



In collaboration between
Ministry of Agriculture, Food Security and Cooperatives, Tanzania and
Japan International Cooperation Agency (JICA), Japan



SCHEDULE OF THE NEXT TERM (January – March 2013)

JANUARY

Administration section

- ◆ Baseline survey for Monitoring
- ◆ Investigation by Japanese Consulting Mission

Construction section

- ◆ Dissemination II & I (Mtwara zone)
- ◆ Dissemination II & I (Mwanza zone)

Operation & Maintenance section

- ◆ DIDT training for selected 5 schemes in Kilimanjaro zone

FEBRUARY

Administration section

- ◆ Analyzing data collected by the baseline survey for Monitoring
- ◆ 3rd Steering Committee Meeting for fixing baseline and target figures in PDM

Construction section

- ◆ Dissemination II & I (Tabora zone)
- ◆ Dissemination II & I (Central zone)
- ◆ Dissemination II & I (Kilimanjaro zone)

Operation & Maintenance section

- ◆ DIDT training for selected 5 schemes in Central zone
- ◆ DIDT training for selected 5 schemes in Tabora zone
- ◆ Revision of the training manual by a Japanese short-term expert

MARCH

Construction section

- ◆ Dissemination II (Mwanza zone)
- ◆ Dissemination II (Tabora & Central zone)
- ◆ Dissemination I (Morogoro zone)

Operation & Maintenance section

- ◆ DIDT training for selected 5 schemes in Mbeya zone
- ◆ Revision of the training manual by a Japanese short-term expert
- ◆ Workshop for the training frame work and the training manual for trainers

MAIN ACTIVITIES IN THIS PERIOD - Administration section -

Date	Activities	Venue	Achievement
Oct-Dec	Orientation and Baseline survey for Monitoring	Kilimo2, Several zones	Baseline data before training were collected
30 Nov	Meeting in DITS for sharing information and exchanging opinions	Kilimo3	Most of DITS staff could share information of the Project

MAIN ACTIVITIES IN THIS PERIOD - Construction section -

Month	Activities	Venue	Achievement
Oct	Dissemination II (Central, Mwanza, Tabora zone)	Tabora, Inala irrigation schem	Activities of Implementation GL (Babati, Singida, Urambo, Kasulu, Maswa, Misenyi)
Oct	Dissemination I (Mwanza zone)	Mwanza	Activities of Formulation & Implementation
Nov	Dissemination II (Mtwara, Morogoro zone)	Irrigation sites	Activities at the 8 schemes in line with the Guideline
Nov	Information sharing workshop	Dodoma	Discussions of construction management and experience of Dissemination in each zone
Dec	Dissemination I (Kilimanjaro, Morogoro, Mbeya zone)	Moshi, Morogoro, Mbeya	Share the experience of the implementation



Dissemination I : Meeting of 'Farmers' contribution' at Dakawa irrigation



Dissemination II : Canal Construction at Kyamakata scheme in Meru district

For better tomorrow under irrigation

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MAIN ACTIVITIES IN THIS PERIOD - Operation & Maintenance section -

Month	Activities	Venue	Achievement
Oct	DIDT training of selected 5 schemes	Lindi, Mtwara	Training needs assessment, O&M planning, IO strengthening etc. were trained.
Oct	DIDT training of selected 5 schemes	Morogoro	Training needs assessment, O&M planning, IO strengthening etc. were trained.
Nov	DIDT training of selected 5 schemes	Mwanza	Training needs assessment, O&M planning, IO strengthening etc. were trained.
Nov	Guideline seminar for all districts in the Central zone	Dodoma	Guideline and monitoring systems were understood.
Nov	Joint Evaluation Workshop	Dodoma	Evaluation of 7 Demo-sites was conducted.
Dec	Guideline seminar for all districts in the Tabora zone	Tabora	Guideline and monitoring systems were understood.
Dec	Guideline seminar for all districts in the Mbeya zone	Mbeya	Guideline and monitoring systems were understood.
Dec	Preparatory workshop for trainers	Morogoro	Trainers for DIDT training were trained.



Participants are preparing the basic operation plan at DIDT training in Lindi, Mtwara zone.



A farmer presents the progress of the scheme during the Joint Evaluation Workshop.

HORIZONTAL EXPANSION & VERTICAL EXPANSION under Irrigation

For a long time we have been putting more efforts to **horizontal expansion** and putting less effort to **vertical expansion** while vertical expansion is less expensive compared to **horizontal expansion**. When a new land is put under irrigation that is **horizontal expansion** and when operation and maintenance is intensified so that production and productivity is increased sustainably is **vertical expansion**. Consider to have average production of irrigated paddy of 4 tones /hector but production can go up to 10tones /Hector under intensification of operation and maintenance. It is less expensive to produce 6 tones more from one hector compered to expansion of a new area of irrigation which include construction of new irrigation infrastructure which can produce 6 tonnes. In the Comprehensive Guidelines Operation and Maintenance is clearly elaborated and when adhered production and productivity of irrigation scheme will increase sustainably.

HOW TO USE THE COMPREHENSIVE GUIDELINES? - No.4 -

This column introduces the Guideline to disseminate as a serial publication. Please share with us!

Gross Water Unit Requirement in Guideline p3-25

How to calculate the gross water requirement of the irrigation scheme?

Basic formula is as follows;

$$\text{Gross unit water requirement (l/sec/ha)} = \frac{\text{Net unit water requirement (mm/month)}}{\text{Irrigation efficiency (\%)} \times 8.64 \times D \text{ (days)}}$$

D: number of days in the month
8.64 is a conversion factor of the unit

Example;

If Net unit water requirement of paddy is 250 (mm/month) in April, Irrigation efficiency is 0.4 (40%), then Gross unit water requirement is

$$\text{Gross unit water requirement (l/sec/ha)} = \frac{250 \text{ (mm/month)}}{0.4 \times 8.64 \times 30 \text{ (days)}} = 2.4$$

The following table shows the Net Unit Water Requirement in the Guideline on p3-26. You can calculate the GUWR of each month in your region using these data.

Table-1 Net Unit Water Requirement (NWR) in each Region

Unit: mm/month

Region	Crop	Soil Type	Dry Season				Rainy Season							
			Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun
Arusha	Paddy	Sandy Loam	637	460	502	501	-	-	686	465	484	358	390	-
		Clay Loam	432	310	352	346	-	-	481	325	329	208	235	-
	Maize Bean & Veg	Clay	289	220	262	253	-	-	338	241	236	118	142	-
			90	112	194	191	144	-	45	124	165	58	75	-
			90	112	169	172	-	-	49	111	149	66	72	-

In the Guideline on p3-27, Scheme efficiency or Irrigation efficiency is roughly estimated. Sufficient means farmers have the sufficient experience of irrigation practices with unlined canals. Poor means they do not have sufficient experiences.

Table-2 Irrigation Efficiency by Scheme Condition

Proposed canal condition	Lined	Unlined	
Farmers' experience	-	Sufficient	Poor
Irrigation efficiency	0.40	0.30	0.25

From Project Manager -3-, TANCAID

Irrigation development in Tanzania can move faster if and only if there are serious commitments of all stakeholders including Government Staff private partners and beneficiaries. Individual commitment of each stakeholder will be the agent of change and will increase the pace of irrigation development in Tanzania. Let us promote all stakeholders to participate in the irrigation development showing our achievements to them.

