u>Ministry of Agriculture, Forestry, Cooperatives and Rural Development</u> Prof Mathew Udo, Undersecretary Dr Loro Georeg Leju, DG Agric Production Mr Timothy Thwol, DG for Forestry Mr Cirino O. Oyiki, DG Mr John Pangech, Team Leader/DG for Planning Dr Atem Garang Malual, Head of Plant Protection Rev. Oneil Yosia, DG Mr Aggrey Malual Mr Taban Charles Lupai Mr John Rithi Solomon Mr Daniel Atem Awuol Mr Abdou Ayuen Mr John Deng Ayau Mr Ruben Abuol Kok, Cooperative College Mr Charles Chol Ngok, Deputy Director Mr A Tamim Fartak, Plant protection Mr Samuel John Awok, state ministry of agriculture Mr Kenyi Bullen Baggu, Director of forestry Mr Joseph Akim, Deputy Director of Extension Mr Noel Bangaza Cleopas, Assistant Director of Forestry Mr Ezbon Lodu, Deputy Director of forestry survey</p> <p><u>Ministry of Livestock, and Fisheries Industry</u> Dr Makuei Malual Kaang, Undersecretary Mr John O Kanisio, Secretary General RSSFC Mr Luis K Jaja, DG Mr Augustino Atillio, Acting DG Mr William Olami, A/DG for Planning Mr Anthony Raymond Tombura, DG Mr Sarafino Aloma, DG Mr Aluma Araba Mr John Kaang, Director Ms Esther Kaku Henry Mr Samson Bringi Francis, Inspector of Livestock Mr German Tom, Veterinary officer Mr David Lawrence Lual, Livestock Officer</p> <p><u>Ministry of Electricity, Dams, Irrigation and Water Resources</u> Eng. Isaac Liabwel, Undersecretary Eng Jiben Jeremiah, IDMP TT leader/DG for Irrigation and Drainage Mr Alex Liki Ruben Mr Philip John Akol, A/Inspector for Haffis</p> <p><u>Ministry of Finance and Economic Planning</u> Mr Philip Richard, Deputy Director Mr Ngida Philemon, Inspector of budgets</p> <p><u>Ministry of Environment</u></p>

	<p>Ms Martha Biong, S/Inspector Ms Melania Peter Ajang, A/Inspector for biodiversity Ministry of Interior and Wild life Conservation Mr Martin Ring Malek <u>JICA Consultant Team</u> Mr Ayo Peter Wani, Research Assistant Ms Baityo Sande, secretary</p>
Handouts	<ol style="list-style-type: none"> 1. Agenda for the meeting 2. Power Point for CAMP Implementation Coordination Structure 3. Technical Annex 4. Power Point for Example of Implementation Coordination Structure 5. Transformation schedule of CAMP TT to CAMP CU (Pangech)
Key Points	<ol style="list-style-type: none"> 1. In slide 6 of the implementation coordination structure, Counties should be added as a separate column/implementation level. 2. Still on slide 6, NGOS and DPS should be added to the list of implementing directories. The implementation structure needs to be refined to be inclusive of everybody. 3. Need for aggressive communication and coordination on CAMP to lobby for funds. 4. CAMP should adopt the implementation coordination structure based on experiences of SPRCP project and other plans. 5. CAMP should be legislated as an Act at the national and state level. 6. Need to decide on which financing modality to adopt for the CAMP process; the pooled financing modality could be proposed because it has worked for the airport construction project (between RSS gov^d and China gov^d), the hydroelectric dam project (between Norwegian gov^d and RSS). 7. CAMP CU should be sited at the presidency to have an upper hand <p>Need to invite DGS and Ministers from State Ministries to attend TC and Inter-ministerial steering Committee meetings with national Ministry DGS and Ministers</p>

Opening remarks by Dr John Kanisio

- Congratulated the Task Team (TT) and thanked JICA for its support.
- Experiences from other projects e.g. Multi Donor Trust Fund (MDTF) should be used for the success of CAMP e.g. the ownership arrangements of the MDTF.
- Partners should feed into the CAMP and IDMP frameworks. The CAMP and IDMP frameworks are the key frameworks to agricultural development.
- There was no clear framework or institutional arrangements for implementation of the MDTF. CAMP has a clear implementation coordination structure.
- The funding mechanisms; every participant in the meeting has to solicit funds from partners for CAMP and IDMP. In doing so, it should be done in the correct manner. Donors usually announce funds for South Sudan but the funds are given to third parties (NGOS). There is need to have proper programs to utilize such money.
- Monitoring and evaluation arrangements have to be put in place. The role of the states should not be forgotten. The states are the real implementers of CAMP.
- For all the above to happen, government should announce CAMP and IDMP as the flagship plans for the development of the agricultural sector in South Sudan. This requires policy declarations.

Funding must be secured for CAMP and IDMP. Government should prepare readiness to implement the programs by building capacity.

Tea break

1. Agenda 1: Presentation and discussion on the CAMP implementation mechanism and coordination structure (Pangech)

- The leader of the CAMP Task Team presented the CAMP Implementation Mechanism and coordination structure

Comments

Aluma, DG for Veterinary Services, MLFI

- Presentation is clear and more to do with coordination and relation between directories and ministries. When will implementation and coordination process start because there are several challenges?
- The TT leader responded that implementation will start with the 2015/2016 financial year. Directorates must ensure they incorporate the master plan into their budgets.

Participant from Ministry of Finance

- The CAMP will improve capacity of farmers on the ground. The ministry of Finance is preparing a program called local governance delivery project, aimed at improving the capacity of farmers. There is need to correlate the project with the CAMP.
- The TT leader responded that low capacity has been the main cause of failure of projects. Job descriptions will be provided to each staff. If a staff fails to deliver, he/she will be dismissed. Public employment will be on a contract basis. Failure to fulfil duties will lead to termination of contract. There is need to work jointly with the local governance support project. He will personally contact the project staff.

DG for forestry, MAFCRD

- Sensitization of the people on the ground is very important. Without sensitization, it's difficult to implement CAMP successfully.

Atem, DG for Plant protection-MAFCRD

- A plant protection consultant was hired but there is no project on plant protection in the technical annex.
- There are so many nice projects in the technical annex but where is the source of funding? Will government fund or Donors? If government will fund, since long time, directorates have been drafting budgets just for formality. Not even a single coin has been released by the government to finance the budgets of the directorates.
- Regarding the sharing of project activities; planning, funding, implementation and monitoring between national ministries, states and counties, from point of experience, it's better to have separate projects for each level of government so that each level of government is responsible.
- The functions of each development partner should be defined. There are some partners who confuse the communities.

Cirino, DG-MAFCRD

- Thanks to consultants because since the beginning of the CAMP and IDMP processes ownership has been with the government. The task teams also visited the states to collect data. There is need to sensitize people and inform them that the data collected by the CAMP team will be owned by them.

- A lot of work has been done before by ZEAT and NEAT. This work has not been incorporated into the CAMP.
- The undersecretaries should attend inter-ministerial meetings because ministers always travel a lot.
- Since the CAMP and IDMP are new approaches, there is need for the ministries to put new people in the right positions to do the right things.
- Financial liquidation needs to be considered. The agricultural sector works on seasonal basis. There is need to respect seasons by ensuring timely liquidation. Extension staff should be well motivated when they go to the field.
- The TT leader responded that government as well as DPS will fund the CAMP and IDMP processes. ZEAT and NEAT, and other plans have been incorporated into the CAMP. All projects of ZEAT are in the CAMP. Undersecretaries are the presenters in the inter-ministerial meetings. Agriculture budget needs to be prioritised by government. The TT will either propose a pooled funding mechanism or parallel. The Maputo declaration of 10% budget allocation to agricultural development will be lobbied for. If there will be political will as shown by the DGS, CAMP will receive enough funds.

Dr Marino, DG for physical planning- Ministry of Housing

- Commend work of TT for developing such a commendable work. However, the physically visible implementation narrative of the CAMP with in the period of 20 years is missing. The map of South Sudan indicated in the technical annex is a good basis for developing a visible narrative for implementing the CAMP .e.g. developing a map with projects locations based on highly productive areas and timelines on when to implement each project, etc. is missing.

Participant from Wildlife, Ministry of Interior

- Government should encourage private individuals engaged in farming by giving them subsidies e.g. farmers who are already producing. Urged every participant to do something on his/her own.

Dr Kanisio, Secretary General of Food security

- Projects have been developed by participants for themselves. Agriculture is a solution to overcome food insecurity, achieve social and economic development.
- However, there are concerns as follows:
- There is need for aggressive communication and coordination on CAMP. It's only the participants to tell the people on the ground that CAMP is the solution to the problems of South Sudanese. If everyone did so, the politicians will rush to approve budgets for the CAMP. It's the participants to tell government/politicians that put money in the CAMP or forget about South Sudan. The government has to state that CAMP is the flagship plan for agricultural development. This requires policy statement and enacting of CAMP into an Act. Let participants not ask where money for CAMP implementation will come from but they should act.

Atem, DG for Plant Protection

- Plant protection unit should be put in the centre of agricultural development in order to produce.

Simon, TT member from Ministry of Finance

- He would like participants to propose how funds should be channelled to the CAMP process, from the Ministry of Finance. If participants propose a mechanism, decision makers will approve. A concept participants should know is that the Ministry of Finance does not allocate budgets directly to ministries. Budgets are approved by the council of ministers. However, there is need to decide on which financing modality for the CAMP process; the pooled financing modality could be proposed because it has worked for the airport construction project (between RSS govᄁ and China govᄁ), the hydroelectric dam project (between Norwegian govᄁ and RSS).

Prof Udo

- During SPRCP project, there used to be a technical team and when TC meetings were held in Juba, DGS from state ministries would join the DGS and undersecretaries from the national ministries. Also, during inter-ministerial meetings, ministers from states would be invited to join the national ministers in the IMSC meeting. It would be important to invite DGS and Ministers from states for TC and IMSC meetings.

2. Agenda 2: Presentation of example of a master plan implementation coordination unit

Presentation by Mr Olami

Comments

- The plan for Ethiopia is almost similar to CAMP. A similar path can be followed, only that Ethiopia uses a zonal approach whereas CAMP can use crop suitability approach. Ethiopia has a federal system of governance similar to South Sudan. They (Ethiopia) also have a policy system and extension staff for each sub-sector. The extension staff for CAMP should coordinate and work together.

Dr Leju, DG Agricultural Production, MAFCRD

- The government learnt several lessons from SPRCP project. There was formation of consistent committees at each level of government (national level, state, County and Payam). All people participated effectively with in the committees. The only confusion is because staffs are in different ministries. There is a need to bring line ministries together and revisit the committees formed by SPRCP project.

Dr Kanisio

- CAMP should adopt the implementation coordination structure based on experiences of SPRCP project, Ethiopian implementation coordination structure and other plans. Let the CAMP be legislated as an Act at the national and state level.

DG for Cooperatives

- Cooperatives do not appear in the presentation.
- Prof Udo answered that cooperatives and rural development are cross-cutting issues in the four sub-sectors.

DG for forestry, MAFCRD

- Prioritization of projects is important during the implementation. MAFCRD has had several similar projects like CAMP but success of majority projects has been in vain. SPRCP and Support for Agriculture were successful programs in the states. Therefore, when developing an implementation mechanism for CAMP, the two programs of SPRCP and Support for Agriculture should be digested. Funding from government will be very difficult unless the approaches suggested by Dr Kanisio will be used by CAMP e.g. enact CAMP into law, by parliament.

Undersecretary for MLFI

- The CAMP implementation coordination unit is ok and the projects are good. Once the document is finalized, the institutions mandated will consider it as the only document for agricultural development. However, CAMP should not nullify the functions of the institutions. The ministries should continue doing their work but there should be a committee to review if CAMP has achieved its goals or not.

Undersecretary for MEDIWR

- On slide 6 of the implementation coordination structure, Counties should be added as a separate column/implementation level. In the implementation directorates, NGOS and DPS should be added. The implementation structure needs to be refined to be inclusive of everybody.

- It should be re-written as: Implementing and supervising Ministries, Directorates, Departments, other Directorates and Stake holders. The addition of stakeholders is because some DPs give funds with conditions. The undersecretary approved the coordination structure with addition of a third column for counties and the word ~~other stakeholders~~ to slide 6.
- Undersecretary Prof Udo agreed with the suggestion of adding ~~other Stakeholders~~.

Participant from Ministry of Environment

- Where is the ministry of Environment in the implementation coordination structure?
- The TT leader responded that the ministry of Environment is part of the CAMP process, and attends CAMP TC and Inter-ministerial meetings.

3. Agenda 3: Transformation schedule of CAMP TT to CAMP CU (Olami)

Comments

- After presentation, the TT leader asked participants to comment whether coordination unit will come into effect with immediate passing and adoption of the CAMP framework by the parliament.

Undersecretary for MLFI

- After ministers discuss and pass the CAMP document in inter-ministerial committee meeting, they will discuss among themselves and choose a minister to present the CAMP document to the parliament and Council of Ministers. The process of enacting may also take several days. Therefore, the dates for transformation of CAMP TT to CAMP CU should be indicated as tentative dates.

Undersecretary for MEDIWR

- Once CAMP framework is adopted, there will be a statement. The TT could therefore indicate that once CAMP is adopted by parliament, the following activities needs to be undertaken.

Closing remarks by Prof Udo

- Appreciated the TC for inputs and urged the TT to incorporate inputs into the CAMP document.
- At end of the day, responsibility of CAMP implementation will lie in the hands of directorates.
- A clear financing modality should be designed.
- Urged TC to continue giving in comments to the documents distributed to them.
- Urged TT to finalize the documents and keep the TC informed of all steps in the CAMP process.
- Wished every participant a merry Christmas and closed the meeting

Lunch and Departure

21. GOVERNMENT-DPS MEETING ON THE CAMP AND IDMP FORMULATION, 20th MAY 2015, CASSAVA HALL, MAFCRD PREMISES, JUBA

Formulation of the Comprehensive Agriculture Master Plan (CAMP) and the Irrigation Development Master Plan (IDMP) of the Republic of South Sudan (RSS)

Minutes of Government – DPs Meeting

Agenda	<ol style="list-style-type: none"> 1. Open discussion and exchange of views on: Community participation, community ownership, private sector involvement, format of investment planning space and projects, procedure for evolving plans, transparency, accountability and innovation, mapping exercise, manageability of the project documents and Government Commitment 2. Presentation on Government proposal on the structure of the Implementation Coordination Task Team (ICTT) 3. Confirmation of the agenda for the second meeting to be held on 26th May 2015 4. Any other issue
Date and Time	Wednesday, 20 th May , 2015, 03:00 . 05:12 pm
Venue	Cassava hall, MAFCRD Premises
Attendees	<p><u>Technical Committee members</u> Hon. John Kanisio, Secretary General, South Sudan Food Security Council Mr Isaac Liabwel, Undersecretary, MEDIWR Mr Jaden Emilio, Undersecretary, MAFCRD Mr Loro George Leju, Director General, MAFCRD</p> <p><u>Ministry of Agriculture, Forestry, Cooperatives and Rural Development</u> Mr John Pangech, Team Leader/DG for Planning Mr Erneo Balasio, Director for Mechanization Mr Kenyi Bullen Baggu, Director for forestry Mr Joseph Akim, D/Director of Extension</p> <p><u>Ministry of Livestock and Fisheries Industries</u> Mr William Olami, DG for Planning Ms Esther Kaku, Assistant Inspector of planning Mr Samson Bringi, TT member</p> <p><u>DPs</u> Mr Mitsuki Furukawa, JICA Country representative Ms Olivia Kalis, DFID Mr Serge Tissot, FAO Ms Chuyil Bowdre, USAID Mr John Brannaman, USAID Mr Vincent de Boer, EU Ms Etsuko Osumi, JICA Mr Tomohro Kuwabara, JICA Mr Daniel Deng, JICA</p> <p><u>JICA Consultant Team</u> Mr Toshifumi Serizawa, Team leader/Administrative and Financial Management/Forestry Management Mr Yasuo Ohno, Co-Team Leader/ Agricultural Development Mr Shigenobu Handa, Administrative and Financial Management 2/ Rural Developments 1/ Land Tenure Ms Misa Abiko, Rural Development 2/Coordinator 2 Mr JoeJoe Wani Lemi, Senior research assistant</p>
Handouts	<ol style="list-style-type: none"> 1. Agenda 2. CAMP final document

Opening remarks

- ✓ The Undersecretary of MEDIWR chaired the meeting on behalf of prof. Udo. He informed the participants that Dr Kaang the Undersecretary of MLFI would not be attending the meeting on health ground.
- ✓ The chair of the meeting requested the participants to introduce themselves, then he read the agenda and asked for any amendment and the participants added one item i.e. any other issues under agenda 1. He asked the consultants to explain how the meeting would be conducted, and the TT leader explained that the agenda contained some major concerns raised by the DPs and the Government (TT and undersecretaries) would answer and clarify these concerns.
- ✓ The chair suggested that the meeting would be an open discussion and a crop sub-sector member proposed that a brief explanation on CAMP needed to be presented before answering the concerns raised by the DPs. However, a member of TC responded that DPs were aware of CAMP and they might have been briefed by their institution prior to this meeting.

1. Agenda 1: Open discussion and exchange of views on:

i. Community participation and ownership

- The chair explained that community and the Government participated in the formulation of CAMP project. However, a member of JICA would like to know the strategy of CAMP in regards to community participation and ownership of the projects
- The TT leader briefed the participants that CAMP project was established by the national Government but it had involved communities in over 50 counties and also states were consulted and their suggestions and views were integrated in the CAMP final document, this is an indication of community participation and ownership of CAMP. He however added that during the implementation of projects advocacy and consultation with communities would be needed.

ii. private sector involvement

- The chair stated that the government had provided favourable environment to investors so that they would lead the agriculture sector. And the TT leader commented that, CAMP document emphasised the importance of private sector and the Government needed to encourage it in order to lead the sector. He further said that the projects on policy and legal framework needed to be implemented in the initial phase of CAMP implementation to create the necessary environment for the private sector to pick up.
- A USAID member highlighted the importance of private sector and he urged the Government to recognise this role and provide the necessary support to enhance the capacity of the private sector. He further said the Government should leave agriculture production to private sector and relinquish its role to policy and development and enforcement. The chair of the meeting added that, the private sector involvement has not been properly reflected in the investment planning space, especially in the initial stages. He added that Government believed in free market economy where private sector plays significance role. Further, a JICA member asked this question, how could CAMP assist small investors? A member of the TC explained that Government should encourage private sector by creating favourable environments for them to operate
- A member of DFID asked the Government to highlight its priorities in the document, and a member of FAO commented that financial institutions unable to provide credits to investors in agriculture sector, which should be tackled. On the other side, a member of consultant team appreciated the participants contribution and urged the dialogue with the DPs to continue enhancing CAMP and IDMP implementation

iii. Format of investment planning space and projects

- A member of JICA suggested that DPs should expedite realignment of their plans and approaches with CAMP. However, a DFID member commented that it would be appropriate for DPs to look at the CAMP projects and appropriately realign their programmes and projects with the CAMP.

iv. *Transparency, accountability and innovation*

- A member of TC explained that CAMP projects would be implemented under the framework of PFM system, and there would be adequate coordination with all the stakeholders during implementation. And the TT leader added that CAMP has developed management tools (operation, human resource, and management) that would be utilized during implementation of projects.
- The Secretary General of SSFSC asked the following questions to the DPs, ~~ay~~ what does alignment with the CAMP meant? Are there going to be parallel system? Is the institutional arrangement in CAMP meeting DPs standard if not what are the gaps? And a member of TC said that it would take sometimes before the DPs could fully align some of their on-going programmes with CAMP. And he urged the DPs to align the new programmes and projects with CAMP.
And a member of FAO urged the Government to be flexible in the implementation of CAMP projects because conditions in project areas would change over time.
- The secretary general of SSFSC commented that resources are scarce, and he urged the DPs to utilized CAMP for their pipeline/new programmes to avoid implementing two parallel plans i.e. DPs and CAMP.
- A DFID member underscored the importance of coordination and working towards common objectives and she emphasised the significance of lessons learned from the implemented projects, also the Government needed to prioritize their projects.

2. **Agenda 2:** Presentation on Government proposal on the structure of the Implementation Coordination Task Team (ICTT)

- The TT leader presented ICTT structure and a member of JICA wanted to know its functions and roles. And a TC member would like the structure to be linked with the implementing directorates, also the objective and TOR for ICTT be developed and circulated to all, so that inputs could be provided.

3. **Agenda 3:** Confirmation of the agenda for the second meeting to be held on 26th May

- The participants agreed on the next meeting as follows:
 - Agenda: Government commitment, mapping exercise, etc.
 - Venue: cassava hall, MAFCRD
 - Time: 03:00 pm
 - Date: 26th May 2015

4. **Agenda 4:** Any other issue

- The TC and TT agreed to hold a meeting on Tuesday 26th May 2015 at 11:00 pm, to review and rehearse the presentation materials for IMSC.

<END>

22. SECOND IMSC MEETING OF CAMP WITH PRESENTATION FROM IDMP, 28th MAY 2015, REGENCY HOTEL, JUBA

Formulation of the Comprehensive Agriculture Master Plan (CAMP) of the Republic of South Sudan Minute of IMSC Meeting

Agenda	<ol style="list-style-type: none"> 1. Presentation and approval on CAMP final document 2. Explanation and approval on CAMP/IDMP implementation coordination structure <ul style="list-style-type: none"> ➤ establishment of CAMP/IDMP ICS at national level ➤ composition and TOR of IMSC,TC & CAMP/IDMP ICTT at national level 3. Explanation and approval on the resource mobilization and buy in process
Date and Time	Friday, 28th May, 2015, 9:30 am . 12:40 pm
Venue	Juba Regency Hotel
Attendees	<p><u>Ministry of Cabinet Affairs</u> Hon Dr Martin Elia Lomuro, Minister</p> <p><u>Ministry of Finance and Economic Planning</u> Hon Mary Jervase Yak, Deputy Minister</p> <p><u>Ministry of Environment</u> Hon Deng Deng Hoc Yai, Minister</p> <p><u>Ministry of Electricity, Dams, Irrigation and Water Resources</u> Hon Jemma Nunu Kumba, Minister Eng Isaac Liabwel, Undersecretary Eng Jiben Jeremiah, Ag DG for Irrigation and Drainage/IDMP Team Leader Mr Makuac Ador Malek Deng, IDMP TT Member/Co-Team Leader Mr Deng Santino Ater, IDMP TT</p> <p><u>Republic of South Sudan Food Security Council</u> Mr John Ogoto Kanisio, Secretary General</p> <p><u>Ministry of Agriculture, Forestry, Cooperatives and Rural Development</u> Hon Beda Machar Deng, Minister Prof Mathew Udo, Undersecretary Mr Jaden Tongun Emilio, Undersecretary Mr John Pangech, Team Leader/DG for Planning Mr Erneo Balasio, Director for Mechanization Mr Kenyi Bullen Baggu, Director for forestry Mr Joseph Akim, D/Director of Extension Ms Winnie Richard Roman, Senior Tutor Ms Flora Joseph Loki, Inspector of Mechanization</p> <p><u>Ministry of Livestock, and Fisheries Industry</u> Mr William Olami, DG for Planning Ms Esther Kaku, Assistant Inspector of planning Mr Samson Bringi, Inspector for Livestock</p> <p><u>JICA South Sudan Office</u> Dr Mitsuaki Furukawa, Chief Representative Ms Osumi Etsuko, Project Formulation Advisor Ms Atong Ajak Demach, Public Relations Officer</p> <p><u>State Ministers</u> Hon Atem Nyok Manga Ajang, Agriculture and Forestry, Abyei Administrative Area Hon Izeldin Ismail Alek, Physical Infrastructure, Abye Administrative Area Hon Lual Longar Adhal, Animal Resources and Fisheries, Warrap Hon Hassan Urbano, Physical Infrastructure, EES Hon Mayen Ngor Atem, Agriculture and Forestry, Jonglei Hon Philip Kot, Agriculture and Forestry, Lakes State Hon William Manyuon, Animal Resources and Fisheries, Lakes Hon Angelo Ugwaag Wol, Physical Infrastructure, NBG Hon Nyang Lul Gai, Animal Resources and Fisheries, Jonglei Hon Gora Hassan Odriel, Agriculture and Forestry, Greater Pibor Administrative Area</p>

	<p>Hon Giroc Teny Korok, Physical Infrastructure, Greater Pibor Administrative Area Hon Jeremiah Lotiboy, Animal Resources and Fisheries, GPAA Hon Gada James Kila, Animal Resources and Fisheries, CES Hon Dak Tap Chuol, Physical Infrastructure, Upper Nile State Hon Albino Madhan Anei, Animal Resources and Fisheries, NBGS Hon John Amuor Kuol, Physical Infrastructure, Jonglei Hon Rou Manyiel, Animal Resources and Fisheries, Abyei Administrative Area Hon Michael Madut Chan, Agriculture and Animal Resources, WBG Hon Chuol Dep Kir, Animal Resources and Fisheries, Upper Nile State Hon Majok Bol Kur, Agriculture and Forestry, Warrap Hon Mayar Deng Mayar, Physical Infrastructure, Warrap Hon Dhieu Chan Liol, Agriculture and Forestry, Upper Nile State Hon Clement J Mbugonia, Physical Infrastructure WES Hon Yugulle K Labadiah, Agriculture, Cooperatives and Environment, WES Hon Clement Loku Chimchim, Agriculture and Forestry, EES Hon Dr Jacob K Lupai, Agriculture and Forestry, CES Hon Lual Dau, Agriculture and Forestry, NBG Hon Abraham Mayen Kuc, Physical Infrastructure, Lakes Mr Paul Amin, Consultant/Advisor, Physical Infrastructure, WBG</p> <p><u>Media Houses</u> Mr George Marko, CTV Mr John Manyiel Shadrak, CTV Mr Patrick Taban, CTV Ms Suzan Dokolo, Miraya FM Mr Kidega Livingstone, Juba Monitor Ms Edina Nelson, Eye Radio Mr Roger Alfred Voron, The Citizen News Paper</p> <p><u>JICA Consultant Team</u> Mr Toshifumi Serizawa, Team leader/Administrative and Financial Management/Forestry Management Mr Yasuo Ohno, Co-Team Leader/ Agricultural Development Mr Shigenobu Handa, Administrative and Financial Management 2/ Rural Developments 1/ Land Tenure Ms Jenny Coghlan, knowledge Management Ms Misa Abiko, Rural Development 2/Coordinator 2 Mr Joe Joe Wani Lemi, Agricultural Expert Mr Ayo Peter Wani, Research Assistant Ms Baiyo Sande, secretary</p> <p><u>IDMP Consultant Team</u> Mr Akira Nakamura Mr Shoshei Natsuda</p> <p><u>Other Attendees</u> Eng Fathi Juma, DG, GPAA Mr Festo John Lino, Driver for Minister of Cabinet Affairs Mr Anthony Ladu, Guard for Minister of Cabinet Affairs Mr Edward Lado, Guard for Minister of Cabinet Affairs Mr Samuel Ladu, Guard for Minister of Cabinet Affairs Mr Clement Laku, Driver for Minister of Agriculture Mr James Okesa, Guard for Minister of Agriculture Mr James Augustino, Driver for Ministry of Agriculture Mr Garang Maduak, Guard for Ministry of Agriculture Mr Andrew Louis Mr Edwin Anthony Mr Daniel Dor Mr Saberi Michael Mr Emmanuel Adeho Mr Ator Ator Mr Kaya Julius, SMAF</p>
Handouts	<ol style="list-style-type: none"> 1. Agenda 2. Presentation and approval on CAMP final document

	3. Explanation and approval on CAMP/IDMP implementation coordination structure
	4. Explanation and approval on the resource mobilization and buy in process

Introductory Remarks by Prof Udo

- Observed the protocol and gave the following remarks:
- Today, we are here to deliberate on very important issues. The CAMP and IDMP have been formulated over 3 years. The Government of South Sudan had a plan to formulate a master plan for Agriculture, in line with vision 2040. As a result, the Government contacted DPs to support with the formulation of the master plan. JICA took up the initiative with support of other partners e.g. CIDA, EU, GIZ, FAO, etc.
- The Task Team has done its job; collected data in all the ten states, analysed and presented in a series of meetings i.e. TC meeting, stakeholder meeting, as well as Inter-Ministerial Steering Committee Meeting (IMSC). Today, it is presenting to the second IMSC composed of the national ministers and state ministers. It will present the development steps and you will deliberate and come up with a reference document for all activities in agriculture, in the Republic of South Sudan.

Remarks by JICA Chief Representative

- Honourable Minister of Cabinet Affairs
Honourable Chairman of the Inter Ministerial Steering Committee, beda Machar Deng, Minister of Agriculture, Forestry, Cooperative and Rural Development,
Honourable Ministers and State Ministers,
Honourable Commissioners,
Distinguished Undersecretaries,
Other distinguished guests,
Members of the CAMP & IDMP Task Teams,
Ladies and Gentlemen,
- Thank you for this opportunity to add my voice on behalf of the Japan International Cooperation Agency, or JICA, to this important discussion. I will start by explaining why JICA has supported the formulation of the two Master Plans, the Comprehensive Agriculture Master Plan (CAMP) and the Irrigation Development Master Plan (IDMP). I will end by sharing some thoughts that I hope will be useful to you as you implement these important documents.
- JICA is supporting CAMP and IDMP because our vision calls for inclusive and dynamic development. In pursuit of this vision, we operate through technical cooperation agreements with Governments across the world to build their institutional capacities. Sometimes, this involves support to the formulation of Master Plans. In South Sudan, agriculture and water management are central to development. For that reason we invested in the development of these two important Master Plans. We are guided by an understanding that good performance is based on sound planning.

Mr Chairman,

- Through CAMP and IDMP, the Government of South Sudan now understands the status and potential of your country's agricultural and water resources. Before formulating the plans, you had a sense of those resources, but now you understand them on the basis of factual evidence. And you are aligning all cooperating institutions of Government in a clear direction behind plans that you own. You can be confident in the value of these plans because no one else has accumulated and analyzed the amount of information contained within them. This resource planning places you in the driver's seat of your economic development.
- Yet all of us are aware that Government can't do it alone. Neither would you want to. CAMP and IDMP are good tools for coordination and their implementation will benefit from international cooperation. As chair of the Agricultural Donor Group, JICA is actively promoting the Master Plans among Development Partners to achieve this international cooperation. Recently, we helped the CAMP and IDMP Technical Committee and Task Teams to convene two meetings with the Development Partners. These meetings improved their common understanding of the Master Plans.

JICA will continue to support the CAMP and IDMP Implementation Coordination Task Team as it undertakes the resource mobilization process, which will be presented to you shortly. We will also continue our support to the process as chair of the agriculture donor coordination. Furthermore, we are willing to support the information campaign to make all stakeholders understand the importance of the CAMP and IDMP when the government authorize these plans.

- As you work to secure full international cooperation, the Government would be wise to lead by example. Your political and financial commitment is strategic, particularly at this crucial time. The technical and policy dialogue that you've launched is also important. The dialogue between Development Partners and your Directorates will enrich the Master Plans. In this respect, let us remember that just like all good plans, CAMP and IDMP are living documents that evolve with time and the active participation of all stakeholders. In this respect, a mutual respect, openness and frank sharing of ideas is required. As common ownership develops, the Master Plans will provide a dictionary, a roadmap and a bible for all of us in South Sudan's agricultural development. However, it remains for you, the Government of South Sudan, to lead the process.

Friends,

- While we congratulate the accomplishments of the Task Team in formulating the plans, let us not underestimate the greater challenges still before us in their implementation. CAMP and IDMP will need time, resources and the participation of all institutions on this Inter Ministerial Steering Committee. It falls upon you to set the laws, frame the regulations and create the enabling environment for agriculture to succeed in South Sudan. All of your different Ministries are expected to provide the essential support, roads, electricity, communications, financial services and security infrastructure needed for the private sector to lead the way.
- For our part, JICA will continue through our technical cooperation to invest in agriculture and its enabling infrastructure, such as the Freedom Bridge over the Nile River. These investments are complementary to the agricultural production and distribution system of South Sudan.
- In view of the current economic and political difficulties in South Sudan, I'd like to take this chance to share with you my personal view that no person or nation grows without enduring periods of hardship. South Sudan is in the midst of such a period economically and politically. But I believe through hardship, we can learn and we can grow to emerge wiser and stronger. During formulation of CAMP and IDMP, JICA watched as our South Sudanese colleagues have looked inward, examined the country's natural and human resources, and produced viable plans to grow your economy sustainably. In the process, you've produced a tool for the diversified economic growth called for by the President of South Sudan and the Ministry of Finance and Economic Planning and for lasting peace through development.
- This Inter-ministerial steering committee is the powerful engine of CAMP and IDMP to put the Master Plans at the centre stage of South Sudan's development. You have the political and technical muscle to implement them successfully. With one firm step placed after another, you and your development partners can build peace and prosperity through agriculture. As you implement the Master Plans, JICA will be with you, side by side. Each time we hear one of you say, a friend in need is a friend in deed, in reference to JICA's presence in S. Sudan, we feel proud as Japanese.
- So in closing, JICA and the Japanese Government shall continue to be friends in deed to the people of South Sudan.
Shukrun Alekum

Remarks by Hon Jemma Nunu Kumba

- Your Excellences,
Honourable Ministers,
Chief Representative of JICA South Sudan,
State Ministers,
Distinguished guests,
- On behalf of the Ministry of Electricity, Dams, Irrigation and Water Resources, I am very happy to convene here today, to discuss about the CAMP and IDMP final documents. I would like to express

my gratitude and appreciation to JICA for putting resources into the CAMP and IDMP documents, and to the Task Team for its commitment to develop the two master plans. What is very important is how to put up strategies for resource mobilization, for implementation of the master plans. I would like to welcome everybody to the meeting. I will not talk much because we will hear more in the presentations.

Remarks by Hon Beda Machar Deng

- Honourable Minister of Cabinet Affairs
Honourable Minister of Environment
Honourable Minister of Electricity, Dams, Irrigation and Water Resources,
Honourable JICA Chief Representative
Honourable Deputy Minister of Finance and Economic Planning,
Honourable Secretary General of the South Sudan Food Security Council
Honourable State Ministers,
Undersecretaries,
Members of the Task Team,
- Welcome to Juba and particularly to the second Inter-Ministerial Steering Committee Meeting.
- It is a great pleasure for me to be here today to open this Inter-ministerial Steering Committee meeting. On this occasion of the completion of CAMP development, we appreciate and thank the attendance of the State Ministers. We recognise that the state and county governments will play the main role of service delivery to the millions of farmers. The Comprehensive Agriculture Master Plan project has been an enormous undertaking for the Government of South Sudan, supported particularly by JICA and CIDA, EU, FAO and GIZ, to whom I extend our grateful thanks.
- The Task Team, made up of representatives of the 3 Ministries has made painstaking efforts to collect the information and develop the masterplan. Today marks the completion of such masterplan development and the beginning of its implementation.
- The Government of South Sudan is committed to implement CAMP and, I hope, we the government, development partners, and all other stakeholders will work together for the betterment of the country and its people. I sincerely invite you all to work with us to implement this master plan, which is essential if CAMP is to be the success that it deserves to be.
- Our vision is that all South Sudanese farmers will be able to supply the food and agricultural products our people need for their future well-being and prosperity. Only through the implementation of CAMP can we make a very large improvement in the lives of the people of South Sudan. Let us work to overcome the constraints in front of us and move forward to achieve stability and peace, food security and resilience, and prosperity for the nation.
- At this juncture, I take the honour to introduce Honourable Martin Elia Lomuro, Minister of Cabinet Affairs to open this meeting.

Opening Remarks by Hon Dr Martin Elia Lomuro

- Today is a very good day because I remember when the idea of CAMP came up I complained that it would delay the development of the agricultural sector, and indeed it's about four years now since the inception of CAMP.
- All protocol observed
- CAMP is a combination of agriculture and Irrigation master plan, which will help to address all roles of agriculture. Since then, we have been writing documents on food security frameworks. These documents have been revised over and over and approved by the parliament. All of these documents have now been combined into the CAMP. CAMP is a complete document. It has taken note of topography, climatic variations in South Sudan and etc. These are factors which influence the performance of the agricultural sector. All state ministers should look at those recommendations made by the Task Team and not ignore them e.g. South Sudan is emerging from war with people

scattered all over, infrastructure challenge, security and different types of conflicts affect agriculture. We should think about whether we need the entire South Sudan to produce sorghum or we need specific areas for livestock. Consider seriously the institutional status; buildings, budgets, governance, including human resource and etc. Agriculture sector is one that has well trained personnel. The private sector is a key player. We should enable the private sector to actively participate in production. The pressure on government will reduce; people will have enough food and will be happy. State ministers should provide strong recommendations for the private sector.

- Government is prepared to implement the recommendations of the state ministers. The government formed the food security council, vision 2040 and other documents which are in parliament. The government has gone to the policy of mechanization. Tractor stations will be established in different parts of the country where people will hire tractors at affordable prizes.
- Government is committed on development of schemes. What is remaining with government are the challenges that will come with CAMP implementation. One challenge is the engagement of the budget. State ministers should give strong recommendations about the budget.
- JICA is indeed the true friend of South Sudan. Other DPs are not even present in the meeting.
- With these remarks, I declare the meeting open.

1. Agenda 1: Presentation and approval on CAMP final document

- Before the presentation on agenda 1, Undersecretary Isaac clarified that the CAMP Task Team and the TC had close consultations with FAO, EU, USAID, CIDA and JICA. The DPs are in line with CAMP and IDMP.
- The leader of the CAMP Task Team presented a power point of this agenda (please refer to hand-out/power point material for details).
- After the presentation, comments were invited.
- **Hon Mary Jervase Yak, Deputy Minister of Finance**
- Presentation is very interesting. In the implementation coordination structure, %state implementation coordination committee+ should be plural i.e. %state implementation coordination committees+. If it will be one committee for all ten states it will be a hectic task but if each state will have its own committee, naming should be changed to committees.

Hon Nyang Lul Gai

- CAMP is for 25 years and its a national policy for planning. One concern is on the ministry of wild life; South Sudan is abundant in wild life. There is need to include wild life in the master plan because wild animals need water. Its an important sector. Livestock and fisheries share important aspects with wild life and therefore wild life sector should be included.
- Undersecretary Isaac Liabwel, Ministry of Electricity, Dams, Irrigation and Water Resources
- There will be committees to deal with the wild life sector. There is a way to utilize wild life without destroying it. The point is taken and the Task Team will try to present and keep the point.

Hon Mayar Deng Mayar, Minister for Physical Infrastructure, Warrap

- The document is very comprehensive and final but I didnq understand how to link roads with agriculture because without roads, it is difficult to develop agriculture.
- A member of the CAMP/IDMP Task Team responded that indeed feeder roads are a serious concern in the crop and other sectors. Farmers are not able to sell their produce if there are no feeder roads. Because of this, the Task Team put the issue of feeder roads clearly in the CAMP/IDMP document. The document is very big and if Hon ministers have time, they should look at it in detail.

Hon Clement Mbugonia, Minister for Physical Infrastructure, WES

- Presentation is marvellous. I have an observation about water management for agriculture. The presentation only referred to rivers and streams, but there are areas that experience heavy rainfall. How are we going to use the rain water?
- The aspect of implementation only looks at finance. What about human resource? There is also a serious problem of feeder roads.
- Undersecretary Isaac responded that water harvesting facilities are part and partial of irrigation technologies.
- A member of the Task Team responded that there is a project on building the capacity of implementing ministries. It's one of the highly prioritised projects and will be implemented this year. After its implementation, trained staff will be re-deployed and equipped with necessary resources.

Hon Dr Jacob Lupai, Minister for Agriculture and Forestry, CES

- The documents are very comprehensive and this may be the beginning of agriculture revolution in the Republic of South Sudan. The worry is that we are very good at producing good documents but implement nothing. Farmers lack seeds. The ministry of Finance is here, how shall we be assured that this document will be implemented when there are projects still outstanding?

Prof Mathew Udo, Undersecretary for MAFCRD

- Responded that while developing the master plans, the Task Team (TT) and Technical Committee (TC) put implementation challenges into considerations and developed a resource mobilization strategy. The TT and TC have talked to implementing ministries on how each directorate can contribute. Now the two teams are discussing with DPs and the leadership of the implementing ministries to set up a special fund for implementation of the master plans. All stakeholders will contribute. The next presentation will be on resource mobilization strategy.
- Regarding feeder roads, in the IMSC meetings the minister of Transport, Roads and Bridges should attend. The Undersecretary for MTRB is part of the CAMP/IDMP Technical Committee.
- A member of the crop sub-sector informed Hon Ministers that there will be IMSC meeting for IDMP in June.

Tea break

Explanation on the linkages between CAMP and IDMP was made by Undersecretary Isaac

2. **Agenda 2: Explanation and approval on CAMP/IDMP implementation coordination structure**
 - establishment of CAMP/IDMP ICS at national level
 - composition and TOR of IMSC, TC & CAMP/IDMP ICTT at national level
3. **Agenda 3: Explanation and approval on the resource mobilization and buy in process**

- A member of the crop sub-sector presented a power point of agenda 2 (please refer to hand-out/power point material of agenda 2, for details). After agenda 2, agenda 3 was presented by a member of the forestry sub-sector.
- Comments were invited as follows:

Hon Lual Longar, Animal Resources and Fisheries, Warrap

- I congratulate and thank ourselves for job well done and achievement. We have been waiting for the CAMP document. Instead of waiting further, we should adopt the document so that by June, we mobilize resources. The recent presidential decrees established some ministries. The CAMP and IDMP should put into considerations those ministries.

Hon Jacob Lupa, Agriculture and Forestry, CES

- How will implementation at national level be carried out separately from the state? The national government supervises the state government and the state government implements because it has the land and other resources. Who designated that certain projects should be for state government and others for national government? We should think about immunity lines between the national government and state government. After all, we are all the same government. The national government provides its resources to the state to achieve the same objectives. State projects are national projects at the state.
- A member of the CAMP Task Team responded that state projects can be identified from the capacity of its resources. Certain projects e.g. control of birds, disease epidemic, etc. are national projects.
- Undersecretary Isaac responded that all projects will be jointly implemented by national government, state and county governments. At least no project will belong to the national government alone or states and counties only. There will be a reason for each level of government to get involved in each project.

Hon Mayen Ngor Atem, Agriculture and Forestry, Jonglei

- I would like to thank the Task Team for coming up with a wonderful document.
- In the CAMP/IDMP implementation Coordination Structure (please refer to presentation material), the linkages among the three levels of government are very important. Availability of human resources in the states is very challenging. Unless we come up with very clear and string linkages, it will delay the process of economic growth in the country. Most of the projects will be implemented in the states. Linkages should be strengthened so as to come up with a uniform way of recruitment, etc.

Hon Majok Bol Kur, Agriculture and Forestry, Warrap

- The document is very excellent. I would like to thank the Task Team and JICA for its support. The document identified 113 projects, spread all over the states. However, there are projects specified for only 3 or 4 states e.g. establishment of research centres. Will these projects start in some states and spread to other state?
- In the terms of reference (TOR) of the IMSC, it should be written that an extra ordinary meeting can be conducted in case of any matters arising. And in the TOR for TC, it should be modified to the TC may meet 3 times in a year or more if need be. This is a technical committee and many issues may arise.
- The document needs political back up. If not given back up, we will not achieve food security. 10% of budget should be allocated to agriculture.
- A member of the CAMP Task Team responded that research is a national project. Research stations will be established in the states based on agro-ecological zones. There is also a proposal for South Sudan national research organization.

Hon Gada James Kila, Animal Resources and Fisheries, CES

- I would like to appreciate the work of the Task Team members. The master plan needs the inclusion of the Maputo declaration. 10% of the financial budget must be allocated to agriculture.
- Borrowing should be included as a strategy for resource mobilization because some projects require large amounts of funds. It is included in the constitution that the states can borrow money through the guarantee of the national government.
- We need to have clear plans for national projects. Projects have to be mapped, debated between the national and state governments, agreed and passed by the parliament into a bill. Once passed, the national ministers should support the state ministries of agriculture.
- Several documents are sent to the council of ministers and remain there. The CAMP and IDMP should be speeded up and passed. Once passed, it should be provided to the states to implement.

Hon William Manyon, Animal Resources and Fisheries, Lakes

The CAMP and IDMP logo should be re-designed to represent locally produced products in South Sudan.

Hon West Yugulle, Agriculture, Cooperatives and Environment, WES

- Regarding the national and state projects, in most of the time, there has not been good collaboration between the national and state governments. There is need to step up the collaboration.
- The master plan needs to be presented to the parliament and the council of ministers. I am concerned about the time it will take to pass the master plan document into a bill.

Dr John Ogoto Kanisio, Secretary General of the Food Security Council

- Observed the protocol and gave the following remarks.
 - On resource mobilization, we need to ask ourselves how we can secure financing to implement CAMP. First, we need to adopt CAMP as our own plan at the state level, then to the citizens. When you feel something is yours, you can finance it. We should ensure that all coordination levels discuss this question. While we discuss, we need to start with what we have at the state and national level. Communities and individuals must be involved. We need to make them believe that they have. People are eager to give all what they have only if they believe. Fund raising for CAMP at all levels should be done starting at the ground level.
 - Let us re-align the development assistance at the state. We should tell the DPs our priorities. There are DPs and individuals who can finance the CAMP.
 - The CDF should be used to support CAMP. Let us make CAMP a priority. If we don't make it, business will be as usual.
 - Let capacity building be included at all levels in resource mobilization. We need to teach our experts how we can raise funds
 - Implementing good governance should be prioritised. How we manage funds to make partners to trust us is important.
 - National projects help states on issues the state cannot implement e.g. trunk roads, environmental issues, projects that intend to promote security, large markets, etc. At the end of the day, the implementers will be the states.

Undersecretary Prof Udo

- Informed Hon Ministers that the reason why the CAMP TT and TC presented is to discuss together and give concrete solutions. He noted, ~~at~~ at least all of us have accepted the document. Issues raised will be improved by the Task Team. I urge honourable ministers to accept the document as it is, lobby for it in the council of ministers and pass it, and send to parliament for final passing, with in the shortest time possible.
- The ministry of Agriculture developed annual work plan, and selected prioritised projects from the CAMP and IDMP+.

Hon Deng Deng Hoc Yai, Minister of Environment

- Hon minister observed the protocol and gave the following remarks.
 - I am delighted to be here to give remarks. I would like to thank the Task Team for producing two technical plans (CAMP and IDMP). I would like to convey my gratitude to JICA as well.
 - We need to understand the context in which we are in. The world today is threatened by climate change, desertification and so many other factors. However, South Sudan is still in a better position compared to other parts of the world. This is why the world is holding numerous conferences on climate change.

- We need to come up with new sustainable development roles. We need to recognise that the agriculture sector will be affected by climate change and climate change will reduce the amount of food. Therefore, we need to do something to reduce climate change. We need to promote sustainable development by focusing on environmental impact assessment before any project is implemented. We need to minimise the impacts of climate change. We need to impact on agriculture revolution. The two documents will result into agriculture revolution. If implemented, the two documents will ensure food security and also surplus to export to neighbouring countries.
- We need to introduce irrigation. If we rely on rainfall and it becomes less, we will be in trouble.
- We need to mobilize popular support. The success of the master plans will depend on ownership of the plans by the people. We need to prophesy about the master plans. We need to ensure that the states are given more support, and that more support is given to the counties. We need to encourage the culture of hard work and yield the fruits of our hard labour. We need to create a conducive environment for the master plans, starting with team work among the 3 levels of government.
- On issue of roads, agriculture is linked to roads. Western Equatoria and Upper Nile state produced surplus of food in 2014 but were not able to sell off the surplus due to lack of roads.
- Markets; we need to have a stand-alone institution or as part of the ministry of Trade, Industry and Investment to develop and regulate markets.
- We need determination. Government needs to significantly invest in agriculture. Government should not rely on Development Partners. We need to ensure that every year there is an allocation to agriculture that is enough.
- I would like to express my thanks to the Task Team and to JICA for the financial support and being a friend in need.
- Finally, I would like to express my full support to the CAMP and IDMP, and I endorse the documents for CAMP and IDMP.

Closing Remarks by Hon Dr Martin Elia Lomuro

- Hon Minister of Cabinet Affairs gave the following remarks:
 - I would like to congratulate the Task Team. I would like to adopt the documents with comments.
 - I appreciate comments made by state ministers.
 - Regarding issue of national to state projects, South Sudan has a political hierarchy but it's all one government. The levels of government have outlined roles and responsibilities. If we follow these roles, we should not have conflict.
 - Justifications why national projects should be there:
 1. National projects have been in existence since the Khartoum government and we have to accept them now.
 2. There is need for government strategic projects that can mitigate the impact emergencies.
 3. Land belongs to everybody. Therefore, the national government has a right to get land anywhere to invest in agriculture.
 - With consultations with the chair of the IMSC meeting, the Hon minister approved the CAMP and IDMP master plan documents and declared the IMSC meeting closed.

<END>

23. EIGHTH TC (TC MEETING OF IDMP), 13th MARCH 2015, QUALITY HOTEL, JUBA

The Republic of South Sudan (RSS)
The Project for Irrigation Development Master Plan (IDMP)
Memorandums of Technical Committee (TC) meeting of IDMP

Agenda	A. Introduction and Opening Remarks B. Presentation and Discussion on the Progress of IDMP Formulation Process 1. IDMP Overview and Process toward Master Plan Formulation 2. Draft Programme Profiles 3. Priority Projects 4. Relation between IDMP and CAMP C. Closing Remarks
Date and Time	Friday, 13th of March, 2015 (9:00 ó 17:00)
Venue	Quality Hotel, Juba
Participants	See the attached participant list
Attachment	The Presentation Material of the 4 th TC meeting

A. Introduction and Opening Remarks**1. Introduction of Participants**

First of All, Andrew, the moderator of the 4th TC meeting, welcomed all the participants to the meeting, starting from the three undersecretaries, followed by Secretary General of Food Security Council, JICA representatives, Director Generals (DGs) of the various ministries and CAMP and IDMP Task Team (TT) members.

Secondly, he introduced four new JICA TT members of IDMP to the TC members: namely, Hiki, Kikuchi, Toshima and Hara.

Thirdly, he explained the structure of IDMP TC and TT, especially regarding their composition: TT consisting of JICA experts and RSS TT members from MEDIWR, MAFCRD and MFLI; TC consisting of mainly the undersecretaries of MEDIWR, MAFCRD and MFLI and DGs of various Ministries concerned.

Fourthly, he asked all the participants to make brief self-introduction.

Finally, he closed the introduction session by explaining the programme of the 4th TC meeting,

2. Remarks by the Chief Representative of JICA South Sudan Office (JICA SS)

First of All, Dr. Mitsuaki FURUKAWA, the Chief Representative of JICA SS, showed his gratefulness to undersecretaries and other TC members. He continued that the IDMP made some progress for the last three years since the RSS government requested JICA for support and promised all the TC members to share more concrete deliverables in three to four months to come, encouraging everyone to contribute to the IDMP process. He closed his remarks by emphasising the importance of i) Public Relations on IDMP and CAMP; ii) Investment in IDMP and CAMP; and iii) Sensitising/ Promoting Awareness regarding IDMP and CAMP down to the level of the local government.

3. Opening Remarks by Prof. Mathew Udo, Undersecretary, MAFCRD

First of all, Prof. Mathew Udo, Undersecretary of MAFCRD, greeted all the participants.

Secondly, he congratulated all on having made a big progress by reaching the 4th TC meeting; and he told the Chief Representative of JICA SS that we had done well so far.

He continued that the implementation of CAMP and IDMP initiatives and also capacity development for the technical teams had been problems; and he showed his gratitude to JICA SS for having supported RSS government financially and technically. Then, he emphasised that the RSS government were going to make these two programmes (CAMP and IDMP) government institutions, saying that this is not just a JICA programme. He also stated that the RSS government would take the responsibility of implementation and process of CAMP and IDMP and all the levels of governments would be in the process, mentioning that the process had already been started during the preparation of CAMP and IDMP by selecting states and counties through consultation workshop and other activities targeting states and counties.

As for the way forward, he placed importance on the consolidation of effort to complete the document of CAMP and IDMP and the establishment of consolidation mechanism for going into the planning process.

Finally, he concluded his remarks by encouraging all the participants to put their inputs through their comments or clarifications in the 4th TC meeting for enriching IDMP.

B. Presentation and Discussion on the Progress of IDMP Formulation Process

1. IDMP Overview and Process toward Master Plan Formulation

(1) Presentation

Jiben presented the following items by using the presentation materials:

- a) Overall Objective and Strategic Goal
- b) Coordination Mechanism for IDMP Formulation
- c) IDMP Formulation Process
- d) Strategic Framework toward the Master Plan
- e) IDMP Elements, Strategic Approaches and Programmes
- f) IDMP Expected Outputs
- g) Structure of the IDMP document
- h) Next Step (Action Plan until August, 2015)

(2) Comments and Clarifications

JICA Chief Representative made a comment regarding the Next Step. He stated that the IDMP master plan had to be submitted by June, 2015, since the new fiscal year of the RSS will start in July.

(3) Answers

Eng. Isaac Liabwel, Undersecretary of MEDIWR, together with Andrew, responded to the comment of JICA Chief Representative. They mentioned that the IDMP formulation had been affected by the internal dispute of the RSS and also that the studies related to the IDMP formulation was season sensitive (especially studies on priority projects that we are currently doing can be conducted only in

dry seasons, which is necessary to produce good documents). He also stated that the budgeting process of the RSS government started from November; even the CAMP would miss the next fiscal year planning; however, supplemental budgets would be applicable for CAMP and IDMP.

2. Draft Programme Profiles

(1) Presentation

IDMP TT explained to the participants i) Development Theme, ii) Organizations/Institutions involved, iii) Funding Sources, iv) Activity Types, Programme Objective, v) Outputs, Components, vi) Expected Negative Impacts Outcomes and vii) Routine work after the completion of the IDMP, regarding the following six programmes:

- a) Information Network System Establishment (INSE) presented by Deng;
- b) Irrigation Development Guidelines Formulation Programme (IDGFP) presented by Andrew;
- c) Human Resource and institutional Development for Irrigated Agriculture Programme (HRIDIAP) presented by Erneo.
- d) Irrigated Agriculture Extension Programme (IAEP) presented by Erneo;
- e) National Irrigation Schemes Development Programme (NISDP) presented by Makuac; and
- f) Private Sector Irrigation Investment promotion programme (PSIIPP) presented by Andrew.

(2) Comments/Clarifications and Discussion

- a) Regarding the Organizations/Institutions, Prof. Mathew Udo pointed out that some Departments of MAFCRD, such as departments related to donor coordination and cooperatives were missed out as well as departments of the state ministries related to rural development and cooperatives.
- b) Mr. Ambrose, the representative of NBD, stated that involvement of local communities, farmers/pastoralists and civil societies for awareness of the IDMP was not clear. He emphasised the involvement of the pastoralists to avoid conflicts between the farmers and the pastoralists.
- c) Mr. Olams, a CAMP TT member, made some slide collection on naming of the Directorate of Investments Planning and Statistics under MFLI.
- d) Some representative of MAFCRD pointed out that their directorate of planning was missed out.
- e) Concerning the funding source for INSE programme, some representative of MFLI pointed out that only a development partners grant was written.
- f) The representative of Ministry of Wildlife Conservation and Tourism stated that Ministry of Wildlife Conservation and Tourism should be included for the implementation.
- g) Mr. Emmanuel, a representative of MEDIWR, suggested that organizations/institutions related to land use, such as Ministry of Lands, Housing and Physical Planning (MLHPP) and Land Commission, should be included in the implementation. He continued that conflict mitigation over land should be considered for the IDMP implementation.
- h) Dr. John Kanisa, the Secretary General of Food Security Council, stated the stakeholders of the IDMP programmes needed to know when/how long/how they would be included in the process.

He also suggested that community contribution should be also considered as a funding source of programmes.

- i) Regarding the organization/institutions involved in INSE programme, a representative from the CE State mentioned that their directorate of land and survey was not recognized and should be included because they were responsible for land demarcation and acquisition.
- j) Mr. Pangach, the leader of CAMP TT, stated that we needed some clear commitment from the national level to the state level.
- k) Prof. Udo stated that some governors of the states rejected changing the structure of the state ministries to meet those of the national government so that it could be clarified which line ministries would be responsible, saying that each state has different organizational settings (dynamic institutional settings). He concluded that we should identify which departments at the state levels to be the stakeholders.
- l) A commissioner of Juba County asked the IDMP TT how to plan the mitigation for replacement for forests for agriculture as well as how to provide policies and protection for the mitigation.
- m) A representative of Chamber of Commerce suggested that active involvement of private sector representatives would be very important. He also stated that Chamber of Commerce could be included in the process for clear understandings of the IDMP, in order to create a good investment climate and to appeal for foreign investors.
- n) Mr. Michaya, a representative of MAFCRD, stated that Seretenya (EE State), one of the international border points, was not included in a water supply project for livestock under NISDP. He also concerned about inclusion of Development partner support on budget sources for programmes, asking if such support should be included in planning.
- o) Regarding institutions and management, some TC member stated that information and policy would be a key function of relevant ministries. Regarding the structure, he asked the IDMP TT how the IDMP implementation structure and directorates of planning of the relevant ministries coexists.
- p) JICA Chief Representative asked the IDMP TT how to make awareness of the IDMP (e.g. information campaign or other means).
- q) Some TC member suggested Alamoto should be included in a coffee project area under NISDP.
- r) A representative of Ministry of Transport, Roads and Bridge (MTRB) stated that status of roads was not mentioned, saying that roads were necessary for marketing products. He asked the IDMP TT how Feeder Road Programmes would be linked with CAMP and IDMP programmes (how MTRB should intervene and coordinate the CAMP and IDMP process).
- s) Some TC member stated that a legal framework of the IDMP would be clarified.
- t) A Director General of Ministry of Gender, Child and Social Welfare suggested that social welfare (health, education and etc.) should be added to development themes. She continued that water should be provided to some more places under NISDP.
- u) Dr. John Kanisa, the Secretary General of Food Security Council, concerned that a subsidy system for the private sector programme would cause a negative impact (considering that the

subsidy is the only way for attracting private investors is dangerous) and he suggested that the subsidy system should be replaced by an incentive/attraction system. He also pointed out that the expression, "Number of ~", used for "Outcomes" should be revised, since it was more commonly used for a monitoring indicator.

- v) A coordinator of JICA SS asked the IDMP TT how to do implementation campaigns as well as when/where to hold them.
- w) A representative of Juba University asked the IDMP TT why Agricultural engineering (water crop requirement measurement and etc.) was not included in Agricultural Extension Programme.
- x) The representative of MAFCRD's Directorate of Agriculture Engineering stated Capacity Building for their departments: i) Mechanization; ii) Soil; iii) Irrigation; and iv) Environment Control were concerned. He continued that a zone irrigation system should be created.
- y) Mr. Granage Young, an advisor of MEDIWR, suggested that all the necessary actors should be included in the IDMO process. He also asked the IDMP TT why the IDMP stuck to the private investment. He continued that we should collect water fees as a routine operation.

(3) Answers

- a) Regarding the organization/institutions that were missed out, Andrew answered that they would be reflected for revision. He continued that the IDMP TT would see what organization/institutions to be related to each programmes, as well as financial sources.
- b) Regarding the involvement of farmers/pastoralists, Erneo answered that the IDMP would address where to provide water for them. He also mentioned that IDMP would consider the issues of the conflicts between farmers and the pastoralist as well as those of the wildlife.
- c) Regarding the Comments/Clarifications y), Andrew answered that the IDMP did not stick to the private investment, which would be one of the programmes.
- d) Regarding the mitigation for the replacement of forests, the IDMP TT answered that IDMP and CAMP would address tree nurseries and also stated that environmental and social consideration would be taken care of in a form of guidelines as well as in the implementation.
- e) Regarding the awareness campaign, especially on who would take the lead, Eng. Isaac Liabwel answered that the coordination body would do the campaign.
- f) Regarding the Comments/Clarifications u), the IDMP TT answered that the expression for "Outcome" would be revised.
- g) Regarding the target areas of the projects under NISDP, the IDMP TT also explained that the IDMP would provide water for farmers and the areas would be revised together with CAMP TT.
- h) IDMP TT stated that the IDMP encompassed the department of Mechanization under MAFCRD. The TT continued that the IDMP would capacitate the department, since the current government structure was planning to be utilized.
- i) Regarding the Comments/Clarifications r), the IDMP TT answered that feeder roads would not be excluded, since it is important for both CAMP and IDMP implementation.

- j) Regarding the Comments/Clarifications s), the IDMP TT answered that the IDMP would go through the legal process. The IDMP TT also explained that IDMP would produce guideline, since the water bill/act is the general law for the IDMP.
- k) Regarding the Comments/Clarifications u), Eng. Issac Liabwel answered that the subsidy system would function as both a motivation factor and complementary funding. He continued that the more discussion needed to be done.
- l) Eng. Isaac Liabwel stated that the last presentation would answer how to implement CAMP and IDMP. He continued that the IDMP needed to catch necessary aggregation/departments/divisions for development process, including the environmental authorities.

3. Priority Projects

(1) Presentation

Robert presented the following items by using the presentation materials:

- a) Priority Project Objectives
- b) Criteria for selection of the priority projects
- c) Study on Priority Projects
- d) Planning for Priority Projects (Pre-F/S)
- e) Procedures for Priority Project Planning and Designing (Pre-F/S)
- f) Soil Survey
- g) Installation of the Hydrological/Meteorological observation Equipment
- h) Socio-economic Survey
- i) Environmental and Social Considerations

(2) Comments and Clarifications

- a) Some TC member demanded the clarification of the priorities, especially regarding the reasons why the current locations were selected.
- b) Dr. John Kanisa, the Secretary General of Food Security Council, asked which map was used by the IDMP TT for the high resolution map.

(3) Answers

- a) Robert answered that due to the security the current priority projects were limited to the locations where Feasibility Studies can be conducted.
- b) Eng. Isaac Liabwel answered that the IDMP TT used the map showing the borders that have been accepted internationally.

4. Relation between IDMP and CAMP

(1) Presentation

Eng. Isaac Liabwel, Undersecretary of MEDIWR, presented the following items by using the presentation materials:

- a) Relationship between IDMP and CAMP

- b) CAMP and IDMP Implementation Mechanism
- c) CAMP and IDMP Implementation Coordination Structure
- d) Implementation and Management tools (Investment plan; Annual Planning)
- e) CAMP and IDMP Implementation Coordination TT (One Campaign)

(2) Comments/Clarifications and Discussion

- a) Ms. Osumi, Project Formulation Adviser of JICA SS, asked Eng. Isaac Liabwel whether the CAMP and IDMP Implementation Mechanism presented could be one possibility.
- b) Mr. Pangach responded to Ms. Osumi that the implementation mechanism was accepted by the inter-ministerial committee (Now how to implement the mechanism matters.).
- c) Dr. John Kanisa, the Secretary General of Food Security Council, asked where the private sector would be accommodated in the CAMP and IDMP Implementation Mechanism. Eng. Isaac Liabwel answered that the private sector would be added in the implementation mechanism.
- d) Dr. John Kanisa also commented that everybody wanted to be involved in the implementation mechanism at the TC/Policy level and asked Eng. Isaac Liabwel if they could be included in the mechanism.
- e) A representative of Juba County asked Eng. Isaac Liabwel which parts of the county level coordination structure the county structures would constitute. Eng. Isaac Liabwel answered that commissions, departments and units would constitute the inter-departmental committee.
- f) Some TC member suggested titles/grades of individual actors should be shown in CAMP and IDMP Implementation Coordination Structure. Eng. Isaac Liabwel answered that the figure showing CAMP and IDMP Implementation Coordination Structures would be kept as it is, since necessary actors at the individual level might be changed.

C. Closing Remarks

1. Closing Remarks No 1 by Dr. John Kanisa, the Secretary General of Food Security Council

Dr. John Kanisa appreciated the effort of the IDMP TT and the MEDIWR for involving various institution and stakeholders in the IDMP process. He stated that green revolution through IDMP and CAMP was just begun. Regarding the IDMP process, he mentioned that MEDIWR would lead all the structure of the government as well as the private sectors. Then he emphasised the importance of the formulation and dissemination of administrative guidelines/ procedures and technical/ operational guidelines through the upstream to the downstream. He also suggested that the IDMP TT should revise the selection criteria of the priority areas to avoid questions in the future. He continued that it would be important to extend the M&E of CAMP and IDMP, in addition to communicating the knowledge generated through the CAMP and IDMP process. Moreover, he recommended that conflict mitigation and management should be considered more seriously and the formal measures should be made at every level, such as research on how to resolve the conflicts. Finally, he closed his remarks by saying that Food Security Council would support the IDMP and CAMP process.

2. Closing Remarks No.2 by Dr. Makuei Malual Kaang, Undersecretary, MLFI

Dr. Makuei Malual Kaang thanked the CAMP and IDMP TT for the good achievement. Then He stated that Issues of food security and economic development would have priorities and should be tackled, mentioning that two master plans would be implemented for the well-being of people. He continued that the provision of water for the livestock is vital to avoid the conflicts between farmers and the pastoralists as well as the ones between neighbouring communities. He ended his remarks with the words of thanks and declared that the meeting was dismissed.

End

Participants List of the 4th Technical Committee Meeting

Name	Institutions/Organizations	Positions
Prof. Mathew Udo	MAFCRD	Undersecretary
Makwei Malual	MLFI	Undersecretary
Isaac Liabwel C. Yol	MEDIWR	Undersecretary
John Kanisa	ROSFSC	SG Food Security Council
Majok Mading	Ministry of Environment	D/director
Atem Garang	MAFCRD	D/G Planning and Protection
Michaya Gamunde	MAFCRD	Ag.. D. Planning
Kenneth Duker	MAFCRD	Director of Forestry
Santo Luis	MAFCRD	Planning Affairs
Daniel Atem	MAFCRD	D/G for Special Projects and Donors
Martin Makur	MAFCRD	Director of Mechanization
Luis Jaja	MLFI	Research D G
Emmanuel Lado	MEDIWR	D G Planning & Programming
Albert Chzai	MEDIWR	Director for Rural Water and Sanitation
Thomas Jang	MEDIWR	Ag. D/G. for Water Resources Management
Waiwai Thilt	MRTB	D/Director. Maintenance
George Lumori	Wildlife	D/ Administration & Finance
Regina Olullo	MGC&SW	DG Gender &Children
Lazarus Lemi Chacha	MOPI/CES	D/G
Ajo Samuel	MAF /CES	D. Agriculture
Daniel Jada	Forestry Juba County	U/Commissioner
Stephen Lado	Juba County	A/com. Water sanitation
Julus Lado	Juba County	A/ Commissioner / Fishery
Lona Denis	Juba County	Inspector
Arok Dut Arok	SSCCIA	General manager
Ambrose Laim	NBD. SS	Chairperson
Garang Young	MEDIWR	Advisor
John Morris	Juba University	Lecturer
Ogawai Ojwok	Upper Nile University	D. Dean of Agriculture
Mitsuaki FURUKAWA	JICA	Chief Representative
Miwa ITO	JICA	Dep. Director Africa Department
Etsuko Osumi	JICA	Project Formulation Advisor
Daniel Deng	JICA	Program Coordinator
John Pangech	CAMP TT Leader	D G. Planning & Program
William Olami	CAMP TT	Co. Team Leader
Jiben Jeremiah	IDMP/MEDIWR	Acting Director General for Irrigation and Drainage
Andrew Yunda Stephen	IDMP/MEDIWR	Deputy Director for Planning and Programming
Simon Otoung Awijak	IDMP/MEDIWR	Deputy Director for Hydrology
Deng Santino	IDMP/MEDIWR	Assistant Director for Hydrology
Makuac Ador Malek	IDMP/MEDIWR	Assistant Director for Irrigation and Drainage
Robert Peter Zakayo Galla	IDMP/MEDIWR	Inspector for Hydrology
Chut Isaac Chol	IDMP/MEDIWR	Inspector for Water Resources Management
Pagan John Okwach	IDMP/MEDIWR	Inspector for Irrigation and Drainage
Wol Gordon Tong	IDMP/MEDIWR	Inspector for Planning and programming
Gai Simon Reath	IDMP/MEDIWR	Assistant Inspector for Hydrology
Philip John Akol	IDMP/MEDIWR	Assistant Inspector for Hafirs, Dams and Dikes
Doki Lako Busuk	IDMP/MEDIWR	Assistant Inspector for Hafirs, Dams and Dikes
DR. Erneo Balasio Peter	IDMP/MAFCRD	Director for Agricultural Mechanization
Moses Mogga Mikaya	IDMP/MAFCRD	Inspector for Mechanization
Kazumitsu TSUMURA	IDMP	Team leader
Hitoshi TOKU	IDMP	Irrigation and drainage

Akira NAKAMURA	IDMP	Organization / Capacity Building / Training
Kotaro KIKUCHI	IDMP	Irrigation Institution / Operation and Maintenance (OM)
Shigeru OTSUKI	IDMP	Irrigation Facility / Cost Estimate (Main)
Haruo HIKI	IDMP	Reservoir / Dam
Ayako OCHI	IDMP	Remote Sensing / GIS
Ritsuko HARA	IDMP	Agriculture / Soil
Ryu TOSHIMA	IDMP	Coordinator for irrigation facility (1)
Koichi AKASHA	IDMP	Project coordinator
Ywodo Andrew Oyor	IDMP	Secretary

**24. NINTH TC (TC MEETING OF CAMP WITH PARTICIPATION OF MEDIWR AND IDMP TT),
23rd APRIL 2015, JUBA REGENCY HOTEL**

**Formulation of the Comprehensive Agriculture Master Plan (CAMP) of
the Republic of South Sudan**

Minutes of TC Meeting in Juba

Agenda	<ol style="list-style-type: none"> 1. Update on the finalization of CAMP document 2. Discussion and approval of CAMP implementation coordination structure <ul style="list-style-type: none"> ➤ establishment of CAMP ICS at national level ➤ composition and TOR of IMSC, TC & CAMP ICTT at national level 3. Update on resource mobilization process within government directorates 4. Clarification on the integration of IDMP component into CAMP document 5. Discussion on the agenda and schedule of natural resource sector working group meeting & IMSC meeting which will involve state ministers and some legislators <ul style="list-style-type: none"> ➤ NRSWG . proposed date, 20 May 2015 ➤ IMSC - proposed date, 28 May 2015
Date and Time	Thursday, 23 rd April, 2015, 08:30 am . 14:00 Hrs.
Venue	Jonglei Hall, Juba Regency Hotel
Attendees	<p><u>Ministry of Agriculture, Forestry, Cooperatives and Rural Development (MAFCRD)</u> Prof Mathew Udo, Undersecretary Mr Jaden Tongun Emilio, Undersecretary Dr Loro Georeg Leju, DG Agric Production Mr John Deng Ayau, DG for Finance Mr Cirino Oketayot, DG for Research Mr Atem Garang Malual, DG for Plant Protection Mr Timothy Thwol Onak, DG for Forestry Mr Stephen Lomeling, DG for Administration Mr John Pangech, Team Leader/DG for Planning Mr Kenyi Bullen Baggu, Director of forestry Dr Erneo Balasio, Acting TT Leader/Director for Mechanization Mr Joseph Akim, Deputy Director of Extension Mr Noel Bangaza Cleopas, Assistant Director of Forestry Ms Monica Mario Tokwaro, Gender policy Mr Ruben Abuol Ki, Cooperative College Mr Daniel Atem Abuol, DG Special Projects and Donor Coordination Mr Marlin Atero Angara Mr Victor Mobrouk Clement, Principle for Amadi Rural Development Institute Rev Oneil Yosia, DG for Agricultural Education Mr Amule Martin</p> <p><u>Ministry of Livestock, and Fisheries Industry (MLFI)</u> Dr Makuei Malual Kaang, Undersecretary Mr William Olami, A/DG for Planning Mr Anthony Raymond Tombura, DG Ms Anna Felix Baigo, DG Mr Sarafino Aloma Francis, DG Mr Augustino Atillio, DG Mr Girima Elikia Toma, Research Mr Alex Lomoro Kalisto Mr George Babi Natana Ms Esther Kaku Henry, Assistant Inspector of Planning Mr Samson Bringi Francis, Inspector of Livestock Mr Adriko Dioben</p> <p><u>Ministry of Electricity, Dams, Irrigation and Water Resources (MEDIWR)</u> Eng. Isaac Liabwel, Undersecretary Ms Jiben Jeremiah, IDMP TT Leader/DG for Irrigation and Drainage</p>

	<p>Mr Makuac Ador Malek, IDMP TT member/deputy team leader Mr Godfrey Semakula <u>Ministry of Finance and Economic Planning</u> Mr Charles Chol Mojwok <u>Ministry of Environment</u> Mr David Batali Oliver Mr Peter Wunding Thonypiny <u>Ministry of Wild Life</u> Maj Gen. Gibril Mour, DG for Wild Life <u>ALDI</u> Mr Davidson Amani Ms Margaret Juan <u>JICA South Sudan Office</u> Mr Tomoki Kobayasi, Deputy Chief Representative Mr Tomohiro Kuwabara, Representative Ms Osumi Etsuko, Project Formulation Advisor Mr David Deng, Advisor to Senior Management <u>JICA Consultant Team</u> Mr Joe Joe Wani Lemi, Agricultural Expert Mr Ayo Peter Wani, Research Assistant Ms Baityo Sande, secretary <u>IDMP Consultant Team</u> Mr Akihiko Hata, Co-Team Leader Mr Kotaro Kikuchi</p>
Handouts	<ol style="list-style-type: none"> 1. Agenda for the meeting 2. Power Point of Agenda 5 (Resources mobilization for CAMP) 3. Narrative of CAMP/IDMP ICTT structure and CAMP/IDMP Implementation structure 4. Proposed Organogram and TOR for CAMP ICTT by Task Team Members

Opening remarks by Prof Udo

- Purpose of meeting is to listen to the finalization of CAMP document. Most important issues to listen to are: Update on the finalization of CAMP document, Discussion and approval on CAMP implementation coordination structure, Update on resource mobilization process within government directorates, Clarification on the integration of IDMP component into CAMP document, and Discussion on the agenda and schedule of natural resource sector working group meeting & IMSC meeting which will involve state ministers and some legislators.
- Declared the meeting open.

Remarks from Mr Tomoki Kobayasi, JICA Deputy Chief Representative

- On behalf of JICA, I would like to congratulate the efforts of the CAMP and IDMP Task Teams in the formulation processes. Formulation is one process but implementation is another big task. I am very sure the government will overcome the challenge of implementation. JICA will support the government during the implementation process. Departments of the line ministries have to work together to help the functions of each department. All Director Generals and Directors present at the meeting will play a crucial role during the implementation. I hope that TT members will return back to their respective directorates and form focal points for CAMP and IDMP implementation. Thank you very much for listening.

1. Agenda 1: Update on the finalization of CAMP Document

- The CAMP Task Team Leader briefly updated participants of the meeting about CAMP finalization as follows:
- Finalization of CAMP document will be achieved as planned in the schedule. The Task Team finalized government buy-in meetings where TT members presented CAMP documents to respective directorates. Copies of annex 1 and CAMP main document were distributed to each directorate. Now, TC meeting is on progress and finally Natural Resource Sector Working Group and Inter-ministerial steering committee meetings will be held on 20th and 28th May respectively.

2. Agenda 2: Discussion and approval on CAMP implementation coordination structure

- The CAMP Task Team Leader presented a narrative/Microsoft word format document of the CAMP and IDMP implementation structure. After presentation by Team Leader, the Co-Team Leader presented a proposed organogram and Terms of reference for the ICTT prepared by the CAMP Task Team Members. Comments were invited from the participants.

Undersecretary Isaac.

- The presentation on the implementation unit with Implementation Coordination Task Team is confusing. The Organogram prepared by the Task Team should be developed based on the proposed number of ICTT members in the ICTT presentation by Team Leader. In addition to the originally proposed number (6 members in total) in the ICTT presentation, two members, one each from the Ministry of Transport, Roads and Bridges (MTRB), and Ministry of Trade, Industry and Investment (MTII) should be added to the composition of the ICTT, to participate in the day to day activities of the ICTT. Participant from MTRB will facilitate the prioritization of the implementation of activities on feeder roads and other trunk roads, while participant from MTII will facilitate the initiation of agro-industries, agricultural markets, etc.
- Organogram should be adopted based on the composition of members in the ICTT.

Prof Mathew Udo

- My comment is in line with that of Undersecretary Isaac. There is a bit of confusion between the structures presented by Team Leader (structure/ composition presented in the narrative by using the Word document) and structure presented by Co-Team Leader in the organogram. There is also an idea that members of the CAMP TT must be featured in the ICTT. If that is the case, what will be the role of implementing directorates? Either we have ICTT composed of one member of the CAMP TT (Technical expert) per sub-sector or we have a different ICTT composition with direct linkages between Implementing partners and directorates. If we have the structure of ICTT as presented by Co-Team Leader, the composition of ICTT will be too bulky and we will have budgetary constraints. If we reduce the composition in the organogram to one TT member per sub-sector it will reduce the number of members and it will be cost-effective. Meanwhile, the proposal of Engineer Isaac to add two members; one from Ministry of Roads and Bridges, and the other from the Ministry of Trade, Industry and Investment is ok.

Undersecretary Isaac

- Basing on the composition of ICTT in the narrative, if we have the Team Leader from crop sub-sector, co-team Leader will come from Veterinary/Livestock/MLFI. The other three members will come each from Forestry, Fisheries and Irrigation/IDMP. Not all of those TT members who have been formulating the CAMP/IDMP processes will be involved in the implementation of the CAMP/IDMP. A plan/Master Plan document is always formulated to guide the entire public and upcoming generation.

Undersecretary Jaden

- All of us own the CAMP and IDMP documents, and we have to be reading it, understanding it and implementing it. During the planning phase, all TT members were involved because planning had to be done by the TT. Now, this is implementation, we have to look at it in a different way. The

institutions of government have to be involved. We have a partner (JICA) that is committed to support us and would like to continue supporting us. We appreciate the support very much. If we have a team leader who will coordinate projects with DPs, he/she has to be approved by the inter-ministerial steering committee (IMSC), not Technical Committee. We should find a way to discuss and ensure we institutionalise the implementation of the CAMP/IDMP into the directorates. If the Team Leader will coordinate with the ministry of Finance (as indicated in TOR presented by TT), it has to be a finance officer endorsed by IMSC.

CAMP Team Leader

- What the Task Team has proposed is not 100% correct. The TC can have some time to read and think about it, and contribute their inputs. On the other hand, the ICTT presented as a narrative was only discussed by the undersecretaries without involvement of the Task Team.
- Not all subsector members will remain as ICTT members. In the CAMP Task Team, each sub-sector had about seven (7) members and not all members will remain in the sub-sectors. If there will be one member per sub-sector in the ICTT e.g. a crop specialist in the crop sub-sector, he/she will not be able to explain issues of mechanization. Also, if one member of the sub-sector falls sick or travels, the other member can be able to support. At least two members per sub-sector, and additional administrators who will support the team will be ok.

Undersecretary Isaac

- This is a coordinating Task Team, just to coordinate; we cannot give it the function of implementation. Once for instance we have the ministry of Finance approving Finances for a project, the directorates have to implement and the ICTT will coordinate.

Prof Udo

- Let us leave the structure as it is in the ICTT narrative.

Undersecretary Isaac

- The Task Team should circulate the ICTT structure to each member of the TC.
- A period of one week for reading and making comments on the ICTT for submission will be given to the TC.
- However, with Consultations between JICA and Undersecretaries for MAFCRD, MLFI and MEDIWR, after the TC meeting, it was later agreed that the ICTT will have a total membership of 8 members.

Tea break (15minutes)

Announcement of Extension of JICA Support to CAMP and IDMP (Prof Udo)

- Prof Udo announced that Goss-MAFCRD and JICA South Sudan signed a memorandum of understanding to amend the Record of Discussion signed in 2012 for the project for the Formulation of the Comprehensive Agricultural Development Master Plan (CAMP) and also for the project for Irrigation Development Master Plan (IDMP). Prof Udo read the minutes of meeting between JICA and authorities concerned for the Government of the Republic of South Sudan (GOSS): for CAMP to extend the project period and to add the activity to support the implementation structure, and for IDMP to extend the project period.

3. Agenda 4: Clarification on the integration of IDMP component into CAMP document

- Undersecretary Isaac presented comments by IDMP Task Team on the CAMP Main Document, regarding integration of IDMP into the CAMP. (For details, please refer to CAMP Main Document with Comments of Mr Isaac/IDMP Task Team).
- First, he commented about the proportionality of the features on the CAMP logo i.e. the fish is too big, the head of sorghum is rivalling with the tree. He urged the CAMP Team to think about revising

the CAMP logo to have sizable proportions of the features on the logo. He proceeded to make the presentation.

Comments

Prof Udo

- Presentation by Undersecretary Isaac is wonderful. Alignment of IDMP to CAMP is important. We have to look at the documents as one document. Appreciate work done by Isaac very much. Personally I have not had time to read the CAMP document in detail as Isaac did.

Mr Cirino, DG for Research-MAFCRD

- The fact that JICA is extending its support to the CAMP, the new additions/issues that came in e.g. the 1000 tractors purchased, the involvement of the army in agriculture, etc. should be incorporated in the CAMP. Sustainability of the projects should be considered e.g. the case of Aweil Rice Scheme should not be replicated. Schemes must have business plans. Basket funding should be embraced. At each level of government, there must be planning sessions to make effective use of DP and government support.

Mr Timothy, DG for Forestry

- Any project should have a technical proposal indicating the entire lay out of the project, down to the budget.

4. Agenda 3: Update on resource mobilization process within government directorates

- Dr Erneo presented a summary table of resource mobilization with in government strategies and invited comments.

Comments

Mr Olami, Co-Team Leader of CAMP TT

- The CAMP Task Team discovered a major challenge experienced in the state. Revenue collected in the state is controlled and utilized by the governor as his/her personal fund. The CAMP document has to be enacted and passed by parliament as a law, and a special fund secured for its implementation.

Prof Udo

- There are definitely some hardships in the way people manage funds. Percentage of revenues collected at county should be shared by state and collections at state should be shared with national government.
- We are all supposed to be supervised by the chairman of the Food Security Council who is the President of South Sudan. In the recent state ministers meeting, we agreed that we have to set up a special fund for CAMP.
- The role of governors needs to be specified and revenue collection strategy has to be clarified. Idea should be presented at Inter-Ministerial Steering Committee Meeting.

Mr Akim

- There is total confusion in the government system. The national government collects revenues, and the state and county governments collect revenues also. The fund collected is not utilized for implementation of activities.

- Government commitment to CAMP has been very poor as experienced by the CAMP formulation process. At the beginning of the CAMP process, government committed to contribute support to the CAMP but JICA ended up supporting everything.

6. Agenda 5: Discussion on the agenda and schedule of natural resource sector working group meeting & IMSC meeting which will involve state ministers and some legislators

- The CAMP Task Team Leader presented a power point of the resources mobilization for CAMP process (please refer to the power point material for details).

Comments

Mr Mobruk, Principle for Amadi Rural Development Institute

- CAMP document is very good but we need to develop an institution that will implement it e.g. if we have a parastatal body e.g. a Food Security body that will implement the CAMP, implementation will be successful. The parastatal body, independent from the government would request for money from the government for implementation. If government is left to implement the CAMP, it will fail. The national TT members would be grouped into an institution and implement the CAMP.

Mr John Deng, DG for Finance, MAFCRD

- The CAMP document is still a draft. Finalization should be done quickly so that we have a final binding document that can be funded. If finalization is not quickly done, it will delay implementation. CAMP TT members should quickly finalize the document so that it can be passed by parliament and implemented. Resources are there but cannot be given without a final binding document.

Closing remarks by Prof Udo

- Appreciate presentation. We are still in the government buy-in process. The buy-in process started with in directorates and now to TC and finally to IMSC and NRSWG. Presentations for today are for fine tuning the CAMP document. If participants have additional comments, they can submit to the CAMP Task Team later. Resource mobilization is a very serious challenge because people always do not want to allocate funds to agriculture. It was agreed in state-national ministers meeting that CAMP is a reference document.
- DPs always appreciate plans of government but they always ask who will manage the funds properly? DPs are always cautious about government management of funds.
- The list of bilateral and multilateral players should be revised. There are some important partners e.g. The Great Britain who are our former colonialist, Danish Church Aid, etc. who should be included to the list.
- Document is almost at its finalization.
- Declared the meeting closed at about 13:20 hours.

<END>

25. TENTH TC (TC MEETING OF IDMP), 27th JULY 2015, QUALITY HOTEL, JUBA

The Republic of South Sudan (RSS)
 The Project for Irrigation Development Master Plan (IDMP)
Memorandums of Technical Committee (TC) Meeting of IDMP

Agenda	A. Introduction and Opening Remarks (by Mr. Makuac) B. Presentation and Discussion on IDMP Draft Final Report (by IDMP RSS-TT) <ol style="list-style-type: none"> 1. Strategic Framework based on the situation analysis 2. Strategic Programmes 3. Priority Project Plans 4. Implementation Mechanism 5. Conclusion and Recommendations C. Wrap-up and Next Steps (by Mr. Tsumura) D. Closing Remarks
Date and Time	Monday, 27 th of July 2015 (9:30 - 15:30)
Venue	Quality Hotel, Juba
Participants	See the attached participant list
Attachment	The presentation material of the 5 th TC meeting

B. Presentation and Discussion on IDMP Draft Final Report (DFR)**(1) Presentation**

Following presentations were carried out by IDMP RSS-TT.

1. Strategic Framework Based on the Situation Analysis by Mr. Makuac
2. Strategic Programmes by Mr. Simon
3. Priority Project Plans by Mr. Robert and Mr. Deng
4. Implementation Mechanism by Mr. Isaac
5. Conclusion and Recommendations by Mr. Makuac

(2) Comments, Clarification and Answers

- a) Regarding cost financing of IDMP, we have to finance the implementation of IDMP. CAMP aims at the transformation of agriculture from subsistence farming to commercial farming. To achieve the transformation, the Government has to provide heavy inputs at the first stage but cost implication should change in the future when the benefits of the development are realized. Source of the cost should shift from the Government to the farmers by stages. Government contribution to the farmers should be decreased in the future after the farmers come to afford to get more benefit from their farming.

Structural reform of the Government is also needed as the Government needs to move out the service provision from the irrigation scheme and shift it to parastatal or private sector. The role of the Government should change, too. When I visited Japan, Japanese farmers were not competing with Chinese farmers as the Government protected the farmers with subsidy. The protection gives heavy burden to the Government; so let us expose the farmers to competition for making them self-dependence. (Secretary General for SS of Food Security Council)

- b) About the Priority Projects, to protect agricultural produce from wild animals, we can prepare buffer zone or livestock corridors and create water points in the zone to avoid conflict between farmers and other sectors. The revenue from the oil will be declined in future. Then the agriculture sector has to lead the economic growth of RSS. (Secretary General for SS of Food Security Council)
- c) Lack of info for planning was mentioned, i.e. in the Chapter 1, page 1-7 in DFR, the number of access to water should be checked, taking consideration of the water quality viewpoint. According to the borehole survey in Juba, water quality is very low and it tends to have high salinity. In addition, areas of high risk, such as deforestation or oil concession areas do not seem to be reflected to the assessment. (Director General for Planning, SS Urban Water Corporation)
- d) There is water treatment point in the Nile and the study in Rejaf East should consider the drainage of water with agrochemicals by the irrigated farming, which can affect the water quality of the river. The definition of National/ State programs is not clearly explained. (Director General for Planning, SS Urban Water Corporation)

Eng. Makuac replied that the IDMP has defined as less than 100 ha, 100 - 500 ha, and more than 500 ha as small-scale, medium-scale and large scale respectively.

- e) About the cost recovery principle regarding scheme management office (SMO), that must be tough from my experience in water purification under regulation of the Government, which allows the corporation to take only 6 SSP/m³, while people are buying untreated water at 50 SSP/m³. This water tariff can hardly cover the cost. (Director General for Planning, SS Urban Water Corporation)

The undersecretary pointed out the difference of water use; drinking water is social goods while the irrigation water is economic goods. Since farmers can get benefits from the use of irrigation water, farmers could afford to pay the service fee, which can cover the cost of the irrigation scheme management.

- f) Regarding Wau, the study of Sue dam by the Egyptian government shows it is feasible. (Director General for Planning, SS Urban Water Corporation)

Eng. Makac replied that the dam planned by IDMP is only for irrigation use while the Sue dam is designed as multi-purpose including hydropower.

- g) Regarding the contacting authorities in the project planning process, the ministry of livestock and animal resources in states should be involved. (Madam Susan from ICTT)
- h) Demarcations of agricultural land have to be made clear to avoid conflict between farmers and other sectors. SMO can give/create new job opportunities for new graduates after the project is realized and SMO is established. Opportunity of capacity building of local government should

be provided. (Dean of Faculty of agriculture, University of Upper Nile)

- i) Regarding the planning process, monitoring and evaluation process should be clarified or mentioned. (SSIA: SS Investment Authority)

The undersecretary explained that the M&E aspects are included in the workflow of IDMP as presented that IDMP will undertake mid-term evaluation. We will mention the monitoring aspect clearly as well.

- j) Regarding cost estimation for each project site, what was the process of the classification of long/ medium/ short term? And how did you identify each area? Is there any way to estimate cost per site? How could you deal with land acquisition issues? Land act has not been passed. (SSIA)

- k) About financing plan, financing source for each program/ project is not mentioned. Fund source like African Development Bank should be considered. It is good to show EIRR because investors and other donors can clearly get the figure but also FIRR should be calculated. (SSIA)

Mr. Hata answered that FIRR has also been calculated and shown in the report.

- l) All the issues regarding the priority project areas, such as land acquisition or community involvement should be incorporated into the implementation plan to make the project be actually feasible. (Forestry Department, MAFCRD)

Mr. Hata explained that the land in Wau site is public land and in other sites, intensive community consultations have been carried out by IDMP-TT. The land of the target area in Jebel Lado is unused part of the community land, so that the issue of land acquisition would not make a big problem. As for the target area in Rejaf East, there are farmers already cultivating there, so it will need more detail consultation at the next step of the planning and implementation. In anyway, through the community consultation, the communities are directing where we can bring the project so as to avoid conflict over land.

- m) In the report, consideration from gender aspect is not appearing clearly. Regarding environmental and natural resource management, technical support will be provided according to the document. Similar support also should be offered to female. Gender analysis is recommended to be conducted and also incorporated in the implementation analysis. (Madam from the Ministry of Gender)
- n) CAMP has four (4) sub-sectors and they need water, so the relation of IDMP to CAMP should be mentioned, e.g. for preparation of nursery of trees (for forestry use), much amount of water is required, but those things related to agriculture is not mentioned in the document. (CAMP forestry sector)

The undersecretary answered that the relation with CAMP is mentioned in the documents

especially in the programme profiles of IDMP

- o) Juba University can contribute to water sector. In South Sudan, for use of subterranean groundwater in East Equatoria State, construction of valley dams and water harvesting in hills and mountainous areas, etc. can be considered. Juba University offers the courses for water engineering and agriculture engineering. (Professor from Juba University)

End of the document

Participants List of the Technical Committee on July 27, 2015

No.	Name	Institution / Organization	Position
1	Isaac Liabwel	MEDIWR	Undersecretary
2	Mathew Udo	MAFCRD	Undersecretary
3	Makwei Malual	MLFI	Undersecretary
4	Johno Kanisio	Food Security Council	Secretary General
5	De Yalk Atem	MEDIWR	D/G of Hydrology and Surveys
6	Daniel Akau	MAFCRD	D/G of Agriculture
7	Dominic TR	MAFCRD	Director
8	William Olami	MLFI	D/G
9	Mary Yapelis	MLFI	A/D.G of Animal Production
10	Mark Nykang	Ministry of Transport, Roads and Bridge	D/Director of Meteorology
11	Waiwai Phillip	Ministry of Transport, Roads and Bridge	Director
12	Jackline Wowko	MGCSW	Director for Gender
13	Phillip Ayucel	MLHPP	Director
14	Khamis Killei	MLFI	A/Inspector
15	Stephen Pitia	SSIA	D/G
16	Bushk Lawren	SSUISC	D/G of Planning
17	Drowi Tom	MAF, CES	Acting DG, Mechanization
18	George Alphons Wani	MPI, CES	State Focal Person
19	Julius Lado	Juba County	A/Commissioner of Fisheries
20	Aok Dut Aok	Chamber of Commerce	General Manager
21	James J. Banyo	University of Juba	Dean of College of Engineering
22	Gyanra Wani	University of Juba	Professor of Civil Engineering
23	Gai Jong Gai	Upper Nile University	Dean of Facility of Agriculture
24	Peter J. Saweivs	MEDIWR	Advisor
25	Mitsuaki Furukawa	JICA South Sudan Office	Chief Representative
26	Etsuko Osumi	JICA South Sudan Office	Project Formulator Advisor
27	Noel B. Cleaps	ICTT/CAMP	ICTT Forestry sub-sector
28	Suzana Gabriel	ICTT/CAMP	ICTT Fisheries sub-sector
29	Joe Joe	ICTT/CAMP	CAMP ICTT
30	Shigen Handa	ICTT/CAMP	CAMP Consultant
31	Kazuyo Kaneko	ICTT/CAMP	CAMP Consultant
32	Makuac Ador	MEDIWR	IDMP TT
33	Simon Otoung Awijak	MEDIWR	IDMP TT
34	Robert Zakayo	MEDIWR	IDMP TT
35	Deng Santino	MEDIWR	IDMP TT
36	Doki Lako	MEDIWR	IDMP TT
37	Wol Goden	MEDIWR	IDMP TT
38	Pagan John	MEDIWR	IDMP TT
39	Moses Mogga	MAFCRD	IDMP TT
40	Kazumitsu Tsumura	JICA IDMP Study Team	IDMP TT
41	Akihiko Hata	JICA IDMP Study Team	IDMP TT
42	Akira Nakamura	JICA IDMP Study Team	IDMP TT
43	Kotaro Kikuchi	JICA IDMP Study Team	IDMP TT
44	Yuichi Matsumoto	JICA IDMP Study Team	IDMP TT
45	Shohei Natsuda	JICA IDMP Study Team	IDMP TT
46	Toru Nakagawa	JICA IDMP Study Team	IDMP TT
47	Ritsuko Hara	JICA IDMP Study Team	IDMP TT
48	Hideki Ishikawa	JICA IDMP Study Team	IDMP TT
49	Koichi Akashi	JICA IDMP Study Team	IDMP TT
50	Ywodo Andrew Oyor	JICA IDMP Study Team	Secretary

26. SIXTH SHS MEETING (IDMP), 28th JULY 2015, QUALITY HOTEL, JUBA

The Republic of South Sudan (RSS)
The Project for Irrigation Development Master Plan (IDMP)
Memorandums of Stakeholders Consultation (SHC) Meeting of IDMP

Agenda	<p>---- Morning Session ----</p> <p>A. Introduction and Opening Remarks (by Mr. Makuac)</p> <p>B. Presentation and Discussion on IDMP Draft Final Report (by IDMP RSS-TT)</p> <p style="padding-left: 20px;">1. IDMP Draft Framework; Process Frame, Formulation Process</p> <p style="padding-left: 20px;">2. Priority Project Planning</p> <p style="padding-left: 20px;">3. IDMP Draft Framework; Implementation</p> <p>C. Wrap-up and Next Steps (by Mr. Tsumura)</p> <p>D. Closing Remarks</p> <p>---- Afternoon Session ----</p> <p>A. Confirmation of Proposed Irrigation Schemes in Each State (by DGs and SFPs of State Governments)</p>
Date and Time	Tuesday, 28 th of July 2015 (9:30 - 15:30)
Venue	Quality Hotel, Juba
Participants	See the attached participant list
Attachment	The presentation material of the 5 th Stakeholders Consultation Meeting

B. Presentation and Discussion on IDMP Draft Final Report (DFR)**(1) Presentation**

Following presentations were carried out by IDMP RSS-TT.

1. IDMP Draft Framework (Process frame, Formulation process)
by Mr. Makuac and Mr. Simon
2. Priority Project Plans by Mr. Robert and Mr. Deng
3. IDMP Draft Framework (Implementation mechanism) by Mr. Isaac
4. Conclusion and Recommendations by Mr. Isaac

(2) Comments, Clarification and Answers

- a) In the process of the assessment, wild animals protection is not taken into consideration enough. In RSS, there are protected areas, such as national parks more than those shown in the map produced by IDMP actually. In addition, wild animals are moving seasonally. The seasonal movement of the wild animals should be taken into account, too.

Furthermore, the protection of the wild animals should be taken care at the implementation stage. Giving an example, in a past, during Jonglei canal construction supported by Egyptian, two or three precious species are damaged because of the digging operation. We have maps showing national wild lives and protected areas so that the maps can be utilized for IDMP. (Wild Lives Conservation Services, Ministry of Wildlife Conservation and Tourism)

- b) The aspect of safe guard, environment and social issues were left out. These aspects should be considered. Most of the activities regarding the priority project planning have been carried out with data like socioeconomic and environmental evaluation, and that is good. However, the data

samplesø specification, such as ratio of intervieweesø sex is not appearing. In the consultation with the communities, the questions seem to be asked mainly to male probably. The needs of male and female is totally different so above aspect should be considered at collecting data for the planning. (Madam from Ministry of Gender)

- c) In the presentation, the firstly appeared slide showed the command area in Wau was 550 ha; however, the later slide showed it was 500 ha. Where has the 50 ha gone? Regarding metrological measurement station, no particular mention relevant to the climate change could be seen in the presentation of irrigation purposes. On the ground, actually some parts, e.g. flood plain area along the Nile River, are prone to face drought, and flood problem can be accelerated by the climate change in future. Therefore, more study on ground water and surface water is necessary from the aspect of foreseeing future. Flood protection should be incorporated into the planning. (Person from Sudd Institute)
- d) Regarding the consultation levels/ processes, the consultation with communities would be crucial and that private sector should be involved. It is expected that other organizations, such as farmersø organization or chamber of commerce would be engaged in the implementation phase in the future. (SSBF: South Sudan Business Forum)
- e) PPP should be considered for prospective investment. Therefore, consultation with private sector is crucial. (SSBF: South Sudan Business Forum)
- f) Creating arable land should be proceeded immediately. Hence, media advertisement would have to be done more intensively to let other organizations/stakeholders know the plan and encourage them to be involved. (Director of Protocol of Media)
- g) It would be recommended to compare the quantified data with/ without intervention of the project, e.g. agricultural produce amount, which easily shows the quantified effect caused by the project intervention. Quantified evaluation helps understanding the validity of the project by the technical terms. Is the vision toward 2040 for the Ministry or for the country?

I went through the documents in the CD distributed yesterday. In the documents, I couldnø find clear indication of the area where is in øhigh demandö for irrigation. It would be recommended to consider it because actually some parts of our land are prone to be serious drought. (Director General for Planning, SS Urban Water Corporation)

- h) As others suggested, climate change can affect the farming style in future. In short-term, farming style cannot stay as it is but it will change according to the climate change in future. This point should be considered. In addition, environmental issues should be taken care. Regarding the zoning maps in the report, altitude or agro-zoning that used in CAMP reports can be utilized in the zoning maps of IDMP, too. (Madam from FAO)
- i) EU and other donors including us are supporting the improvement of food security and construction of feeder roads for improvement of access to markets in many states. Those activities are relevant to embarking for irrigated agriculture promoted by IDMP. (UNOPS)
- j) Why did you select only three priority projects? (Warrap State)
- k) This kind of work like water potential assessment should be carried out based on the scientific data. Water sources are generally two kinds; surface water and ground water. Actually, ground water condition and its distribution have been changed since past, hence, it is necessary to

investigate ground water condition more on the ground and to get the actual figure.

Regarding farm mechanization, it might be expected that totally shift from manual to mechanization in the report. However, utilization of draft animal cannot be neglected because completely mechanized farming costs much higher, especially for the initial investment. On the other hand, draft animals are easier for ordinary farmers to access and handle. (Professor from Juba University)

- l) For the implementation stage, independent farmers' cooperation should be established to lubricate the coordination among farmers and make them self-supported. Irrigation systems/ techniques should be applied to all over the country, even to mountainous zones. (Dean of Faculty of Agriculture, University of Upper Nile)
- m) Clarification of each term of the target projects, short-, medium-, and long-term, is needed. Definition of the roles, responsibilities, and relationships of involved organizations are not clearly specified in the document. It is crucial especially for the case that international and domestic organizations are engaged at the same time.

Regarding the implementation mechanism that presented by IDMP, it should be modified according to the latest CAMP implementation mechanism. This development committee is under the executive director of county. Currency of estimated costs should be shown in both of USD and SSP. Roles of the Ministries and the commissions should be defined clearly. The selected model schemes should address the produce from not only farming but also other sectors like livestock. (Professor Udo)

End of the document

Participants List of the Technical Seminar on July 28, 2015

No.	Name	Institution / Organization	Position
1	Nunu Jemma Kumba	MEDIWR	Minister
2	Isaac Liabwel C. Yol	MEDIWR	Undersecretary
3	Jaden Tongun Emilio	MAFCRD	Undersecretary
4	Charles Yoete	World Bank	Consultant
5	Awol Endvis	UNESCO	Programme Officer
6	Fumie Arimizu	UNOPS	Business Development Officer
7	Martin Dramani	UNEP	Programme Specialist
8	Nyaberugi Tipc	FAO	Assistant Representative
9	Michael Otto	Veterinaires Sans Frontieres (VSF)-Germany	Country Representative
10	Yoro Kruch	ANC	Information officer for Youth
11	Mdzaidur	BRAC	Programme Manager
12	Ukuwi Paul	SSBF	Programme Officer
13	Abraham Erick	Equity Bank	Representative
14	Nasirs Assmi	MEDIWR	Director
15	Gereng Yong Deng	MEDIWR	Advisor
16	Anthony R, Torubura	MLFI	D/G
17	Anna Felize	MLFI	D/G
18	Sarafino Alow	MLFI	D/G, Fisheries
19	Augustino Afilli	MLFI	D/G, Extension
20	Malual Duwar	Ministry of Justice	Legal Advisor
21	Sebit Ermanule	Ministry of Water Resource, CE	Representative
22	Elkamil Hamad	University of Juba	H/D, Agricultural Engineering
23	Romano Wco	Ministry of Physical Infrastructure and Urban Development, WBG	D/G
24	Sebit Veterino	Ministry of Physical Infrastructure and Urban Development, WBG	Director
25	Lewis Alkafa	Ministry of Agriculture and Forestry, WBG	Acting D/G
26	Anthony Julu Michael	University of Bahr el-Gazal, WBG	Director
27	Stephen Abehik Madut	Ministry of Physical Infrastructure, Warrap	D/G
28	Martin Madut Chan	Ministry of Agriculture, Forestry, Cooperatives and Rural Development, Warrap	D/G
29	Duer Ben Duer	Ministry of Animal Resources and Fisheries, Warrap	D/G
30	Peter Ben	Ministry of Water, Cooperatives and Rural Development, NBG	D/G
31	Deng Deng Jor	Ministry of Agriculture and Forestry, NBG	D/G
32	Stephen Ajok Mou	Ministry of Animal Resources and Fisheries, NBG	D/G
33	Gabriel Gai Kur	Ministry of Physical Infrastructure, Jonglei	D/G
34	Atem DeGak Atem	Ministry of Agriculture and Forestry, Jonglei	D/G
35	Mary Gordon Ayom	Ministry of Livestock and Fisheries, Jonglei	D/G
36	Daniel Bando Hesekeh	Ministry of Physical Infrastructure and Public Utilities, WE	Director
37	Marcello Costantino Bakuyo	Ministry of Agriculture, Cooperatives and Environment, WE	D/G
38	Edward Barnaba Kisanga	Ministry of Agriculture, Cooperatives and Environment, WE	D/G
39	Abala Danis	Ministry of Physical Infrastructure, EE	Director
40	Danato Apari	Ministry of Animal Resources and Fisheries, EE	D/G
41	Ezetiel Magok Rual	Ministry of Agriculture and Forestry, Lakes	D/G
42	Matur Alembang	Ministry of Animal Resources and Fisheries, Lakes	D/G

43	James Twong Lwang	Ministry of Physical Infrastructure and Rural Development, Upper Nile	D/G
44	Samuel Jhon Awok	Ministry of Agriculture and Forestry, Upper Nile	D/G
45	Joseph Chon	Ministry of Animal Resources and Fisheries, Upper Nile	Acting D/G
46	Gai Jany Gai	Upper Nile University	Dean, Faculty of Agriculture
47	Chuol Makuac Kur	Ministry of Physical Infrastructure and Urban Development, Unity	D/:G
48	James Gatluak	Ministry of Agriculture and Forestry, Unity	D/G
49	Stephen Gai TekJiek	Ministry of Animal Resources and Fisheries, Unity	D/G
50	Alex Benjamin	Crop Training Center, Yei	Tutor
51	Victor Mabrouk	Amadi Rurl Development Institute	Principal
52	John Taban	Kagelu Forestry Training Centre	Director
53	Wono Luke	Marial Lou Livestock training Centre	Trainer
54	Aok Dut Aok	Chamber of Commerce	General Manager
55	Nhial	Sudd Institute	Officer
56	Minastna Lerd	MITWC	Director
57	Lawreogc Mauludtaosh	SSUWC	D/G
58	Monywac Tiop	Farmers Union	Secretary for Foreign Affairs
59	Mitsuaki Fumkawa	JICA South Sudan	Chief Representative
60	Etsuko Osumi	JICA South Sudan	Project Formulator Advisor
61	Kazuhiro Inoue	ICTT/CAMP	CAMP Consultant
62	Makuac Ador Malek	MEDWRI	IDMP TT
63	Deng Santino	MEDWRI	IDMP TT
64	Simon Otoung Awijak	MEDWRI	IDMP TT
65	Robert Peter Zakayo Galla	MEDWRI	IDMP TT
66	Pagan John Okwach	MEDWRI	IDMP TT
67	Wol Gordon Tong	MEDWRI	IDMP TT
68	Philip John Akol	MEDWRI	IDMP TT
69	Doki Lako Busuk	MEDWRI	IDMP TT
70	Moses Mogga	MAFCRD	IDMP TT
71	Kazumitsu TSUMURA	JICA IDMP Study Team	IDMP TT
72	Akihiko HATA	JICA IDMP Study Team	IDMP TT
73	Akira NAKAMURA	JICA IDMP Study Team	IDMP TT
74	Yuichi MATSUMOTO	JICA IDMP Study Team	IDMP TT
75	Kotaro KIKUCHI	JICA IDMP Study Team	IDMP TT
76	Shohei NATSUDA	JICA IDMP Study Team	IDMP TT
77	Hideki ISHIKAWA	JICA IDMP Study Team	IDMP TT
78	Koichi AKASHI	JICA IDMP Study Team	IDMP TT
79	Ritsuko HARA	JICA IDMP Study Team	IDMP TT
80	Ywodo Andrew Oyor	JICA IDMP Study Team	Secretary
81	George Alphons Wani	SFP, CE	SFP
82	Jackson Kwaje Laku	SFP, Jonglei	SFP
83	Mangok Mangok Deng	SFP, NBG	SFP
84	Gatluak Dobuol Gew	SFP, Unity	SFP
85	Yak Stephen Lam	SFP, Upper Nile	SFP
86	Martin Nyoul Deng	SFP, Warrap	SFP
87	Abakar Jallab Khadam	SFP, WBG	SFP
88	Tuna Francis Badi	SFP, WE	SFP
89	Nancy Cirino	EBC TV	Reporter
90	Josephine W. Hai	EBC TV	Reporter
91	Gasim Edward	EBC TV	Cameraman
92	Achai Makual	SSTV	Reporter
93	Susan	SSTV	Reporter
94	Jackson	SSTV	Reporter
95	Jackson Cole	SSTV	Cameraman
96	Chol Kuir	S.S. Radio	Reporter
97	Nema K. Tuma	Citizen Newspaper	Reporter
98	Deng Machel	Juba Telegraph	Reporter

27. SIXTH SFPS AND TTS MEETING (IDMP SECOND TECHNICAL SEMINAR), 29th JULY 2015, QUALITY HOTEL, JUBA

The Republic of South Sudan (RSS)
The Project for Irrigation Development Master Plan (IDMP)
Memorandums of Technical Seminar of IDMP

Agenda	A. Introduction and Opening Remarks (by Mr. Makuac) B. Presentation and Discussion (by IDMP-TT) 1. Priority Project Planning (Facility Design) 2. Priority Project Planning (Lessons Learned) 3. Preliminary Irrigation Development Guideline C. Location of Irrigation Schemes (by DGs and SFPs of State Governments) D. Wrap-up and Next Steps (by Mr. Tsumura) E. Closing Remarks (by Mr. Makuac)
Date and Time	Wednesday, 29 th of July 2015 (9:00 - 16:30)
Venue	Quality Hotel, Juba
Participants	See the attached participant list
Attachment	The presentation material of the 5 th Technical Seminar

B. Presentation and Discussion on IDMP Draft Final Report (DFR)

(1) Presentation

Following presentations were carried out by IDMP-TT.

1. Priority Project Planning (Facility Design) by Mr. Deng
2. Priority Project planning (Lessons Learned) by Mr. Tsumura, Mr. Kikuchi and Mr. Nakamura
3. Priority Project (Facility Design) by Mr. Deng
4. Preliminary Irrigation Development Guideline by Mr. Hata and Mr. Natsuda

(2) Comments, Clarification and Answers

- (a) What did you handle with the issue regarding protection of human from disease which may be caused by water in open canal or water reservoir? Open canals easily induce disease because of its open design, so why didn't you take pipe line?

→ Eng. Den answered that we were going to design protection fence at the implementation stage for protection of neighboring people from the direct touch of irrigation water. However, it is now pre-F/S stage, so its design is going to come in the future. In addition, we have conducted preliminary survey of environment (IEE), and we prepared environmental guideline, it can be work as instruction for such sanitation issues, too.

- (b) Unit of area used in the report and presentation, it was ôhaö. Why did not you use ôfedö, which is familiar with all of people in RSS? Normally farmers are not familiar with ôhaö, so it would be helpful for their understanding to use ôfedö instead of ôhaö.

→ Eng. Pagan answered that this document should be read not only domestically, but also internationally. That is why we use ôhaö, which is used internationally as standard. For explanation to farmers in RSS, we can convert it into ôfedö to lubricate their understanding.

(c) If priority projectsøpre-F/S works have been carried out in other states as well, we could have been involved and got more experience. It was a pity for all of SFP here now.

→ Eng. Deng answered that first of all, the models should be established for showing how to carry out each preparatory survey, evaluation, assessment and other activities. Those three priority projects show the way for the establishment of other expected irrigation schemes in future.

(d) How can we protect domestic/wild animals when actual constructions of facilities are carried out?

→ Eng. Pagan answered that now it was the pre-F/S stage. We have to proceed step by step. When the actual implementation stage comes in the future, more detailed information should be gathered for the expectation of those impacts to neighboring peopleø lives, which should be examined. Every aspect will be taken care at the implementation stage.

(e) We should consider all the aspects related to local people including cultural aspects.

End of the document

Participants List of the Technical Seminar on July 29, 2015

No.	Name	Institution / Organization	Position
1	Isaac Liabwel C.	MEDIWR	Undersecretary
2	George Alphons Wani	SFP, CE	SFP
3	Jackson Kwaje Laku	SFP, Jonglei	SFP
4	Mangok Mangok Deng	SFP, NBG	SFP
5	Gatluak Dobuol Gew	SFP, Unity	SFP
6	Yak Stephen Lam	SFP, Upper Nile	SFP
7	Martin Nyoul Deng	SFP, Warrap	SFP
8	Abakar Jallab Khadam	SFP, WBG	SFP
9	Tuna Francis Badi	SFP, WE	SFP
10	Romano Wco	Ministry of Physical Infrastructure and Urban Development, WBG	D.G
11	Sebit Veterino	Ministry of Physical Infrastructure and Urban Development, WBG	Director
12	Lewis Alkafa	Ministry of Agriculture and Forestry, WBG	Acting D.G.
13	Anthony Julu Michael	University of Bahr el-Gazal, WBG	Director
14	Stephen Abehik Madut	Ministry of Physical Infrastructure, Warrap	D.G.
15	Martin Madut Chan	Ministry of Agriculture, Forestry, Cooperatives and Rural Development, Warrap	D.G.
16	Duer Ben Duer	Ministry of Animal Resources and Fisheries, Warrap	D.G.
17	Peter Ben	Ministry of Water, Cooperatives and Rural Development, NBG	D.G.
18	Deng Deng Jor	Ministry of Agriculture and Forestry, NBG	D.G.
19	Stephen Ajok Mou	Ministry of Animal Resources and Fisheries, NBG	D.G.
20	Gabriel Gai Kur	Ministry of Physical Infrastructure, Jonglei	D.G.
21	Atem DeGak Atem	Ministry of Agriculture and Forestry, Jonglei	D.G.
22	Dr. Mary Gordon Ayom	Ministry of Livestock and Fisheries, Jonglei	D.G.
23	Daniel Bando Heseekiah	Ministry of Physical Infrastructure and Public Utilities, WE	Director
24	Marcello Costantino Bakuyo	Ministry of Agriculture, Cooperatives and Environment, WE	D.G.
25	Edward Barnaba Kisanga	Ministry of Agriculture, Cooperatives and Environment, WE	D.G.
26	Abala Danis	Ministry of Physical Infrastructure, EE	Director
27	Danato Apari	Ministry of Animal Resources and Fisheries, EE	D.G.
28	Ezetiel Megok Rual	Ministry of Agriculture and Forestry, Lakes	D.G.
29	Matur Alembang	Ministry of Animal Resources and Fisheries, Lakes	D.G.
30	James Twong Lwang	Ministry of Physical Infrastructure and Rural Development, Upper Nile	D.G.
31	Samuel Jhon Awok	Ministry of Agriculture and Forestry, Upper Nile	D.G.
32	Joseph Chon	Ministry of Animal Resources and Fisheries, Upper Nile	Acting D.G.
33	Chuol Makuac Kur	Ministry of Physical Infrastructure and Urban Development, Unity	D.G.
34	James Gatluak	Ministry of Agriculture and Forestry, Unity	D.G.
35	Stephen Gai TekJiek	Ministry of Animal Resources and	D.G.

		Fisheries, Unity	
36	Alex Benjamin	Crop Training Center, Yei	Tutor
37	John Taban	Kagelu Forestry Training Centre	Director
38	Sebit Ermanule	Ministry of Water Resource, CE	Representative
39	Makuac Ador Malek	IDMP/MEDIWR	Inspector for Water Resources Management
40	Deng Santino	IDMP/MEDIWR	Assistant Director for Hydrology
41	Simon Otoung Awijak	IDMP/MEDIWR	Deputy Director for Hydrology
42	Robert Peter Zakayo Galla	IDMP/MEDIWR	Inspector for Hydrology
43	Pagan John Okwach	IDMP/MEDIWR	Inspector for Irrigation and Drainage
44	Wol Gordon Tong	IDMP/MEDIWR	Inspector for Planning and programming
45	Philip John Akol	IDMP/MEDIWR	Assistant Inspector for Hafirs, Dams and Dikes
46	Doki Lako Busuk	IDMP/MEDIWR	Assistant Inspector for Hafirs, Dams and Dikes
47	Kazumitsu TSUMURA	IDMP	Team Leader
48	Akihiko HATA	IDMP	Co-team Leader
49	Akira NAKAMURA	IDMP	Organization / Capacity Building / Training
50	Yuichi MATSUMOTO	IDMP	Irrigation and Drainage
51	Kotaro KIKUCHI	IDMP	Irrigation Institution / Operation and Maintenance (OM)
52	Shohei NATSUDA	IDMP	Socioeconomic Analysis
53	Hideki ISHIKAWA	IDMP	Coordinator for Irrigation Facility
54	Koichi AKASHI	IDMP	Coordinator for Training
55	Ritsuko HARA	IDMP	Agriculture/ Soil

28. THIRD IMSC MEETING OF IDMP, 4th AUGUST 2015, QUALITY HOTEL, JUBA

The Republic of South Sudan (RSS)
 The Project for Irrigation Development Master Plan (IDMP)
Memorandums of the 3rd Inter-Ministerial Steering Committee of IDMP

Agenda	<p>A. Introduction and Opening Remarks (by Eng. Isaac Liabwel)</p> <p>B. Opening Remarks</p> <ol style="list-style-type: none"> 1. Prof. Mathew Udo, Undersecretary of MAFCRD 2. Mr. David, Minister of MOPI, CES 3. Mr. Hamano, Deputy Ambassador of Japanese Embassy 4. Hon. Lily Albino, Deputy Minister of MAFCRD 5. Hon. Nunu Jemma Kumba, Minister of MEDIWR <p>C. Presentation and Discussion (by IDMP-TTs)</p> <ol style="list-style-type: none"> 1. IDMP Draft Framework (Formulation Framework) 2. IDMP Draft Framework (Formulation Process) 3. Priority Project Planning 4. IDMP Draft Framework (Implementation) <p>D. Wrap-up and Next Steps</p> <p>E. Closing Remarks (by Mr. Makuac)</p>
Date and Time	Tuesday, 4 th of August, 2015 (9:00-15:30)
Venue	Quality Hotel, Juba
Participants	See the attached participant list
Attachment	The presentation Material of the 3 th Inter-Ministerial Steering Committee

C. Presentation and Discussion on IDMP Draft Final Report

(1) Presentations

Following presentations are carried out by IDMP TTs.

1. IDMP Draft Framework (Formulation Framework)
Mr. Makuac
IDMP Draft Framework (Formulation Process)
Mr. Simon
2. Priority Project Planning
Mr. Robert and Mr. Deng
3. IDMP Draft Framework (Implementation)
Mr. Isaac

(2) Comments and Clarifications with answers

- (a) Regarding CAMP/IDMP Implementation Coordination Mechanism (4th slide of the presentation on IDMP Draft Framework (Implementation)), the number of staffs from MAFCRD and MLFI should be increased from 2 to 3.

(State Minister)

- (b) Regarding Snapshots of Programme Profiles (8th slide of the presentation on IDMP Draft Framework (Implementation)), Directorate of Marketing and Supply (??) should be added to MLFI.
- (c) Regarding Programme Components/Projects/Activities (12th slide of the presentation on IDMP Draft Framework (Implementation)), following comments were given.
- 1) "Vegetable" should be shown with blankets after "horticulture".
 - 2) "Fish ponds" should be shown with blankets after "Aquaculture".
- (d) I do not see the time line from the approval of IDMP by council to its implementation. When will this report be submitted to Economic cluster and Cabinet council? The Undersecretary OF MEDIWR answered that the final report will be submitted by 4th September 2015. The Minister of MEDIWR responded that it is her responsibility and she will take actions for passing the Economic Cluster and Cabinet Council as soon as the report is ready. The issue is that the cabinet has a lot of tasks currently, so it may take time to go through the procedure.
- (e) Role and responsibility for irrigation projects is not clear. I do not see clearly what roles for the states are for coordination. Implementation of the project should be the roles and responsibility of the State Government. The National Government should take role of planning, facilitating (in term of technical support and financing) and coordinating.

(Minister of MAF, CES)

The Undersecretary gave an example saying, in case implementation of the project covering several states, national government has to take a role of coordination among relevant states and national level can contribute to the implementation. In addition, the Undersecretary answered that we only showed the technical view in the presentation.

- (f) Priority of the project (in the detail assessment areas) should be given to Upper Nile 1st and Lakes 2nd. In the list shown in the presentation (the list in the detail assessment areas), no priority projects in Unity State and administrative areas are not mentioned. There is only one site in Western Equatoria. Also the site "Galaacial" and "Adongö" should be in Upper Nile State.

(Minister of Livestock and Fisheries from Jonglei)

The Undersecretary answered that the site and location will be corrected. Eng. Simon explained that the IDMP-TT also consulted with the DGs and State Focal Points of the States and more potential sites will be included in the list. Hata also explained that there is a list of potential irrigation sites in the main report showing 133 sites as of now. As Eng. Simon explained those will be more identified by the State DGs and focal points. These sites will also be included in the list. Furthermore, IDMP plans to carry out mid-term evaluation every 3 years and with updated information, the list of the potential irrigation sites will be updated and the priority will also be re-evaluated. The Minister of MEDIWR also added that IDMP showed all the lands in SS are irrigable and the current list of the potential irrigation sites is not exhausted and more sites will be identified. In addition, the Undersecretary explained approval process of the priority project areas that had changed from the original location

because of JICA security regulation.

- (g) The implementation structure needs to be established down to the grassroots level. There are some states where an implementation structure does not exist.
- (h) What are you going to do to make sure the information sharing? Information sharing at the implementation stage is important. Reporting of the progress of implementation should be shared among the stakeholders including Community development committee. Uniformed information sharing structure should be established.
- (i) Fighting in Unity is still on-going. Security Control is very important. The central government needs to take the responsibility. People in Unity cannot cultivate this year because they are staying in Renk now. Also if no finance, implementation cannot be realized. Regarding above issues, we need central government taking responsibilities.
(Minister of Animal Resources and Fisheries, Unity State)
- (j) In the map of rivers, Kir river does not appear.
(Minister of Animal Resources and Fisheries, Unity State)
The Undersecretary answered that in the Map of river network and associated watersheds, that river appears.
- (k) How are we going to allocate dams? Can we build a dam in Aweil? If you can allocate dams, dry season crop will be possible.
(Minister of Animal Resources and Fisheries, Unity State)
- (l) What are the criteria of mapping? Kapoeta ó Mobollo??(Valley from Kenya to Jonglei??)
Areas should be included in the potential area. Potential areas need to be properly mapped.
(Minister of Agriculture and Forestry, EES)
- (m) Why is Abyei area blank?
(Representative (Agriculture) from Abyei)
The Undersecretary explained that the national border to show has to follow the consent of the international community. Therefore, it was agreed that we make it blank to the contested areas along the border of the country, but the data in Abyei is there and found in the report.
- (n) How will the identification of project be done across the States? More projects need to be added.
(Minister of Physical Infrastructure from Warrap)
- (o) It is not necessary to include in the framework. Project should have standard size. Variation of size aspect for national, state and county should be defined. States cannot sometimes afford large scale projects due to the budget limitation.
(Minister of Animal Resources from CES)
- (p) Rainfall assessment should be utilized by various people, e.g. warehouse for animal feed was built without knowing the rainfall information and suffering from leakage of rainwater.
(Minister of Animal Resources from CES)
- (q) Amalgamating recommendations in the report is not necessary and can be omitted, since the master plan is the policy framework.

(Minister of Animal Resources from CES)

- (r) In IDMP programs, there is no planning of road construction for improving market access, which is necessary for selling agricultural produce.

Deputy Minister of MAFCRD answered that MAFCRD is now working on the construction of feeder road.

- (s) Role of Planning Department is not clear in the presentation.

- (t) We have no money to start with implementation. Finance is crucial.

- (u) Selected project areas should be related to livelihood zones and be suit to the livelihood needs on the ground. Therefore, suitable cropping patterns also should be identified for each livelihood zones. In addition, by livelihood zone, it needs to capture how much water is needed and how much water is available.

- (v) The government was supposed to bring new pumps but nothing has been done for the last 6 years. What is going on? The Minister of Agriculture in Upper Nile said it is not state but national project. *(Deputy Minister of MAFCRD did not give clear answer but talked about the bad condition of roads there as the sorghum produce did not go out from the State although there were production of 500,000 sacks there)*

(Minister from Upper Nile)

- (w) When it comes to the Cabinet Council, there is always a question of why we are concentrating on one area. This should be taken into consideration on explaining the priority area.

(Deputy Minister of MAFCRD)

- (x) There is an official map of SS. That map should be used. The Undersecretary answered that we are using it.

(Deputy Minister of MAFCRD)

- (y) We need to make sure that what we have said is reflected to implementation. We have to have standard for irrigation scheme size. Access road must be the part of projects. Every project must be coordinated with other ministries. The document of IDMP must be flexible. It must be updated as we go forward.

(Minister of MEDIWR)

- (z) I was impressed with the intensive discussion and appreciate the efforts of TT. Irrigation is one advantage for agriculture. Some people do not know some areas have much rain in SS. Please try to make use of this advantage of surface water resource and irrigation will improve the quality of agriculture. I like to see the master plan is implemented in the future

(Representative of the Embassy of Japan)

- (aa) I thank all the participants for the long interruption however we were here to discuss very important issues for us. From now on I am the one to defend the document. Everybody can make statement and own the document. Issue of peace is undergoing, IGAD plus are going to make compromise agreement in Addis Ababa soon. So the development partners please continue with us even in this crisis. Implementation is crucial and we will use any available

resources. This document is one of the legacies in SS.
(Minister of MEDIWR)

Participants List of the Inter-Ministerial Meeting on August 4, 2015

No.	Name	Institutions/Organizations	Positions
1	Hon. Nunu Jemma Kumba	MEDIWR	Minister
2	Hon. Lily Albino	MAFCRD	Deputy Minister
3	Prof. Mathew Udo	MAFCRD	Undersecretary
4	Jaben Tongun Emilio	MAFCRD	Undersecretary
5	Lawrence Ioku Moyu	MEDIWR	Undersecretary
6	Machar Aclek	MPM	Undersecretary
7	Isaac Liabwel C.	IDMP/MEDIWR	Undersecretary
8	Shigeru Hamano	Embassy of Japan	Deputy Ambassador
9	Yasuo Matsunami	Embassy of Japan	Secretary
10	Hon. David Lokonga	MOPI, CES	Minister
11	Hon. Jacob K. Lupel	MAF, CES	Minister
12	Dr. Ghoda James	SMARF, CES	Minister
13	Mr. Sebit Veterino	Ministry of Physical Infrastructure and Urban Development, WBG	D.G
14	Hon. Michael Madut Chan	Ministry of Agriculture and Forestry, WBG	Minister
15	Hon. Mayar Deng Mayar	Ministry of Physical Infrastructure, Warrap	Minister
16	Hon. Majok Bol Kur	Ministry of Agriculture, Forestry, Cooperatives and Rural Development, Warrap	Minister
17	Hon. Lual Longar Adhal	Ministry of Animal Resources and Fisheries, Warrap	Minister
18	Hon. Uguak Haron	Ministry of Physical Infrastructure, NBG	Minister
19	Hon. Bona Makuac	Ministry of Water, Cooperatives and Rural Development, NBG	Minister
20	Hon. Lual Dau Marach	Ministry of Agriculture and Forestry, NBG	Minister
21	Hon. Albino Madhan Anei	Ministry of Animal Resources and Fisheries, NBG	Minister
22	Hon. John Amuor Kuol	Ministry of Physical Infrastructure, Jonglei	Minister
23	Hon. Mayen Nagor Atem	Ministry of Agriculture and Forestry, Jonglei	Minister
24	Hon. Nayng Lul Gai	Ministry of Livestock and Fisheries, Jonglei	Minister
25	Hon. Clement Juma Mbugonia	Ministry of Physical Infrastructure and Public Utilities, WE	Minister
26	Hon. West Yugulle	Ministry of Agriculture, Cooperatives and Environment, WE	Minister
27	Hon. Hassen Urbano Alex	Ministry of Physical Infrastructure, EE	Minister
28	Hon. Clement Loku Chichim	Ministry of Agriculture and Forestry, EE	Minister
29	Hon. Martin Lorika Lojam	Ministry of Animal Resources and Fisheries, EE	Minister
30	Hon. Phillip Kot Job	Ministry of Agriculture and Forestry, Lakes	Minister
31	Mr. Matur Alembang	Ministry of Animal Resources and Fisheries, Lakes	D.G.
32	Hon. Dak Tap Chuol	Ministry of Physical Infrastructure and Rural Development, Upper Nile	Minister
33	Hon. Dheiu Chan	Ministry of Agriculture and Forestry, Upper Nile	Minister
34	Hon. Chuol Dep Kier	Ministry of Animal Resources and Fisheries, Upper Nile	Minister

35	Hon. Mocheal Kuer	Ministry of Physical Infrastructure and Urban Development, Unity	Minister
36	Hon. Peter Nyok	Ministry of Agriculture and Forestry, Unity	Minister
37	Hon. Arob Turuk	Ministry of Animal Resources and Fisheries, Unity	Minister
38	Hon. Atem Nyok Mangai	Abyei Administration Area (Agriculture)	Minister
39	Hon. Izeldin Ismacil Malek	Abyei Administration Area (Physical Infrastructure)	Minister
40	Hon. Gora Hassen	Bibor Administration Area (Agriculture)	Minister
41	Hon. Giroch Tenu	Bibor Administration Area (Physical Infrastructure)	Minister
42	Niko Demo Arou	Local Government Board	Representative
43	Etsuko Osumi	JICA	Project Formulation Advisor
44	Zaw Zaw Aung	JICA	Staff
45	John Pangech	CAMP-TT	Team Leader
46	William Olami	CAMP-TT/ICTT/MLFI	Deputy Team Leader
47	Toshifumi Serizawa	CAMP-TT	Team Leader
48	Hideki Sonoyama	CAMP-TT	Consultant
49	Silvano Yslewe	EBC/Radio	Journalist
50	Emmanuel George	EBC/TV	Journalist
51	Nancy Andrew	EBC/TV	Journalist
52	Lumumba M.	Mo&EC	Ambassador
53	Nemak Juma	Citizen News Paper	Reporter
54	Jaekson	SSTV	Staff
55	Ramadan Peter	SSTV	Staff
56	Ayuel Chan	SSTV	Staff
57	Makuac Ador Malek	IDMP/MEDIWR	Inspector for Water Resources Management
58	Deng Santino	IDMP/MEDIWR	Assistant Director for Hydrology
59	Simon Otoung Awijak	IDMP/MEDIWR	Deputy Director for Hydrology
60	Robert Peter Zakayo Galla	IDMP/MEDIWR	Inspector for Hydrology
61	Pagan John Okwach	IDMP/MEDIWR	Inspector for Irrigation and Drainage
62	Wol Gordon Tong	IDMP/MEDIWR	Inspector for Planning and programming
63	Kazumitsu TSUMURA	IDMP	Team leader
64	Akihiko HATA	IDMP	Co-team leader
65	Akira NAKAMURA	IDMP	Organization / Capacity Building / Training
66	Yuichi MATSUMOTO	IDMP	Irrigation and Drainage
67	Kotaro KIKUCHI	IDMP	Irrigation Institution / Operation and Maintenance (OM)
68	Shohei NATSUDA	IDMP	Socio-economy analysis
69	Hideki ISHIKAWA	IDMP	Coordinator for irrigation facility
70	Koichi AKASHI	IDMP	Coordinator for Training
71	Ritsuko HARA	IDMP	Agriculture/ Soil