

Chapter 2: Boosting Sustainable Agricultural Growth in Sub-Saharan Africa

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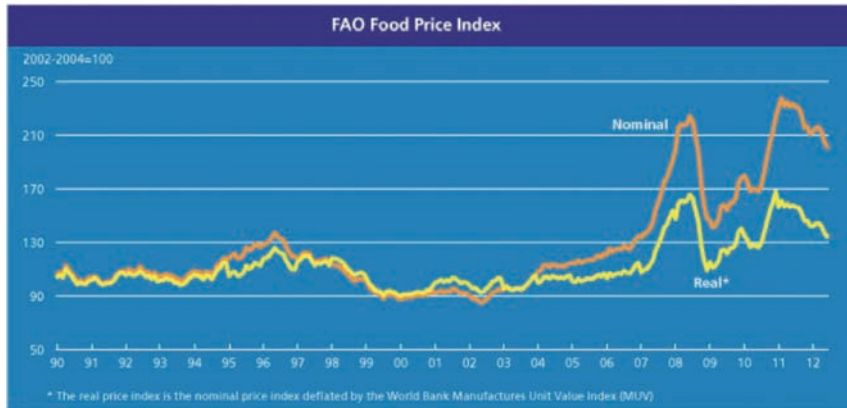
In transformation of the global food security, agriculture in Africa is dynamically and rapidly developing. This chapter tries to review African Agriculture, to identify its challenges, and then shares recent topics of agricultural development such as investments, resilience issue and CAADP. Finally it discusses JICA's support for African agricultural development with an eye toward TICAD V. This chapter provides a general overview for subsequent three chapters as an introduction.

1. Overview of African Agriculture

1.1 Global food security surrounding Africa

In recent years, agricultural and food issues have been attracting much more attention in the international arena. The G20 meeting held in France in June 2011 placed these issues at the top of its agenda, and adopted the Action Plan on Food Price Volatility and Agriculture. Meanwhile at the G8 meeting held in the United States in 2012, agricultural development in sub-Saharan Africa was discussed, it being the region most susceptible to food crisis. These issues have been frequently brought up in the media in the past. But why are they drawing so much of the international community's attention now? It is primarily due to the record-breaking rise in international food prices and concerns over food security (Figure 1).

Figure 1. FAO Food Price Index



Source: FAO (as of July 2012)

Since 1990 when the Food and Agriculture Organization (FAO) began measuring the Food Price Index, it experienced a sharp increase in 2008 followed by a sharp decline after the Lehman shock, and reached its peak (the nominal highest value) in February 2011. Even though there were signs of slight stability in 2012, the effects of serious drought in the United States, the world's largest food exporter, became apparent in July; therefore it is presumed that food prices would increase in the near term.

The steep rise in world food prices can be caused by the following short-term and structural factors:

- ① Short-term (shock) factors-
 - Crop damage caused by poor weather and natural disasters (drought, flooding, typhoons, etc.)
 - Overheated investment (financialization of agricultural commodities)
 - Increases in energy costs (rising costs of transportation and input goods, such as fertilizer)
- ② Structural factors
 - "Thin" and volatile international market structures (lower export rates compared to mineral or industrial products, and the concentration of exporting countries and regions)
 - Demand increase in emerging countries (cereal import volume tripling from 1990 in China and India; cereal consumption in both countries accounts for about 40 percent of the total)

volume of cereal production in the world)

- Medium and long-term constraints on the supply side (constraints on the area of arable land and water resources, slowing in agricultural productivity, effects of climate change, etc.)
- Pressure of demand increase due to expansion in biofuel production.

According to estimates by the United Nations and the FAO, the world population, which is expected to reach 9.1 billion in 2050 (7 billion as of 2012), will require a 70 percent increase in food production by that time. With this situation surrounding global agriculture and food supplies, poor countries that need to import their food are the ones most affected. Sub-Saharan Africa has the largest number of such countries. It is therefore no exaggeration to say that agricultural and food issues discussed in the international arena are significant problems for Africa.

In the midst of rapid globalization, it should be kept in mind that global issues have a direct impact on Africa. High food prices in recent years have caused the attention of African governments, donors, and international organizations to “return” to agriculture and food security. This has led them to attempt to reform agricultural policies and mobilize resources; this has also motivated domestic and foreign farmers and firms to increase their production, beginning with investment incentivization from private sectors. This can be regarded as an opportunity in some respects, and it is quite timely and appropriate for the international community, including Japan, to re-strengthen their efforts to increase food production in sub-Saharan agriculture.

1.2 Overview and challenges in African agriculture

(1) Overview

In Africa, agriculture is the principal source of wealth and of poverty reduction. Agriculture has a strong presence in Africa, accounting for 64 percent of its employment, 34 percent of its GDP, and its growth explains one-third of economic growth (World Bank 2008). Facing the most serious starvation in the world with a 27 percent starvation rate (FAO-WFP 2012), tackling agricultural development for African food production is an immense challenge.

The real GDP growth rate for the agricultural sector remained low with a

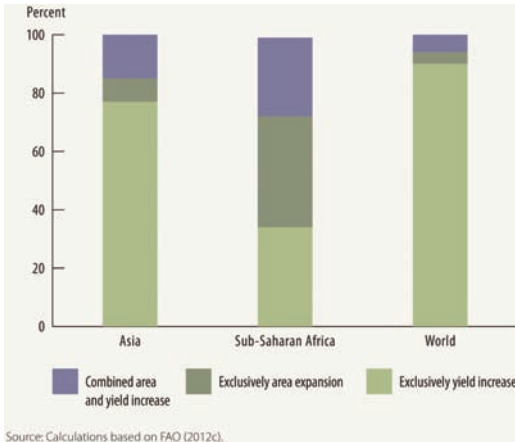
2.2 percent average between 2002 and 2006, but it showed a recovery trend with a 4.4 percent average between 2007 and 2011 (Figure 2). Grain production in Africa tripled from 1961-1963 to 2008-2010 (UNDP 2012) mainly because of an expansion in the harvested areas (Figure 3), while agricultural productivity itself (cereal yield per hectare) stagnated with only slight growth (Figure 4). This contrasts with Asia, which achieved its green revolution and substantially increased its production mainly on the basis of steady improvements in its agricultural productivity.

Figure 2. Agricultural Growth Rate in Sub-Sahara Africa



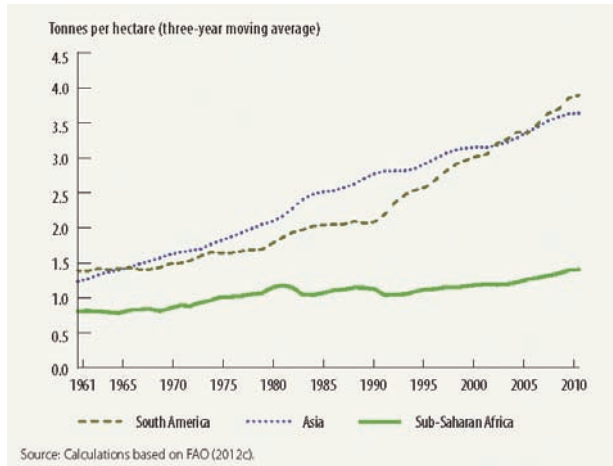
Source: World Bank World Development Indicator

Figure 3. Increases in Cereal Production in Sub-Saharan Africa Come More from Expanding Harvested Area than from Boosting Yields, 1961–1963 to 2008–2010



Source: UNDP 2012

Figure 4. Cereal Yields Stagnated for Decades in Sub-Saharan Africa



Source: UNDP 2012

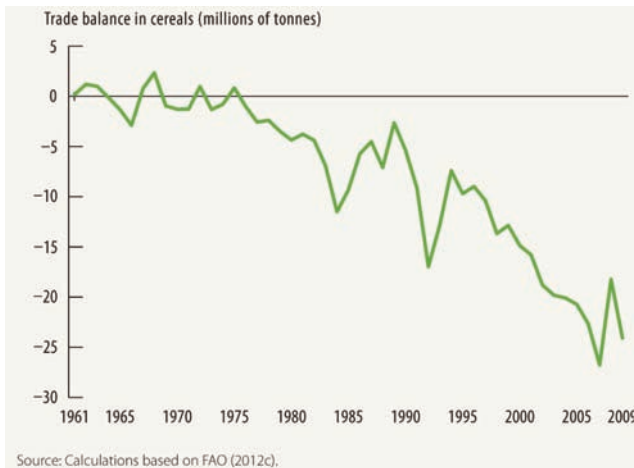
Even though Africa supposedly has room for expansion of land devoted to agriculture on average compared to other regions, uncultivated areas that can be easily cultivated are shrinking and arable land is increasingly marginalized due to pressure from population growth. The cultivated land per agricultural worker has steadily decreased by 59 percent from 1960 to 2009 (World Bank Institute). Less favored land was being cultivated and fallow periods were shortened, causing negative impacts on land productivity since soil fertility was not restored over time.

In other words, although Africa increased its production through expansion of cultivated land in the past, the decrease in per-capita cultivated land due to population pressure and stagnant land productivity resulted in a 13 percent reduction in per-capita cereal production between 1961-1963 and 2008-2010. (During the same period, a 44 % increase in Asia and a 48 % increase in South America were experienced. Thus, Africa will need to swiftly improve its agricultural productivity in order to expand its agricultural production in the years ahead.

The rapid increase in food consumption demand was caused by strong population pressure and economic growth, which resulted in an imbalance between domestic supply and demand. This led to higher dependency on imports as the demand was compensated by quickly

boosting the volume of cereal imports for Africa (Figure 5). This would cause even more serious limitations on foreign currency reserves of African countries. Dependence on imported wheat is at 74 percent and imported rice is 41 percent (2010 statistics; OECD-FAO 2011). Food expenses account for 50 to 70 percent of each household’s budget, much higher than that of families in other regions. As a result, some vulnerability to external conditions, such as price hikes and poor weather, can be observed both at the national and household budget levels. Figure 2 above shows volatile fluctuations in agricultural growth rates, indicating instability of agricultural production in Africa.

Figure 5. The Trade Deficit in Cereals Has Widened for Sub-Saharan Africa over the Past Four Decades



Source: UNDP 2012

(2) Challenges

Why has Africa failed to achieve sufficient improvement in its agricultural production? Reasons for the failure include various factors such as: delay in development and dissemination of appropriate technologies; input (seeds, fertilizer, machines, etc.) supplies; lack of irrigation systems; lack of efficient value chains or markets; soil degradation; lack of financial access; limited public and private investments; and capacity problems in government administrations. These challenges will be discussed below.

In Africa, insufficient research and development for improving

agricultural productivity and quality persist due to constraints on budgets, organizations, personnel, and so on. Also the connection between research institutes at the central level and regional organizations is weak, resulting in an insufficient application of research results to conditions of different regions, translating them into technologies usable on site. It is also necessary to widely disseminate appropriate new technologies among farmers via agricultural extension workers and through other channels. However, in Africa, there are issues of budget constraints, the limited number and quality of the extension workers, underdeveloped dissemination systems, and a lack of appropriate curriculum and teaching materials.

Since water sources (precipitation) are regionally concentrated with large seasonal and annual variations and are affected by climate changes, irrigation plays a significant role in enabling stable use of water and improving productivity. However, African agriculture depends largely on rainwater, and only 4 % of its cultivated land is provided with irrigation systems. (A significantly lower level when compared to the Middle East and North Africa with 33 % and Asia with approximately 30 to 40 %). As well, the rate of fertilizer usage is low, with 13 kilograms per hectare, compared to other regions which use between 73 and 190 kilograms. The usage rate of improved varieties of cereal in Africa remains at 24 percent, despite a sign of increase, and is still low in comparison with the rate of 45 to 85 percent in other regions (World Bank 2008).

A series of value chain processes needs to function smoothly and dynamically in agriculture- that is: "input → production → processing (post-harvest handling) → transportation and storage → sale and distribution." Promotion of improved seeds and the use of fertilization in regions other than Africa were accompanied by the development of a value chain, including building irrigation systems, rural roads, sales infrastructure, financial services and markets, leading to the improvement of productivity and increases in production.

In Africa, however, this process is being hampered by various obstacles, such as inadequate infrastructure, enormous losses due to insufficient post-harvest technologies, lack of financial access, undeveloped market facilities and functions, and delays in governmental regulatory reforms.

Take infrastructure as an example; the paved road ratio in Africa is only 18 percent (33 to 59 percent in other regions), and the electrification ratio remains at 33 percent (62 to 93 percent in other regions) (UNDP 2012). Two-thirds of the African rural population is living in areas that have low potential for agriculture, or poor market access, or both, while the corresponding number for South Asia is only 25 % (World Bank 2008).

As a result of the structural adjustments in the 1980s, the system of public agencies providing farmers with access to land, credit, insurance, inputs, and cooperative organizations was dismantled (World Bank 2008). It was expected that once excess government intervention was gone, private-sector-led market mechanisms would become more active and effectively function in place of the previous system. In Africa, however, this was not fully accomplished. Governments should play an important role together with private sectors in agriculture. In this context let us recall that Asian governments allocated 20 percent or more of their public expenditure when promoting the green revolution, whereas Africa spent only 5.6 percent (2005-2009 average) (UNDP 2012). Thus, Africa needs to devote more effort to increasing allocation of its public investment towards agriculture.

2. Recent Topics on Agriculture in Africa

2.1. Agricultural investments

It has been observed that foreign agricultural investments in Africa are on the rise, being stimulated by high food prices in recent years. As more data on land investments is becoming available lately, we will present an overview of agricultural investments in recent years as well as issues relating to them.¹

Throughout developing countries, it is estimated that land investments covering a total of 70.9 million hectares in 1,155 projects have been approved or were in the process of approval by the governments of those countries over the 10 years from 2000 to 2010. Africa accounts for 48 % of the total investments followed by 40 % in Asia and 9 % in Latin America. Much of the investment in Africa (36 %) comes from Asia.

1. The discussions in the following paragraphs rely on data from the Land Matrix Project, the world's largest scale database of international land transactions. The Project is run by a group of organizations, including the Agricultural Research for Development (CIRAD), a French agricultural research center, the University of Bern, and the International Land Coalition (ILC), with support from the European Union and other parties.

Investments in Africa (based on the area size) can be broken down into the following purposes: 55 % for biofuel, 13 % for food crops, and 6 % for forests; thus agriculture-related investment accounts for 74 % of the entire investment in Africa. The large area-wise share of investment for biofuel can be explained by the interest of developed countries in measures against climate change, and by the fact that these investments tend to employ extensive farming resulting in a large area-per-investment. In comparison, investments for food crops, though perhaps more numerous, tend to have smaller area-per-investment figures.

In terms of investment trends over the past 10 years, investments had been on the rise since 2005, peaked in 2009 triggered by the food price hikes in 2008, and rapidly slowed due to the Lehman shock in 2010. It is expected that investment will continue to rise in the future.

Several factors must be behind the growth of agricultural investments. On the investors' side, the reasons include: concern for food security and the need for an alternative area for biofuel production; the appreciation of the value of African land as an investment target after the financial crisis; and the increasing potential of its forest resources, including that of emissions trading. In this kind of environment, African countries have the opportunity to attract more investments and welcome investors in general.

Agricultural investments can have both advantages and disadvantages. Some important ones can include the following:

(1) Possible Advantages

- As a result of the introduction of new agricultural technologies, productivity and quality improve. Acquisition of foreign currency, and an increase in tax revenues can be expected.
- Development of value chains, such as improvement in the agricultural infrastructure as well as social services (construction of schools, clinics, etc.) and improved market access can be expected.

(2) Possible Disadvantages

- Disputes over land and water resources may occur between investors and local residents. There is a possibility that local residents who originally used the land, etc. may lose their rights due to a weak legal system. In particular, women tend to be

affected negatively.

- The use of mechanized farming has a low job creation effect; moreover the use of imported inputs has only a limited ripple effect on relevant local industries.
- Profits generated by investments are not equally distributed.

As an international response to these agricultural investments, the Committee on World Food Security (CFS), a standing committee of the FAO, has compiled the Voluntary Guidelines on the Responsible Governance of Tenure of Land, Fisheries and Forests (VGGT), with a focus on securing the rights of small-scale farmers, endorsed in May 2012. Japan has also led the effort to establish guidelines for promoting responsible international agricultural investments ensuring that no forced displacement takes place, and that the process is transparent. A draft of the Principles for Responsible Agricultural Investment (PRAI) has been prepared while more discussions are held for finalizing the draft proposals.

Principles for Responsible Agricultural Investment (PRAI)

Principle 1: Existing rights to land and associated natural resources are recognized and respected.

Principle 2: Investments do not jeopardize food security but rather strengthen it

Principle 3: Processes relating to investment in agriculture are transparent, monitored, and ensure accountability by all stakeholders, within a proper business, legal, and regulatory environment.

Principle 4: All those materially affected are consulted, and agreements resulting from consultations are recorded and enforced.

Principle 5: Investors ensure that projects respect the rule of law, reflect industry best practice, are economically viable, and result in durable shared value.

Principle 6: Investments generate desirable social and distributional impacts and do not increase vulnerability.

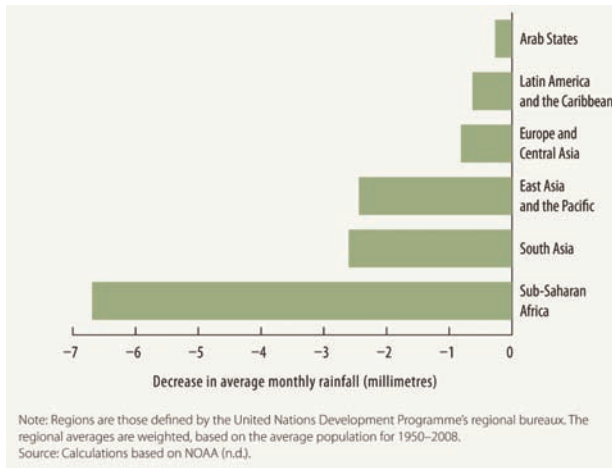
Principle 7: Environmental impacts of projects are quantified and measures are taken to encourage sustainable resource use, while minimizing the risk/magnitude of negative impacts and mitigating them.

The important point is to establish a win-win relationship advantageous to both investing firms/individuals and small farmers through agricultural investments; and it is crucial to incorporate such a mutually benefitting structure into the programs and project designs. Various measures must be taken to assure such development, including that of government regulatory reform, the strengthening of farmer support systems, and continued support from the international community.

2.2. Vulnerability/resilience

From 2010 to 2011, the Horn of Africa region was affected by a serious drought, leaving approximately 10 million people in severe food insecurity. The Sahel region in West Africa still suffers from the impact of drought today. Due to its dependency on rainwater and underdeveloped distribution systems, Africa is traditionally vulnerable to shocks, such as drought and floods. It has periodically suffered a great deal of damage, and the cycle has been more irregular in recent years, while precipitation itself is in decline (Figure 6).

Figure 6. Rainfall Has Declined Most in Sub-Saharan Africa, 1951–1980 to the 2000s



Source: UNDP 2012

The general risks in African agriculture consist of:

- ① Climate and natural disaster risks
- ② Biological and environmental risks such as pests and soil degradation
- ③ Market risks such as high or low food and input prices and seasonal supply and demand variations
- ④ Logistics and infrastructure risks such as transportation, communication, energy, and sales networks
- ⑤ Management and technical risks of farmers or firms (cultivation, inputs such as seeds and fertilizer, finance, etc.)
- ⑥ Policy and system risks in governments
- ⑦ Political and security risks

To reduce risks or respond to the occurrence of shocks, governments have developed systems with support from donors, and achieved certain positive results. In Ethiopia, for example, an early warning system has been developed. This system, including the Productive Social Safety Net Programme covering 7.8 million people (somewhat less than 10 percent of its population as of September 2011) has been created, and worked well in the serious aforementioned drought in the Horn of Africa.

In addition to such direct and expedient approaches, it is essential over the medium and long terms to build up the society's capability - that is the society's "resilience" - to withstand such shocks and, once they occur, to minimize their damage. Such medium and long term measures may also include increasing production in highly productive areas in order to quickly distribute food to affected areas via a distribution network when shocks occur; securing water at the community level; and the introduction of crops and cultivation methods that are resistant to natural disasters.

Unfortunately, the emergency humanitarian support and medium and long-term approaches tend to be planned and carried out independently of one another by government departments and donors, sometimes with avoidable overlaps. To overcome this tendency, there have been some attempts to coordinate all parties to create efficiency and synergistic effects, such as the Nairobi Declaration from the Summit on the Horn of Africa held in September 2011.

2.3. International frameworks for African agricultural development

Starting with the 2008 G8 Toyako Summit and the 2009 G8 L'Aquila Summit, global leaders expressed alarm at the effects of food price spikes and agreed on taking decisive action for ensuring food security, while recognizing the importance of providing support to Africa, considered to be the most vulnerable region. Various efforts have been made on a global scale since then to promote food security and sustainable agricultural production while taking into account actions primarily for Africa. However, lack of sufficient policy coordination among them still remains a challenge which needs to be strategically addressed. Here are some of the strategies taken by the international community:

(1) The Action Plan on Food Price Volatility and Agriculture from the 2011 G20 Summit in France.

In 2011 several working groups on agricultural and food security were set up within the G20 framework including member countries, international agencies, and governments of developing countries, some from Africa. As a result of their active discussions, a ministerial declaration entitled "The Action Plan on Food Price Volatility and Agriculture," consisting of the following points, was adopted prior to the G8 Summit in Cannes:

- ① Improve short and long-term agricultural production and

productivity to respond to increasing demands for agricultural commodities

- ② Improve market information and transparency to respond further to the needs of governments and economic operators
- ③ Increase confidence in international markets, prevent food market crises more efficiently, and strengthen international policy coordination for responding to the crises
- ④ Especially in the poorest countries, improve and develop risk management tools to be used by governments, firms, and farmers for establishing the capability to manage and ease risks accompanying food price volatility
- ⑤ Improve functioning of agricultural commodity derivatives markets

This declaration was a major milestone in the sense that it reviewed all of the existing efforts, and then adjusted them according to their mutual consistency and level of strategy, simultaneously clarifying insufficient points and suggested actions, and identifying monitoring methods and implementing agencies in a comprehensive manner. Many of the specific projects and initiatives supported or suggested in the declaration are currently in progress or under preparation. The importance of rice in Africa and the Coalition for African Rice Development (CARD), supported by Japan (the Japan International Cooperation Agency, JICA), are included in the Action Plan and both are recognized as significant initiatives.

(2) The New Alliance for Food Security and Nutrition from the 2012 G8 held in the United States

In May 2012, the G-8 Action on Food Security and Nutrition was announced at the G8 Camp David Summit held in the United States, and a commitment was made with the announcement of the New Alliance for Food Security and Nutrition in support of Africa. This is a framework aiming to pull 50 million people out of poverty over the next 10 years through promoting private and public investments; advancing technical innovations, risk management, and other tasks; and promoting agricultural development in Africa. Six countries, Tanzania, Ethiopia, Ghana, Mozambique, Cote d'Ivoire, and Burkina Faso were selected as pilot countries.

Since 2011, the Grow Africa Agricultural Investment Forum has been

held (in November 2011 and May 2012) under the leadership of the World Economic Forum (the Davos conference) for the promotion of private investments in agricultural fields as a major pillar of African development. The New Alliance incorporates actions of Grow Africa and is a positive step towards strengthening the promotion of private investments.

It can be said that the New Alliance reinforces the weaker part of actions taken by the Comprehensive Africa Agricultural Development Programme (CAADP), to promote private investment. Cooperation frameworks (agreements) to be created for execution at the level of each country will include government commitments for improving investment environments, prospects for donor funding for relevant fields, and detailed statements of intent from the private sector for investments. As such, it is drawing attention as the first attempt for governments, donors, and the private sector to share cooperative frameworks.

(3) CAADP

The Comprehensive Africa Agricultural Development Programme (CAADP) is an African initiative and framework aimed at revitalizing African agriculture. It is specified as a program to achieve growth in food security, nutrition, and rural income, in the Maputo Declaration adopted at the Assembly of the African Union (AU) held in Maputo in July 2003. The Maputo Declaration consists of goals for African countries to: achieve economic growth, end hunger, reduce poverty, and work on agricultural reforms pertinent to policy and capability issues in African agriculture, targeting an annual average growth rate of 6 % in agricultural fields by 2015. It also includes a decision to allocate 10 % of the national budget in each country to agricultural programs.

Specifically, the goals are to be accomplished by achieving the following four pillars:

- ① Improve land and water management (expanding the area of farmland under a sustainable land and water resource management system)
- ② Improve market access (expansion of market access through development of rural infrastructure and improvement in trade and transaction related measures)
- ③ Fight hunger through expansion of food production (increase

food supplies and reduce hunger by improving productivity of small-scale farmers and improve responses to food crises)

- ④ Promote agricultural research and dissemination (improve agricultural research systems for disseminating appropriate new technologies and strengthen support enabling farmers to employ the technologies)

The main process entails: holding a roundtable meeting in each country first; signing a strategic agreement called a compact between the government and donors for comprehensive agricultural development; and then creating an investment plan laying out detailed actions and costs. (As of November 2012, 40 countries have been involved in the CAADP process, and 30 of them have signed compacts while 27 of them have developed investment plans.)

In Africa, there have been some attempts at creating agricultural sector programs to be managed within the framework of the Sector Wide Approaches (SWAPS), accomplishing certain positive results. However, some of these did not necessarily match with the actions taken under a government's own budget and had weak ties with investments in related fields such as rural infrastructure development. In view of these experiences, CAADP can be regarded as a comprehensive strategic framework for organizing and integrating existing policies, programs, and cooperation frameworks in each country. Nonetheless, compacts and investment plans that have been already shared tend to look more like shopping lists itemizing necessary policies and actions, without due consideration for such factors as investment environment. To make them truly useful for strategic planning, more work is deemed necessary in order to narrow down the measures, assign priorities, improve the accuracy of cost accumulation, sort out timeframes and steps, and strengthen the collaboration with private investors.

3. Direction of Support in TICAD V

Having looked at the global circumstances surrounding Africa as well as some recent topics in African agriculture, we turn now to a discussion of JICA's support for African agricultural development with an eye towards TICAD V.

3.1 Direction of JICA's support (overview)

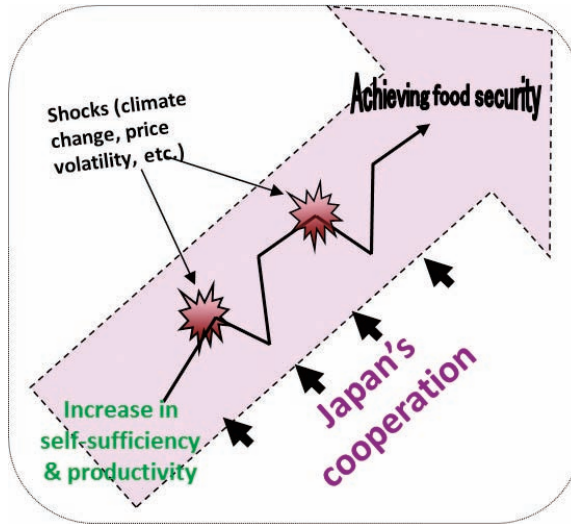
The share of agricultural support in the total amount of official

development assistance by all donors in Africa kept shrinking until 2004 when it was reversed; then the average share was 6 %. Meanwhile, Japan was consistent in its support for African agriculture, devoting an average 11 % of its budget for agriculture during the same period.

As we saw earlier, agriculture still has a strong presence in Africa, where 64 percent of households depend on it and it accounts for 34 percent of Africa's GDP. Agricultural growth has a high poverty reduction effect by its effects (more than twice as much as that of other sectors (World Bank 2008)) and the continent has a comparative advantage in it. Overall, it can be thought of as an excellent source of increasing wealth and of poverty reduction.

Now that the possibility of production increase by land expansion has become limited, every possible attempt must be made to improve agricultural productivity. As before, JICA will place the improvement of agricultural productivity and support for production expansion at the center of its support program at TICAD V and beyond. Also emphasized in JICA's support is the development of value chains, covering both upstream (such as inputs production) and downstream (such as post-harvest and distribution) activities, for achieving improved productivity and expanded production. JICA will provide support while strengthening its partnerships with private firms as agents. It is also important that small farmers themselves make efforts in marketing and building highly profitable farming systems. Agricultural investments in Africa are on the rise in recent years, and by leveraging this trend, a win-win relationship between firms and small farmers should be developed so that it leads to their production expansion and income improvement.

Figure 7. The direction of JICA's support to agriculture

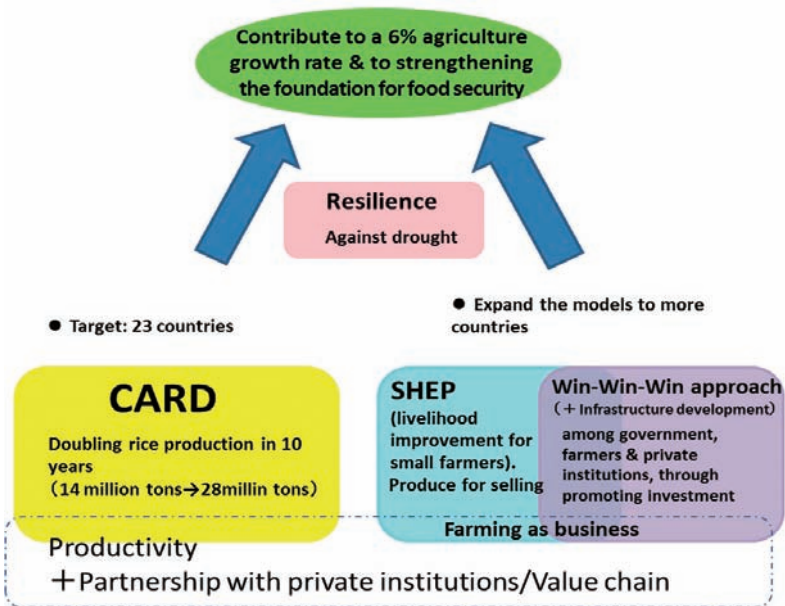


Meanwhile, to deal with negative risks, since African agriculture does depend on rainwater and is vulnerable to shocks including climate change and drought, as well as price fluctuations, it is essential to provide support for strengthening the resilience of African agriculture. In promoting such measures, JICA will take into consideration the mutually reinforcing relationship between productivity improvement and reduction of vulnerability; increased productivity is expected to lead to better resilience, and vice versa. With all of these measures, JICA is determined to contribute to the achievement of the annual agricultural growth rate of 6% and to help to establish the continent's food security, as agreed to in the Maputo Declaration by the AU in 2003. These are the broader points of discussion regarding the direction of support for Africa, at the core of which is assistance for small farmers.

There are several core approaches towards putting these policies in practice. The first is the support for the expansion of rice production; taking advantage of Japan's strength in rice production, JICA will continue to support CARD (the Coalition for African Rice Development) in terms of commodity-based productivity improvement and production expansion. The CARD initiative aims at doubling rice production by 2018. The second is the promotion of the inclusive

development approach among the government, farmers and private partners by means of the promotion of Responsible Investment for agricultural development. This approach aims to facilitate synergistic effects among the partners, with an aim towards attracting investments from the private sector and improving the production and livelihoods of small farmers. The third approach is named “the Smallholder Horticulture Empowerment Project (SHEP) approach,” aimed at achieving a better livelihood for small-farmers through improving their market access. Fourthly, to strengthen the resilience of African agriculture, JICA will attempt to develop irrigation and food reserve systems, and to strengthen the community capacity development from the bottom-up, while exploring the possibility of introducing various innovative schemes such as weather index insurance. It also aspires to making intellectual contributions leading to innovative solutions through, for example, sharing of experiences in Asia in food reserve systems. Figure 8 summarizes these approaches and activities.

Figure 8. Japan’s Focus for Agriculture / Food Security under TICAD V



Over the years, JICA has continuously provided support for improving the productivity of small farmers with numerous successful

achievements, and a substantial body of knowledge and know-how has now been accumulated. This emphasis on productivity improvement, JICA's consistently-held principle, seems to be being re-evaluated in the development community; those donors who used to prioritize the development of value chains by leveraging market mechanisms over the support for production, seem to be increasing their support for production and productivity improvement, especially after the food price spike of 2008. Arguably, JICA's approaches and past achievements are gaining renewed recognition.

In the sections that follow, we will have a closer look at the four approaches outlined above.

3.2 Coalition for African rice development (CARD) (doubling rice production)

Rice consumption has rapidly increased in Africa, and its import has risen accordingly, bringing more pressure for foreign currency constraints. (The share of rice in the total amount of cereal imports in 2010 was about 40 percent (OECD-FAO 2011).) Rice is one of the few cereals among major cereals in Africa that have a high potential for expansion of its production in the region. In TICAD IV held in 2008, JICA and the Alliance for a Green Revolution in Africa (AGRA) jointly announced the launch of the Coalition for African Rice Development (CARD), with a goal of doubling rice production in Africa in the 10 years ending in 2018. This is an international platform for promoting rice development, comprising international organizations and donors such as the World Bank and the International Fund for Agricultural Development (IFAD); research institutes such as the International Rice Research Institute (IRRI), the Africa Rice Center (AfricaRice), the Japan International Research Center for Agricultural Sciences (JIRCAS); non-governmental organizations, and South-South cooperation countries (such as Vietnam).² CARD countries consist of a total of 23 African countries that are divided into a first group of 12 countries with relatively high importance of rice in the country/region, and a second group of 11 countries catching up with the first.

Within the CARD framework, each country has set up a task force for rice cultivation development and drawn up its National Rice

2. For the discussion of the CARD initiative as an example of South-South cooperation, see Chapter 13.

Development Strategies (NRDS), with relevant agencies providing support on the basis of the NRDS. JICA has mainly provided support for productivity improvement, including dissemination and expansion of appropriate cultivation technologies and seeds (such as the New Rice for Africa (NERICA)) among farmers and dissemination staff; JICA is carrying out about 60 projects as of August 2012 (including training in Japan). Rice production is steadily making progress from a baseline of 14 million tons prior to CARD to 18.41 million tons as of 2010.

JICA plans to steadily cooperate with the first group of participating countries as well as to increase support for the second group, expanding comprehensive support covering the development of value chains, and strengthening cooperation with private firms and other partners (the Unites States, South Korea, the Bill and Melinda Gates Foundation, and BRAC).

3.3 Inclusive development approach among Governments, farmers and private partners through the promotion of responsible investment for agricultural development

The Mozambique agricultural development program of triangular cooperation between Japan, Brazil and Mozambique (ProSAVANA) offers an agricultural development program with an aim of achieving a better livelihood for small farmers and the promotion of agricultural investments by the private sector, and to create their synergistic effects. Along with specific policy suggestions made at a national level in the draft of the Principles for Responsible Agricultural Investment (PRAI) led by Japan, attempts towards realizing synergistic effects of agricultural development and distribution infrastructure development hold unique additional values in Africa.

For increasing the agricultural productivity of small farmers and their earnings, not only the refining of their technologies but also the improving and reforming of value chains both upstream (inputs such as seeds and fertilizer) and downstream (post-harvest handling, distribution, etc.) are essential. Private firms play a great role as main players in this effort, and their investments must be increased. JICA will attempt to expand its approach for similar development in countries with potentials for future agricultural investments.

3.4 Smallholder horticulture empowerment project (SHEP) approach: reform in small farmer's approach from "selling after harvesting" to "harvesting to sell"

Currently, the second phase of SHEP (SHEP UP) is in progress in Kenya with the goal of carrying it out nationwide. It has achieved doubled earnings for farmers by inducing a change in their management model - a change from one based on the mindset of "selling crops after harvesting" to the one based on "harvesting to sell," and has been well-received by the Kenyan government and other donors. This is a market-oriented type approach that encourages small-scale farmers to perform their own market research to select crops to be sold and learn market-competitive cultivation technologies, instead of harvesting crops first and then looking for a place to sell. As a result of promoting women's active involvement in farming with this approach, men and women have worked together to achieve more efficient farming. This case was presented in the meeting of the DAC Network on Gender Equality in 2011, receiving high praise from its participants.

Using this success as a foothold, JICA will seek to further generalize and consolidate the approach to be expanded as a regional program with SHEP in Kenya as a base, supplemented by training in Japan.

3.5 Toward strengthening resilience

In recent years, African agriculture has been exposed to increasing risks, such as climate change and food price hikes, and the resilience of countries and communities, i.e., their response capabilities against these risks must be strengthened. Since the severe drought in the Horn of Africa in 2011, JICA has been administering regional programs, which attempt to resolve the gap between humanitarian support and medium-term development to assure human security of the people. The idea of the programs is to help people to be "independent players in the economy" rather than "subjects of social protection." Specifically, programs are offered to pastoralists and others for strengthening their resilience (response capability) against drought in their communities in Kenya, Ethiopia, and Djibouti. A similar project is underway in West Africa.

JICA hopes to implement similar projects and, at the same time, provide support in building irrigation facilities and develop capacity for operating and maintaining them for the effective management and use

of water. It also hopes to provide more support in establishing networks of small-scale food reserves with high mobility. Furthermore, it may be possible for JICA to contribute to food reserve system development (at the regional level), such as the Economic Community of West African States (ECOWAS) on the basis of experiences in the ASEAN Plus Three Emergency Rice Reserve (APTERR). JICA intends to consider support for innovative systems such as weather index insurances. As stated, JICA will take into consideration the mutually reinforcing relationship between productivity improvement and the reduction of vulnerability. Increased productivity is expected to lead to better resilience, and vice versa.

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