Chapter 6: Success stories in agricultural development: lessons learned and their relevance to sub-Saharan Africa

Agricultural development in sub-Saharan Africa could benefit from the wealth of successful sector-wide or commodity-based development strategies implemented within and outside Africa, if properly adapted to the specific situation of SSA countries. Although lessons could also be usefully drawn from failures, this chapter is confined to success stories for brevity.

6.1 Success stories in Africa

Aggregate data such as those analysed in this study do not always reveal the quite varied trends within Africa, as has been illustrated recently by various accounts of “success stories”\textsuperscript{38}, demonstrating how African agriculture has been able on numerous occasions to adapt to evolving challenges. Beyond anecdotal reports and special cases, the analysis of these successes can be useful if it provides answers to the following questions:

- In the mix of trends and patterns regarding agricultural development, do specific actions have a critical positive impact on agricultural performance by responding to key contemporary development and food security issues?
- Does the analysis of the policy framework that has enabled specific achievements point to determinant factors of public action?

6.1.1 Tea, horticulture and dairy developments in Kenya

Kenya currently produces about 16 percent of the world’s black tea. It ranks second after Sri Lanka in tea exports and third after India and Sri Lanka in production. There has been rapid growth both in acreage and production, with the major expansion coming from the smallholder sector whose share of total output rose from a mere 2 percent in 1963 to 62 percent in 2000.

This remarkable growth is attributable to a number of factors including favourable investment policies, institutional support, attractive world-market prices and the land redistribution policy adopted by the Government at independence, which was completed in the mid-1970s. The Government bought land from large-scale settler farmers, subdivided it and re-allocated it to smallholders. The previous policy, which had restricted Africans from growing cash crops, was abolished, paving the way for smallholder tea production. In terms of institutional support, the Government established the Kenya Tea Development Authority (KTDA), which was eventually brought under the control of farmers, to provide smallholder tea growers with extension services and inputs, as well as to collect, process and market green leaf tea.

Kenya also made remarkable progress in the development of its horticultural sector, which now ranks second to tea in agricultural export earnings and accounts for approximately 16 percent of agricultural exports. It is a major source of income and employment in the rural areas, and the smallholder sector accounts for 60 percent of horticultural exports. The subsector contributes significantly to poverty reduction by creating employment opportunities in the rural areas.

The same policy and institutional factors as in the case of tea lie behind the success in Kenya’s horticulture industry. It is, however, important to note the critical role of existing airline facilities as well as the contribution of the Horticultural Crop Development Authority...
(HCDA), created in 1967 to spearhead the development of the sector. HCDA noticeably restricted its role to the provision of advisory and regulatory support. It facilitated the private sector development through a broad range of institutional and marketing arrangements, which included a wide use of contract farming, in which traders provide funding, price information and overall marketing services to farmers.

Dairy development in Kenya has also been impressive\textsuperscript{39}. With an annual output of 3 million tonnes, 80 percent of which accounted by Smallholders, milk production is twice that of anywhere in the continent.

Improved dairy breeds were introduced in Kenya in the early 1900s by commercial farmers. By 1930, these farmers had successfully lobbied for a range of government financial and policy support that included quarantine laws, veterinary laboratories, artificial insemination services, marketing and price controls. In the 1950s and 1960s, smallholder production was spurred by growing demand and favourable institutional factors. On the one hand, the increase in disposable incomes in rural areas created more demand for milk, while on the other hand the provision of veterinary and artificial insemination services, extension support for intensive production and promotion of cooperative development helped to boost supply.

These three successes, despite arising from very different commodities (two export commodities and one food commodity), have some common characteristics, all of which point towards the importance of public support:

- The role of the legal and policy framework (land reform, regulatory frameworks, and contractual arrangements).
- Institutional support through initially public-funded authorities that provided services to producers, and sometimes used for channeling subsidies (inputs), but which are gradually transferred to producer associations or the private sector.
- Public infrastructure (for transport of product and export abroad).

6.1.2 Rice in Mali and Guinea

Rice production in Mali has increased fivefold within the last 20 years (Coulibaly, 2004). With a total production of 930 000 tonnes in 2002, the country now almost meets domestic demand. Similarly, in Guinea, rice production has more than doubled in the last ten years (845 000 metric tonnes in 2003) and now supplies 85 percent of total domestic consumption. This positive evolution occurred against the backdrop of a competitive and volatile international rice market dominated by a few major exporting countries\textsuperscript{40}, a policy bias towards influential importers and urban consumers who benefit from the supply of cheap rice (Hirsch, 2000; Yamdjeu, 2003), and relatively high irrigation costs.

In Mali, the national average yield increased from 1.9 tonnes per hectare to 2.1 tonnes/ha between 1998 and 2001, and it reached 5.9 tonnes/ha in the Office du Niger area in 2001. Area cultivated also expanded significantly (increasing by 130 percent between 1990 and 2001). This recent achievement is particularly positive as it follows several decades of unsuccessful and costly support by the public sector, which resulted in fatigue of development partners.

\textsuperscript{39} Consumption of milk in Africa has increased significantly over the last decade and looks to continue. Milk production grew by a slow 2.3 percent annually in SSA over the last 20 years. Yet, remarkable trends can be observed in several countries, such as Burkina Faso (+6 percent annually over the 1984-2003 period), Cape Verde (+7 percent), and Guinea and Sudan (+4 percent). In all, 14 countries have shown rates above 3 percent. Source: FAOSTAT

\textsuperscript{40} Essentially in Asia (China, India, Pakistan, Thailand and Viet Nam) and the USA.
Several factors account for the production growth:

- Increased involvement of stakeholders through consultation and the growing role of water-user groups in irrigation schemes.
- Improvement and liberalization of the marketing system and development of private agroprocessing units on the output side (Tandia, 2000), which probably encouraged diversification towards complementary irrigated crops (e.g. tomato and onion), thus improving cost-effectiveness of irrigated farming.\(^{41}\)
- Currency realignment (1994) with a positive (although temporary) impact on competitiveness of the rice sector.

Guinea’s rice sector developed under conditions where irrigated rice was not appropriate for a large number of small-scale farmers. However, despite relatively low productivity, domestic rice production doubled in the 1990s. This was made possible by a set of factors which included (Bayo, 2003):

- Creation of an improved policy environment for private sector involvement (support to the development of private processing units\(^{42}\) through credit facilities).
- Enhanced market conditions and a significant increase of producer prices through narrowing the price differential between domestic and imported rice (improved roads and reduced marketing costs; credit to traders; market information on prices and imports).
- Enhanced support services (processing technology; research and extension services, including the propagation of new rice varieties, among which, since 1997, NERICA (New Rice for Africa) by the West African Rice Development Association (WARDA).

### 6.1.3 Cassava, roots and tubers

Since its introduction in Africa in the nineteenth century, and despite little interest from the public sector, cassava has spread progressively throughout Central Africa. It is a staple food for 200 million Africans and is becoming a major guarantor of food security with a visible effect on reducing household vulnerability caused by dependence on a single crop (e.g. maize).

As depicted in Figure 6.1, cassava and roots and tuber production and productivity has increased significantly since the beginning of the 1990s. Total cassava output rose by nearly 30 percent between 1994 and 2004 while yield increased by 10 percent over the same period (it increased roughly by 50 percent since the mid 1970s). A number of factors have contributed to this growth, including:

- Technological development: mechanical processing technologies for preparing cassava-based products.
- A publicly funded research programme that was able to develop a response to the spread of pests and diseases and to address productivity issues.
- Funding of cassava development programmes to propagate the crop, including through improved international and regional cooperation.
- Macroeconomic measures (currency realignment, removal of subsidies on imported food), which contributed to improve competitiveness of local production.

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\(^{41}\) However, similar liberalization has been less positive in neighbouring countries such as Senegal. See also: J.C. Legoupil, ed., Pour un développement durable de l’agriculture irriguée dans la zone soudano-sahélienne, Actes du Séminaire de Dakar, PSI/WECARD CORAF, 2000.

\(^{42}\) One thousand shellers in 2001, compared with 200 in 1997.
Building a case for more public support

Figure 6.1: Cassava, roots and tubers: total production and yield indices

<table>
<thead>
<tr>
<th>Year</th>
<th>Casava - Production</th>
<th>Casava - Yield</th>
<th>Total Roots &amp; Tubers Production</th>
<th>Roots &amp; Tubers Yield</th>
</tr>
</thead>
<tbody>
<tr>
<td>1981</td>
<td>50</td>
<td>10</td>
<td>30</td>
<td>5</td>
</tr>
<tr>
<td>1984</td>
<td>80</td>
<td>15</td>
<td>50</td>
<td>10</td>
</tr>
<tr>
<td>1987</td>
<td>120</td>
<td>20</td>
<td>70</td>
<td>15</td>
</tr>
<tr>
<td>1990</td>
<td>160</td>
<td>25</td>
<td>90</td>
<td>20</td>
</tr>
<tr>
<td>1993</td>
<td>200</td>
<td>30</td>
<td>110</td>
<td>30</td>
</tr>
<tr>
<td>1996</td>
<td>240</td>
<td>35</td>
<td>130</td>
<td>40</td>
</tr>
<tr>
<td>1999</td>
<td>280</td>
<td>40</td>
<td>150</td>
<td>50</td>
</tr>
<tr>
<td>2002</td>
<td>320</td>
<td>45</td>
<td>170</td>
<td>60</td>
</tr>
<tr>
<td>2005</td>
<td>360</td>
<td>50</td>
<td>190</td>
<td>70</td>
</tr>
</tbody>
</table>

Source: FAOSTAT data, FAO 2005

6.1.4 Cotton

Cotton production in West Africa, particularly Mali, has proved to be competitive in international markets despite declining and unstable world prices, increasingly stringent quality standards and the protectionist policies of trading partners. In Mali, cotton is the second-largest source of export earnings. It benefits mainly smallholder farmers and contributes 15 percent of total government revenues. Over the last 40 years, production growth has on average surpassed 9 percent per year (Tefft, 2004). Improved access to cotton inputs and increased farmer income also had a positive impact on the production of other crops, particularly maize.

The main ingredients for the success of Mali’s cotton industry are the following (Tefft, 2004):

- Public support provided through a vertically integrated, state-owned monopolistic cotton company (Compagnie malienne de développement textile - CMDT) which deals with a number of functions: provision of inputs on credit; facilitation of acquisition of equipment; extension; guaranteed, pre-announced and pan-territorial prices; and participation in development of rural infrastructure.
- Development of effective farmer organizations, initially intended for marketing but which progressively evolved into an umbrella association helping in negotiations between CMDT and farmers.
- Research in a regional framework harmonized by an international research institution, the International Cooperation Centre of Agricultural Research for Development (CIRAD).

The cotton sector in Mali, as in some other West African countries, provides a noticeable case of strong public-sector involvement in economic activities. However, other African

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43 Other important cotton producers in SSA include Benin (more than 70 percent of export earnings), Burkina Faso, Cameroon, Côte d’Ivoire, Sudan and Zimbabwe.
countries could also develop cotton production under a private sector-led approach (e.g. Zambia) in which competing private companies, through the contract farming and outgrowers schemes, are the main development agents (RATES Centre, 2003).

6.1.5 Local agricultural development in various areas of sub-Saharan Africa

A number of other informative cases have been analysed in the literature, but it would go beyond the scope of this paper to describe them comprehensively. A mention should be made, however, of an analysis that looks at agricultural development in SSA from a local village-based perspective (Wiggins, 2000).

Wiggins’ main findings are that:

- Agriculture seems to have performed better than what aggregated statistics suggest.
- Market access has been a key driver of change and of the performance of agriculture, although not always a sufficient condition (e.g. in cases of poor agro-ecological conditions).
- In many cases, successful crops were not the traditional export crops, but rather “new” crops (e.g. yam, pumpkin and onion), with market opportunities often beyond national borders.
- Technology, though important, has not been the main driver of change.

The examples presented very briefly above, along with other cases presented in the literature, illustrate the capacity of SSA agriculture to respond to key contemporary challenges, for instance by: reacting to market demand (e.g. cassava for feeding rapidly growing urban areas in Central Africa and in coastal West Africa); creating new institutional mechanisms (farmer organizations, contract farming) in response to liberalization; developing new technology and improving plants genetically; adopting conservation farming; and enhancing fallow systems and agroforestry (Franzel et al., 2004).

6.2 Selected success stories from outside Africa

6.2.1 The Marshall Plan (1947-51)

Globally, the Marshall Plan (European Recovery Program) is regarded as one of the most successful development interventions. At the end of World War II, Europe’s economic infrastructure (bridges, roads, factories and so on) were destroyed and agriculture was severely disrupted. In March 1946, US emergency food aid came in abundance, facilitated by the logistics that had been set up for the war. Yet aid was not considered to be a sustainable solution for feeding Europe, still less for eliminating poverty.

The plan had two aspects:

- a financial aspect, whereby a considerable amount of financial resources was put at the disposal of governments;
- an organizational aspect, whereby policy advice was provided by an international organization - the OECD, now the Organization for Economic Co-operation and Development (OECD) - in charge of administering the plan.

The plan largely rested on the belief that coherent economic policies, well-targeted priorities, a careful allocation of resources, and the synergy between state interventions and private enterprise was the key to success.

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44 For more details on the Marshall Plan and South East Asia’s experience, see also Boussard et al., 2005.
Building a case for more public support

It is difficult to know exactly where the key to success actually lay. It has been argued that the amount of the transfers – about 1 percent of American gross national product (GNP) or 3 percent of European GNP – was too small to have exerted any significant influence (Bradford De Long and Eichengreen, 1991). Other authors, by contrast, celebrated the Marshall Plan as a unique historical achievement. The policies and participatory private-public institutions that were put in place, the general mobilization and the will to succeed were certainly important factors that should be kept in mind in the context of Africa's NEPAD. However, the postwar situation in Europe differs in many respects from the present situation in Africa, not least in the existence of relatively skilled human resources.

6.2.2 The Southeast Asian experience

In Southeast Asia, rapid productivity gains in agriculture lifted millions out of poverty. The rapid and sustained economic growth exhibited by the Asian “Tiger” states – Hong-Kong, Singapore, South Korea, Taiwan – since the sixties, followed a decade later by some members of the Association of Southeast Asian Nations (ASEAN) countries – Indonesia, Malaysia, Thailand and Vietnam – is an outstanding example of success not only with respect to economic development, but also in poverty alleviation and food security improvements. In the late sixties, these countries were importing increasing quantities of food and experts were pessimistic about their future ability to feed their growing populations. However, 35 years later, most exhibit great progress in food security and poverty alleviation, and have become self-sufficient in staple food.

Beyond their diversity, common factors explaining these impressive performances can be identified. In most of these countries, governments played a key role in the development process: defining objectives to be attained and strategies to be applied through development plans; providing infrastructure; and handling directly selected economic activities and encouraging private investment in others. In addition, whenever land distribution was too unequal, land reforms were undertaken.

Although government intervention was a common feature, policies were not uniform; generally, they were carefully adapted to each specific case. It is, however, possible to identify a few general patterns. The agricultural development strategy adopted in most of these successful countries focused on:

- Improving the functioning of agricultural markets, through the stabilization of agricultural prices.
- Providing the necessary infrastructure, economic incentives and extension services to facilitate increase in agricultural labour productivity.

One important characteristic of government intervention in these countries is that it was mainly focused on avoiding market failures and trying to accompany private economic activities rather than replacing them with public activities. The idea was to achieve a relative stability of agricultural prices and to improve farmers’ access to the market in order to increase economic opportunities generated by trade, while at the same time protecting the poor. Different means were adopted to stabilize food prices: public stockpiles aimed at achieving a guaranteed floor-price for producers and preventing sharp increases of food prices for consumers; imports and exports were licensed to regulate supply; and import bans and direct subsidies were also used.

Public investment in human capital development through formal education and expansion of extension services also played a major role in the success of the “Green Revolution” in Asia. Price incentives stimulated growth in rural areas and increasing rural income created demand for goods and services in rural areas, acting as a source of growth and employment. The forward and backward linkages fostered between agriculture and industry resulted in higher rural wages and more employment, with an attendant positive impact on poverty alleviation.
The Southeast Asian miracle was, therefore, based on a combination of factors, particularly a high savings rate interacting with high levels of human capital in a stable market environment (Stiglitz, 1996). Well-designed government intervention, complementing markets rather than replacing them, played a key role. The high savings rates in the region could be explained by cultural factors, but the key determinant of success was that savings were efficiently used and the technological gap was quickly reduced. These countries followed a mixed strategy in which government played an important role by correcting market failures and creating the conditions for an optimal operation of markets.


During the Five-Year Plan, Government always paid attention to the development of agriculture and rural areas, considering agriculture and the rural sector as a foundation for industrialization and modernization of the country. Success in agriculture and the rural areas has helped the country overcome a difficult period and stabilize the economy, society and the political scene, creating the prerequisites for a new development phase, i.e. industrialization and modernization. The Five-Year Plan was therefore designed with the objectives of achieving high, sustainable and efficient growth, stabilizing firmly the macroeconomy and preparing the conditions for further development (mainly that of human resources, sciences, technology, infrastructure and institutions).

The main achievements of the plan are:

- Agriculture has become a key export sector. The country is now a significant exporter of coffee, rice, tea, cashew nuts and forestry products, generating US$2.8 billion of export earnings.
- Food production increased by 1.3 million tonnes annually, due among other things to increased use of improved seeds (over 87 percent of the planted area). Per capita food production has increased from 379 Kg in 1995 to 435 Kg in 2000.
- The structure of agricultural production and the rural economy has changed. The ratio of industrial crops, vegetables, flowers and fruit increased from 30.6 percent in 1999 to 35 percent in 2000; the share of livestock production increased from 17.9 percent in 1999 to 19.7 percent in 2000; and large-scale specialized production regions have been established for coffee, tea, rubber and sugar. Non-agricultural industries in rural areas have been restored and developed to create job and income generating opportunities.

**Source:** (1) Ministry of Agriculture and Rural Development (MARD), Agriculture and Rural Development Plan (2001-2005), Hanoi, 2000; (2) MARD, Vietnam’s Agriculture: A strategy toward WTO, 2000

The Southeast Asian experience shows that government intervention does not necessarily contribute to inefficient resource allocation. On the contrary, well-designed and flexible government intervention can be highly adaptive to a changing context and contribute to quick economic growth. In these countries, government's role focused on providing macroeconomic stability, making markets work, ensuring political stability and creating an atmosphere conducive to private domestic and foreign investment. It should, however, be added here that the infrastructure these densely populated Asian countries inherited from the colonial era and the massive foreign aid they received played an important role. For example, Taiwan and South Korea had relatively good agricultural infrastructure - roads, irrigation and market facilities - and industrial equipment such as textile and agribusiness plants before World War II.

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45 Taiwan was part of China until 1949; Korea was colonized by Japan between 1910 and 1945.
6.2.3 India

India’s accomplishments in agriculture over the last 40 years have been a major success story. Food-grain production increased from 50.8 million tonnes in 1950 to 176.3 million tonnes in 1990 and 206 million tonnes at the turn of the Century. From a nation dependent on food imports to feed its population, India has become self-sufficient in grain production, has a substantial reserve and of late started exporting appreciable quantities of wheat and rice. The success was a result of a combination of interventions in favour of increased productivity, macroeconomic policies (after 1980) and anti-poverty programmes.

Increase in agricultural production and productivity in India has been brought about by expanding cultivated area, developing irrigation facilities, promoting the use of improved high yielding varieties and of better crop husbandry techniques developed by agricultural research, improved water management and plant protection. These results were achieved by: implementing 182 major and 312 minor irrigation projects; launching a multitude of large national programmes such as, for example, the National Pulse Production Programme, the Drought-prone Areas Programme and the Small Farmers Development Agency; improving coordination and management of education, research and extension through the creation of the Indian Council of Agricultural Research (ICAR); ensuring public distribution of subsidised inputs and supporting agricultural prices through a system of administered prices. In parallel to this, the country implemented a comprehensive management system for the procurement, storage and public distribution of food grains to ensure adequate availability of food.

The 1980s were for India a period of partial liberalisation which was characterised by high economic growth. After 1991, the economic policy was further liberalised. Agricultural subsidies were reduced drastically as public expenditure was cut to ensure macroeconomic balance. As a result, growth in agriculture decelerated. The devaluation of the rupee however helped to boost international competitiveness of Indian agriculture and contributed to increase exports.

Despite the successes in production and numerous social programmes, India remains today the country in the world with the highest number of undernourished (more than 200 million), and this number increased during the 1990s. The case of India demonstrates that growth can be achieved in agriculture, but that it is not sufficient to eradicate hunger, when access to land and off-farm income opportunities are limited for the poor. It shows that introducing new agricultural technology into a highly differentiated social system without sufficiently addressing the question of access to the benefits arising from change can result in concentration of benefits in the hands of some, while the situation of others remains unchanged.

6.2.4 Agricultural research

Agricultural research has been a major contributor to the world’s ability to produce more food from limited agricultural land over the past 40 years by producing higher yielding and more drought- and pest-resistant varieties. Evenson (1994) estimates that it has contributed from one-half to two-thirds of output gains over recent decades worldwide.

The benefits of research breakthroughs can go well beyond farm household incomes to include: strengthening of national institutional capacities to create new technologies; improvement in women’s situation; protection of biodiversity; and environmental protection through alleviation of pressure to clear new land for cultivation.

According to studies carried out in Sierra Leone, utilization of improved rice varieties led in the 1990s to 25 to 32 percent increases in yields, and raised farmer incomes by US$14 million. In Ethiopia, complementarities existing between cattle breeding and cropping have been exploited to develop techniques of labour, cropping and water management. These new techniques allowed yields and labour productivity to increase by more than
300 percent, as well as alleviating the workload of women and children.

Agricultural research is justified by its high payoff. Economic returns on investments in well-organized, well-funded and targeted technology generation are regularly over 20 percent, and often 30 to 40 percent or more. Some success stories among many others illustrate this point. On the aggregate, returns on African maize research have been estimated to be some 30-40 percent per year. The development of cotton production, generation and diffusion of higher-yielding wheat in eastern and Southern Africa, hybrid sorghum in Sudan, semi-dwarf rice for irrigated regions and early-maturing cowpeas in western Africa and disease-resistant potatoes in the Eastern and Central Africa Highlands are other successes stories which are worth considering.

There are good reasons to believe that future returns in agricultural research in SSA will be at least as high as those recorded in the past as productivity is still low in the region provided public investment is made in this area. It is also expected that, as markets develop, some private research will take place in the continent.

6.3 Lessons learned

The examples of success stories, especially those from different parts of Africa, although most are commodity-based, provide hope that the battle for agricultural development and food security can be won. The success stories in Southeast Asian countries also avail African countries the opportunity to draw lessons for agriculture-led economic growth and transformation.

In response to the two questions asked in section 6.1, it is possible to assert that there are indeed some basic characteristics required for agriculture development to take place. Table 6.1 summarizes what these threads have been in the African success stories reviewed here. While the review helps to identify key areas for public support, it does not point to clear conclusions as to the specific approach to be followed in each: the diversity of situations and experiences suggests that solutions in each of these areas should be specifically adapted to local conditions.

<table>
<thead>
<tr>
<th>Main aspects of public support</th>
<th>Kenya</th>
<th>Mali</th>
<th>Guinea</th>
<th>Cassava</th>
<th>Cotton</th>
</tr>
</thead>
<tbody>
<tr>
<td>Institutional support (services, including subsidies)</td>
<td>X</td>
<td></td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>Macroeconomic framework (e.g. exchange rate for competitiveness)</td>
<td></td>
<td>X</td>
<td></td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>Technology development and dissemination (research and extension)</td>
<td></td>
<td></td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>Support to agroprocessing development</td>
<td></td>
<td>X</td>
<td>X</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>Participation and consultation of stakeholders</td>
<td>X</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Public infrastructure</td>
<td></td>
<td>X</td>
<td>X</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Legal and policy framework (land, regulation, contracts)</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Building a case for more public support

Box 6.2: Lessons learned from success stories

**Lessons from African success stories:**

- The picture of SSA agriculture is not bleak: there are success stories that demonstrate that it is possible for agriculture to develop.
- There is a need for a stable and conducive macroeconomic environment, particularly with an exchange rate policy favourable to competitiveness.
- A favourable policy and regulatory framework (including land reform and legal framework for contracts) is needed.
- Public support is essential in terms of specialized institutions that provide a variety of services, including advisory support to farmers, research and extension, farmer training and channelling of significant public resources to the sector. With time these institutions may be handed over to producer organizations.
- Technology is an essential ingredient for agriculture development.
- Promotion of agroprocessing and market information contributes to making markets responsive.
- Public infrastructure is indispensable.
- Creation and support to smallholder farmer organizations and establishment of consultative mechanisms are necessary.

**Additional lessons from non-African experiences:**

- Additional financial resources are important, but policies, institutions, political will and general mobilization matter at least as much.
- Stabilization of prices is important as it encourages private investment.
- Agriculture can play the role of an engine of growth and can be the basis for solid and diversified economic growth in a second phase of development, by exploiting backward and forward linkages between agriculture and the rest of the economy.
- It is important to encourage domestic savings.
- Development of human resources, science and technology are essential for the longer term, and investment in agricultural research has proven to be quite profitable, worldwide but also in SSA.
- Public organizations can be efficient, provided good governance and management practices are adopted.

**Conclusion**

The above lessons show that it is possible to achieve agriculture and rural development in SSA. They help to identify the main ingredients, illustrating the importance of public involvement through adequate policies, appropriate institutions, development of technology, establishment of infrastructure and strengthening of human resources. In the next chapter, we will determine the specific priorities that should be considered in four typical situations found in SSA, and also will address recommendations for governments, regional organizations and development partners.
Chapter 7: Where do we go from here?

After reviewing the food security situation in sub-Saharan Africa (SSA) (Chapter 1), we concluded that in the immediate term, economic development and food security in most SSA countries cannot improve if more attention and support is not given to agriculture and rural development (Chapter 2). A review of the performance of agriculture in SSA showed that agricultural growth has been insufficient in most countries - with some exceptions - and agriculture has by and large failed to play its role of lead sector (Chapter 3). Numerous constraints have held back its development and it appears that governments as well as their development partners have not promoted sufficiently agricultural production, so that the region has come to rely unnecessarily on food imports and food aid (Chapter 4). Opportunities for developing agriculture in SSA exist; however, as is demonstrated by numerous success stories, this entails providing appropriate policy and support measures (Chapter 5).

This chapter attempts to chart the way forward by formulating some recommendations to governments and their development partners regarding the kind of priority support that is required, with due attention to the diversity of situations within SSA. Any strategy, in order to succeed, must be highly context-specific and sensitive to local needs, environments and resources. Thus, diverse priority responses are required, applying to different countries in different ways and to varying effect. They are provided for: (i) countries emerging from conflicts; (ii) less-advanced countries; (iii) resource-rich countries; and (iv) relatively more-advanced countries. It is hoped that these recommendations can further help ministries responsible for agriculture and rural development to argue in favour of their sector while engaging in dialogue with ministries of finance and development partners.

The natural question that arises is this: must we continue to watch the food security situation in SSA deteriorate, or is there a solution? If yes, what are its characteristics? What kind of support to agriculture does it imply? Certainly not a return to past policies, which failed and resulted in structural adjustment programmes in the eighties. The answer to the first question is a categorical yes; there is an alternative, and we have demonstrated that there are reasonably good prospects for success - provided that attention and resources are allocated to agriculture to address the constraints that have hampered its growth. Some countries have already started to show the way. Some time ago, it seemed that Southeast Asian countries would never be able to feed their growing populations, and that the Malthusian theory of “people have to die in order to restore equilibrium with the natural base” was the obvious prospect. Such predictions proved wrong. There are no reasons why they should not also be proved wrong in Africa, provided governments are politically and morally committed to change the status-quo. The following sections examine the likely exit options, with obvious proviso that they have to be further analysed and adapted to the specific situation in each SSA country.

7.1 General recommendations applying to all SSA countries

7.1.1 Addressed to governments

Although it is acknowledged that there are performance differences between countries and subregions, it is evident that sustained growth and development generally have eluded SSA as a whole. The findings of this study indicate deficits in peace and security, policy and institutional framework, finance, service delivery, public investment and many other impediments. The relative importance of each of these shortfalls is different in different countries, but there is no doubt that the malaise affecting the SSA food and agriculture sector cannot end without comprehensive political, technical and financial support. The following strategic areas indicate (without becoming prescriptive) possible areas countries could...
consider as exit options to boost the development of their food and agriculture sectors and achieve sustainable food security in line with the commitments they have made in various fora, including the World Food Summit and the AU Maputo Declaration (July 2003) on the implementation of the NEPAD Comprehensive Africa Agriculture Development Programme (CAADP).

**Bad governance, political instability and armed conflicts**

The prospects for agriculture and rural development and food security remain bleak as long as armed conflicts, bad governance and political instability continue unabated. One of the most tragic realities of SSA is that the levels of conflict, refugee crisis, corruption, political suppression and economic injustice are among the worst in the world. Serious political commitment, backed up by concrete actions, is required to ensure democracy, respect for human rights, social justice and economic prosperity for the rural masses.

More often than not, poverty coupled with limitation in natural resources endowment bring about political instability, conflict and insecurity, which in turn further accentuate poverty. Hence stability cannot be guaranteed without alleviation of poverty and poverty cannot be eradicated without political stability. SSA governments should therefore make considerable effort to resolve armed conflicts and political unrest, if need be with the support of the international community, in particular the United Nations, African Union and their regional organizations such as ECCAS, ECOWAS, SADC, IGAD, CENSAD and others.

Governments must be accountable to their people. They should provide public goods and services in the often-neglected rural areas, within the limits of available resources, in an effective, transparent, impartial and accountable manner. The autonomy of the judiciary must prevail and the operational efficiency of the legislature must be ensured. This would, however, be ineffective as long as capacity constraints in public-sector management are not addressed. Failure to address these issues will likely perpetuate instability, conflicts and resulting poverty and food insecurity.

**Guaranteeing food access**

In line with their commitments to the Millennium Development Goals and other international conventions on human rights, including the Right to Food, governments should strive to resolve their internal political problems rather than denying their citizens access to food for political ends.

They should also design strategies and programmes to generate rural employment and income that will allow vulnerable groups to have access to food. Safety nets should also be put in place for those who are as yet unable to tap other opportunities to improve their welfare and generate income required to purchase food, while education and advocacy programmes should be implemented to bring about attitudinal changes needed to ensure equitable access of food within households by women and children.

**Efficient resource mobilization and expenditure**

The invigoration of the food and agriculture sector in line with the World Food Summit goal of halving the number of undernourished people will require a considerable increase in public expenditure and investment. On the other hand, the financial constraints that most SSA countries are facing given the multitudes of challenges are well understood. Efficient resource mobilization and expenditure becomes particularly important in light of the dwindling flow of development assistance and slow growth in foreign investment. Under the circumstances, the following measures seem to be appropriate:
• Reconsider priorities in allocating the limited financial resources available among sectors, as well as between activities and programmes within the same sector. For obvious reasons, priority in most SSA countries should be given to productive sectors such as agriculture, which provide a livelihood to the bulk of the population and generate most of foreign exchange earnings.
• Close down inefficient public sector programmes or, if they are providing essential public goods and services, ensure that they operate on financially sound basis, as this was one of the reasons that spurred the adjustment programmes of the 1980s and early 1990s.
• Reallocate resources from non-productive ministries such as defence and internal security to ministries dealing with productive sectors; a call for political and moral commitments for peaceful resolution of conflicts and political unrest.
• Facilitate private sector financing, given that the public sector’s role is primarily to support a private sector-led development, and recognizing that government alone cannot move agricultural development forward.
• Within agriculture and rural development, give priority to expenditure on public goods rather than to subsidies on private goods, which are generally less effective in generating growth and reducing poverty.
• Improving revenue collection through efficient tax collection, including tackling tax evasion, and introduction of para-fiscal sources of revenue (user fees, cost recovery, etc.).

7.1.2 Addressed to the African Union, NEPAD Secretariat and regional organizations

The African Union, the NEPAD Secretariat and regional economic organizations have a great role to play in the effort that will be required to fulfil the World Food Summit objective. There are six key areas in which these organizations can take the lead:

• Prevent conflicts and facilitate their resolution.
• Continue to provide the fora to discuss food security and development issues for SSA, and in particular help to step up mobilization in government, civil society and among development partners and ensure appropriate participation of all stakeholders in dialogue, giving due attention to various points of view and interests.
• Encourage and provide the political backing to regional agricultural research initiatives based on agro-ecological zones and in collaboration with and in support of existing research networks.
• Identify, formulate, seek funding for and help implement projects and programmes of a regional or subregional dimension.
• Facilitate regional economic integration by adopting common standards and rules and enhancing region-wide infrastructure.
• Improve regional mechanisms to prevent and manage food crisis, based on successful experiences in Africa and elsewhere.

7.1.3 Addressed to development partners

Development assistance and foreign investment

Although, in line with the spirit enshrined in NEPAD, SSA governments should aim primarily at mobilizing domestic resources to meet the challenges of food security, agriculture and rural development, this will not be sufficient to make a meaningful impact in most countries. Therefore, development partners - including developed countries, international financial institutions, the United Nations, international NGOs and civil society - have a moral obligation as well as an economic and political interest in engaging meaningfully in assistance for SSA countries. In this regard, reference is made to article 29 of the Declaration of the World Food Summit: five years later, on resources, which stipulates:
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“29. We urge developed countries that have not done so to make concrete efforts towards the target of 0.7 percent of gross national product (GNP) as ODA to developing countries, and 0.15 percent to 0.20 percent of GNP of developed countries to least developed countries, as reconfirmed at the Third United Nations Conference on Least Developed Countries, and we encourage developing countries to build on progress achieved in ensuring that ODA is used effectively to help achieve development goals and targets. We acknowledge the efforts of all donors, commend those donors whose ODA contributions exceed, reach or are increasing towards the targets, and underline the importance of undertaking to examine the means and time frames for achieving the targets and goals” (FAO, 2002).

The additional assistance provided should, in priority, support development efforts of SSA governments seeking to expand and stabilize their agricultural production (including irrigation and possible schemes, stabilize markets of certain strategic food commodities), prevent occurrence of food crisis and attract foreign investment. Preventive measures have been extensively used in the health sector, and more recently in international relations, why not apply this concept on a large scale to food crisis in sub-Saharan Africa and mobilize the resources needed to prevent crises from occurring? These efforts will not fail to help reduce the need for food aid in the future, which will hopefully become limited to those areas that are still scourged by conflict and war or where peace has not yet yielded its full dividends.

7.2 Priority areas for action in countries in conflict or emerging from conflicts

Countries in conflict or emerging from conflicts have been the main source of increase in the number of undernourished in SSA. They are where food insecurity has reached its most extreme intensity, causing the loss of large number of lives. They are characterized by large displaced population groups or refugees, and often have to face the question of demobilizing soldiers. Destruction of physical as well as social infrastructure and land-mines are usually widespread, acting as insuperable constraints to development. Under such circumstances, four key priority areas for action can be recommended.

7.2.1 Immediate measures to ensure adequate access to food for the hungry and for resettling refugees and demobilized soldiers

These measures include:

- Organizing food distribution to vulnerable groups (refugees, resettled families, women or children-headed households) through government services and NGOs. Distribution should be used to create local groups that will be of use for development purposes as the country moves from emergency to rehabilitation and development. Food distributed should be based increasingly on local purchase, as production progressively rises and as a growing number of areas succeed in generating a food surplus.
- Putting in place a system for distributing agricultural implements (tools, draught animals), basic inputs (seeds and small quantities of fertilizer) and livestock (e.g. small ruminants, poultry).
- Financing (in part) labour inputs provided by members of vulnerable groups for constructing or repairing rural infrastructure, through either food-for-work or cash-for-work depending on local conditions.
- Putting in place community-managed school-feeding schemes and school gardens that will progressively evolve into home-grown school-feeding schemes as local production capacity increases.
7.2.2 **De-mining and rehabilitation/construction of rural infrastructure**

Economic development, and particularly development of agriculture, requires good communication. Market and production infrastructure need to be put in place for the local economy to be resuscitated. This entails considerable investment in:

- de-mining and rehabilitation of major roads and bridges, rural access roads and river crossings;
- market and storage places;
- irrigation facilities; and
- anti-erosion and land-improvement measures in some areas.

7.2.3 **Establishment of basic rural services**

It may be tempting for governments to re-establish, at the end of a period of conflict, past public extension or credit systems, without taking full account of experience gained and reforms implemented in other countries. Yet the dismantling of past public systems because of conflict may offer an opportunity to put in place leaner, more efficient systems that offer greater opportunities for civil society organizations and private companies to enter into rural services, even – particularly in a first phase – through contracts and with financial support from the government. Public support under these circumstances could in priority be geared towards:

- microcredit systems operated by commercial banks or NGOs;
- extension systems operated jointly by government services and NGOs;
- seed multiplication schemes in contract with NGOs and/or groups of farmers;
- rural service centres providing veterinary services, business support services, agricultural inputs and consumer goods, managed by NGOs or contracted to private entities; and
- capacity-building of government service technicians, NGO staff and members of rural organizations.

7.2.4 **Establishment of an appropriate institutional and policy environment**

In this case, too, there could be tendency for governments to try and restore the institutional set-up that was in place prior to the conflict, but the opportunity exists to establish a strong and efficient public structure that can design and coordinate the implementation of a policy and regulatory framework favourable to development, including:

- a stable macroeconomic environment;
- a legal system for ensuring security of land tenure and efficient implementation of contracts;
- a policy framework favourable to local and private initiatives;
- support to the establishment of rural organizations;
- a regulatory framework and technical norms to ensure food quality and safety, animal health, sustainable management of natural resources and conservation of biodiversity; and
- reliable statistics, food security monitoring and market information systems.

7.3 **Possible exit options for less-advanced countries**

This group of countries includes those that typically have a GDP below US$750 per caput and where agriculture represents more than 25 percent of GDP. This category includes the majority of SSA countries, which suffer from very weak institutional capacity, a frail private sector and poorly operating markets. In these countries, agriculture and rural development typically face most of the constraints identified in Chapter 4, and the essential conditions
have to be put in place for development to take place. Four priority areas for action have been identified, for which recommendations are proposed below.

### 7.3.1 A strengthened institutional capacity

A strong institutional and human capacity is central to formulating and managing successful rural and agricultural development policies, strategies and programs.

Institutional strengthening has three main dimensions:

- Creating the institutional framework that can respond to the needs of the various stakeholders: producers, input and output traders, processors, consumers and other stakeholders. This comprises well-structured organizations with adequate staffing (in numbers and in skills) and resources to operate, as well as institutionalized venues where policy dialogue between government and stakeholders can take place. Decentralization has become an increasingly frequent characteristic of reformed institutional set-ups. Most SSA countries have implemented institutional reforms, often in the context of an overall civil service reform. These reforms should be viewed as a dynamic process and not a one-off event: the public sector needs to continue to adapt to emerging challenges and changes occurring in the economy and help to facilitate them.

- Adopting improved management practices in public institutions, which are based on transparency and accountability; implement personnel policies to develop individual staff competencies, and provide them with adequate performance-related incentives and career development opportunities; minimize the impact of the HIV/AIDS pandemic and other communicable diseases; and offer a proper working environment based on the use of information and communication technologies (ICTs) to enhance exchange of information and partnership.

- Moving progressively from a project-based mode of intervention, often using parallel structures, towards a more integrated program approach that is based on improved government implementation mechanisms and supported by well-coordinated assistance from the development partners.

### 7.3.2 An appropriate policy framework in place

Experience of countries with prosperous agricultural sectors shows that they owe their success to, among other things, a strong capacity to formulate and implement strategic public interventions during earlier take-off periods. In particular, the capacity to implement policies capable of maintaining macroeconomic stability has proven to be an essential condition of success. Although there will be variations among countries depending on specific conditions, it is possible to give some common characteristics of sector policies that address some of the key constraints on agriculture and rural development identified earlier:

- The land tenure system in most countries needs to be reviewed to ensure equitable and guaranteed access by all segments of the society, particularly women farmers, and to promote private-sector development while warranting sustainable use of this most important asset. A legal framework must be developed and implemented to achieve these objectives and allow producers to use their land as collateral to get access to financial services.

- The respective roles of the public sector and the private sector or of civil society must be clearly delineated, with each defined on the basis of the characteristics of the goods and services to be delivered and the existing capacity outside of the public sector.

- A legal system must be put in place for ensuring efficient implementation of contracts (including contract-enforcing mechanisms), in particular for contract farming.

- A policy and regulatory framework favourable to local and private initiatives should be established, including:
Investment in “soft infrastructure” to reduce transaction costs and price risk, which provides the technical norms ensuring food quality and safety, animal health, grades and standards, warehouse receipt systems, market information and price stabilization/guarantee measures through for example the operation of grain reserve agencies, buffer stocks or harvest failure funds, price bands, commodity exchanges (including futures markets) and facilitation of intraregional grain trade.

- Harmonization of standards with international and regional specifications to alleviate the burden of compliance through, but not exclusively, and establishment of regional standard bodies as well as equivalence between national standards in developing and developed countries.
- A regulatory framework for sustainable management of natural resources and conservation of biodiversity.
- Measures to minimize any disruptive effects of commercial imports and food aid on domestic food prices by instituting mechanisms that would ensure that their delivery corresponds to shortages in the domestic markets, and which could include tariffs, provided they are consistent with WTO\textsuperscript{46} and other trade commitments.
- Expanding export of processed and unprocessed traditional export crops using the method of branding (by location and method of production, e.g. organic production) and price discrimination, as well as fair-trade networks.
- Reducing cross-border transaction and transportations costs.

- Improving international negotiations through more active involvement in multilateral trade negotiations and in decision-making processes of standard-setting bodies, as well as through participation in the creation of regional and continental alliances to improve bargaining position towards improved access and terms of trade.
- Reliable statistics and food security monitoring systems.

In many of these countries emigration is economically significant and migrants have been sending back remittances both for consumption as well as for investment purpose: governments may want to put in place mechanisms to facilitate transfer of funds (which now are often very costly) and facilitate investment in priority areas by providing additional incentives (e.g. matching grants and co-funding).

### 7.3.3 Public investment

In this group of countries, public investment is an essential ingredient for agriculture and rural development to take place. Priority areas for investment include:

- Rural roads, marketplaces and storage facilities to facilitate marketing of inputs and outputs.
- Irrigation facilities (both small- and large-scale when possible), managed by water user groups, to increase productivity and stability of production, and decrease reliance on rain-fed agriculture (to reduce costs, use of low-cost technologies and developing local capacity will be essential and should be a high priority).
- Soil fertility improvement and anti-erosion measures to improve productivity and sustainability of production.
- Research facilities to enhance the capacity to develop technologies responsive to the needs of small- as well as large-scale farmers (regional cooperation around agro-ecological research initiatives should also be considered).

\textsuperscript{46} Opportunities exist, at the time of negotiation of common tariffs of regional organizations, to reinstate a certain level of well-justified protection through tariffs beyond commitments made by individual countries.
7.3.4 Public services

In these countries, agricultural services have undergone considerable downsizing. Restructuring, degradation of working conditions as well as HIV/AIDS have resulted in high loss of skilled personnel.

With regard to extension:

- Partnerships and contractual arrangements should be sought with NGOs and private service providers.
- Efforts are required to make extension more responsive to the needs of small- as well as large-scale farmers by promoting two-way communications between research and extension and between extension officers and farmers.
- Technical messages should promote:
  - the use of both organic and inorganic fertilizers and alternative means of combating pests (IPM) given the pervasive foreign exchange limitations to import fertilizers and other agrochemicals; and
  - minimum tillage, conservation agriculture and other labour-saving technologies, given the impact of HIV/AIDS and other diseases.

With regard to rural finance:

Formal financial institutions generally view smallholder agriculture as a high-risk industry. Governments and their partners should consider:

- Fostering behavioural change and perception with regard to financial services so that they are perceived as sustainable profit-making businesses with clients, rather than as mechanisms to provide assistance to beneficiaries. Private-sector involvement – with or without association with public institutions – can go a long way in changing this perception and can contribute to improving repayment of credit, promoting a savings culture and making better use of existing social capital (e.g. trust, social connectedness). This approach can be made possible through education and advocacy.
- Providing financial support to rural finance organizations, such as the rural Savings and Credit Cooperatives (SACCOs), the Accumulated Savings and Credit Associations (ASCAs), NGOs, village banks, microfinance organizations or branches of commercial banks, by partially subsidizing establishment costs and, at a decreasing rate, operational costs during the first years of business. Interest rates applied should, however, be market rates or close to market rates.
- Providing technical support, management training and oversight to ensure that rural finance organizations are headed by well-trained professionals and that they are accountable to their members.
- Establishing agricultural and rural development banks - preferably in partnership with the private sector - with capacity to provide long-term investment loans for land improvement structures, irrigation, tools and implements, machinery, livestock, orchards, tree crops, small-scale processing, off-farm handicraft, rural industries and other activities.

With regard to other important services:

- Private sector development should be facilitated by provision of capacity-building in business management, and by provision of technical support services.
- Support should be given to the creation of organizations of producers and other economic operators in rural areas through advocacy, legal provisions, training and limited financial support.
- Public capacity to combat plant and animal pests and diseases should be increased.
• Partnerships between the public and private sector should be facilitated in the delivery of agricultural inputs (seeds, fertilizer, implements and veterinary drugs), particularly in remote areas.

7.4 Possible exit options for resource-rich countries

Economic conditions in resource-rich countries are generally characterized by strong macroeconomic imbalances resulting from the overwhelming domination of the resource-based sector (e.g. mining, petroleum exploitation). Large exports from the resource-based sector result in considerable inflow of foreign currency, which tends to overvalue the local currency, rendering other sectors non-competitive for export, but also on domestic markets. Growth in the resource-based sector thus generates stagnation in other sectors. This is compounded by the fact that attention of decision-makers is generally focused on the resource-based sector, such that other sectors are not considered to offer valuable development opportunities. This kind of economy also shows high income disparities among population groups, but also between regions: main economic activities are concentrated in the hands of a few in small areas. Last but not least, the existence of important resources and internal disparities are potential sources of conflict. In addition to recommendations made for less-advanced countries or for countries emerging from conflict, which may also apply in case of resource-rich countries, there are some additional recommendations specific to this category. They pertain to three main priority areas which demand, for successful implementation, a high level of transparency and governance, as well as carefully designed mechanisms to make sure that public spending is oriented towards the need of the population.

7.4.1 Macroeconomic measures

The main instruments that can reduce macroeconomic imbalances are:

• In the short term, sterilization of funds on special accounts for the benefit of future generations and investment in physical and social infrastructure to absorb usefully excess foreign currency; the balance between the two measures should be determined largely by the need to keep inflation and nominal interest rates under control so as not to discourage private savings and investment.
• In the medium- and long-term, invest in other sectors (such as agriculture, services, processing/manufacturing and industry) in order progressively to achieve a more balanced economy. Subsidies and protection may have to be granted on the ground of these activities being infant industries.

7.4.2 Investment

These countries have much greater capacities than others to invest and develop services in rural areas, without having to rely excessively on support from development partners. The focus of public expenditure should be on:

• investments that increase present and future competitiveness of agriculture and other non-resource-based sectors (e.g. transport infrastructure, market and storage facilities, communication, land improvement, research) and support private investment (grant up to a considerable share of investment outlay for farm buildings, equipment and livestock); and
• investment that ensures social stability and cohesion (e.g. education, health, training, community facilities).
Building a case for more public support

7.4.3 Safety nets

The financial capacity of these countries should make it possible for them to eradicate rapidly food insecurity and undernourishment by putting in place safety nets targeted at vulnerable groups. In rural areas, efforts should be made to provide this type of support through cash rather than in kind, so as to contribute to boost local demand and invigorate markets. The recent initiative of WFP to explore the possibility of launching financial derivatives to raise cash for providing aid to populations struck by famine is a step in the right direction.

7.5 Possible exit options for more-advanced countries

This group of countries is characterized by a relatively high GDP (more than US$750 per capita), a diversified economy, an active private sector and functioning markets. The way forward towards development and food security in these countries is based on two main principles: (i) reinforcement of the role of the private sector; and (ii) further diversification of the economy. Care has to be taken, however, to ensure that growth has an impact on poverty and food insecurity. For that to occur, effective statistical and food security monitoring systems must be maintained by governments so as to identify specific measures that may be required should results not be up to expectations.

7.5.1 Reinforcement of the role of the private sector

In addition to the recommendations made for less-advanced countries, many of which still apply even in the more-advanced countries (particularly as regards the policy framework), the following can be added regarding institutional aspects, services and investment:

- The role of public institutions should be more reduced than in less-advanced countries, as the capacity of the private sector makes it possible to take over certain activities of a private nature that would otherwise be handled by government. The existence of private research and extension, and private capacity that can be contracted to verify compliance with standards and norms, allows government to refocus its activities. Greater use of outsourcing and contracting of public functions to private entities is possible, for which legal provisions and government supervision capacity needs to be stepped up.
- Private investment should be facilitated by providing incentives, where required, to private commercial banks to provide financial services to the private sector for investment required to grow capital-intensive export crops (e.g. cut flowers, vegetables and fruit, fish) or invest in agroprocessing, manufacturing and other activities.
- An investment code should be revised (or established) that protects private investors (property rights, use of profits generated) and attracts foreign private investment (direct or portfolio), as well as regulations that facilitate the establishment of joint ventures and partnerships with foreign companies.
- Business regulations and procedures required to establish new businesses or sign contracts should be simplified.
- The strength of the private sector may make it feasible to have public-private partnerships in order to mobilize additional resources for financing public goods. This requires the development of an appropriate legal framework.

7.5.2 Economic diversification

The existence of a buoyant private sector and functioning markets creates opportunities for diversification in agriculture as well as in the rest of the economy. In particular, when agriculture is connected to the world market, it can grow new, high-value crops for export. The private sector can also increase its agroprocessing activities and production of inputs required by a more technology-based agriculture. Public support to these initiatives entails:

- development of research on non-traditional exports such as tea, horticultural products and others;
• promotion of national products and national investment opportunities abroad;
• provision of information on world markets, export opportunities, rules and regulations in trading partners and indications on possible partners abroad in different economic activities;
• investment in port and airport facilities and encouragement of competition in the shipping business.

7.6 Summary and Conclusion

This chapter provides possible exit options from the current situation of high food insecurity prevailing in SSA countries by making recommendations to governments, regional organizations and their development partners of the kind of priority support that is required in different situations observed in the region.

This chapter provides precise details of what should be done in order for agriculture and rural development to play a role as lead sector for developing SSA countries and in reducing hunger and undernourishment. By charting the way forward under some typical conditions found in the region, it is expected that the chapter will help ministries in charge of agriculture and rural development sharpen their arguments when advocating with ministries of finance and development partners for increased allocation of resources and attention to their sectors. Box 6.1 summarizes the main points.

These recommendations were discussed in a regional workshop in which senior policy-makers participated. It is expected that the recommendations will be progressively made more country-specific and integrated by countries in their strategies and policies for agricultural development and food security, and will be fully reflected and given highest priority in the revised PRSPs that are being developed in a number of countries. It is also hoped that the arguments and ideas put forward in this paper will be mirrored in the Medium Term Expenditure Frameworks developed in SSA countries and that additional resources will be mobilized for agriculture and rural development in government budgets and focused on the priorities identified here. To achieve this, initiatives will be required to foster dialogue between ministries of agriculture and rural development and ministries of finance and planning. It will also need better communication between technical personnel working in agriculture and rural development related ministries and political personnel, including parliamentarians. For this purpose, specific activities may need to be organized at country or regional level.

FAO, while continuing to provide support to the NEPAD process and to individual countries, will also conduct further analysis in areas that this study has helped to identify. Areas that have so far been identified and on which work will be undertaken include:

• Conditions required to boost private sector investment in agriculture, as it constitutes the bulk of investment in the agriculture sector (work already initiated by the FAO Subregional Office for Southern and East Africa.
• Opportunities created by regional integration for agricultural growth and food security.
• Effective market-compatible agricultural price-stabilization mechanisms\textsuperscript{47}: designing well-adapted and sustainable modalities for price stabilization in SSA, considering that past experience in this area has generally not been very successful.

\textsuperscript{47} Building for example on work done by the World Bank/DFID – C. Poulton, J. Kydd, S. Wiggins and A. Dorward, State Intervention for Food Price Stabilisation in Africa: Can It Work? Programme of Advisory Support Services for Rural Livelihoods, DFID, May 2005
Box 7.1: Summary points on the way forward

**Recommendations addressed to all governments**
- Spare no efforts to resolve armed conflicts, achieve political stability and improve governance.
- In line with commitments to MDGs and Right to Food, design strategies and programmes for income generation and access to food.
- Reallocate resources from non-productive ministries to ministries dealing with productive sectors, and improve public-sector efficiency and revenue collection.

**Recommendations addressed to regional organizations**
- Facilitate peace and cooperation among SSA countries in favour of food security.
- Identify, formulate and raise funding for regional or subregional projects and programmes.

**Recommendations addressed to development partners**
- Step up assistance provided to the less-advanced sub-Saharan African countries and orient it in priority to programmes in favour of increased and more stable agricultural production to avoid future crises in the future.

**Specific recommendations for countries emerging from conflicts**
- Put in place immediate measures to ensure adequate access to food for the hungry and for resettling refugees and demobilized soldiers.
- Give priority to de-mining and rehabilitation/construction of rural infrastructure.
- Support the establishment of effective basic rural services to support resuscitation of the rural economy.
- Establish an effective institutional set-up and a policy environment conducive to the development of an efficient market-based rural economy.

**Specific recommendations for less-advanced countries**
- Adapt institutions to the emerging challenges by increasing technical capacity, improving management and direct them toward facilitating dialogue between government and stakeholders; adopt more integrated and coordinated development programs.
- Design and implement policies for a market-based economy where the private sector and associations are given increased initiative, and where transactions are facilitated by the enforcement of a proper legal framework.
- Pursue public investment geared towards stabilizing production, enhancing productivity and improved functioning of markets.
- Create public services aimed at promoting adapted and efficient technology, private sector development and capacity.

**Specific recommendations for resource-rich countries**
- Institute macroeconomic measures to reduce imbalances and enhance competitiveness of non-resource-based sectors.
- Encourage investment and financial support in favour of diversification of the economy, social stability and cohesion.
- Eradicate poverty and food insecurity through massive public-funded targeted safety nets.

**Specific recommendations for more-advanced countries**
- Implement packages aimed at the reinforcement of private sector as producer, service provider and, in some cases, as source of funding for public goods through partnerships with public institutions.
- Support programs for diversifying agriculture towards non-traditional high value export commodities (e.g. horticulture, tea, fisheries).
- Implement programs in promoting diversification of the economy by increased agro-processing, manufacturing and other activities.
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Chapter 6 – Success stories in agricultural development: lessons learned and their relevance to sub-Saharan Africa


Chapter 7 – Where do we go from here?

### Appendix 2.1: Indicators of food intake, undernourishment, growth and sources of cereal supply in SSA

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<td>6</td>
<td>58.5</td>
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</tr>
<tr>
<td>Democratic</td>
<td>1,599</td>
<td>105</td>
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<td>23.3</td>
<td>-4.3</td>
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<td>28.8</td>
<td>30.4</td>
<td>5.614</td>
<td>0.092</td>
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<td>15</td>
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<td>Republic of the Congo</td>
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<td>14.068</td>
<td>0.522</td>
<td>1.6</td>
<td>18</td>
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</tbody>
</table>

**Sources:** FAOSTAT, FAO/SOFI, World Bank, UNAIDS

* Some data only available after 1992  ** Only after 1992
## Appendix 2.2: Indicators of food intake, undernourishment, growth and of cereal production, imports and aid in SSA

<table>
<thead>
<tr>
<th>Countries</th>
<th>Annual rate of growth of cereal production</th>
<th>% of net imports in consumption (including food aid) in supply</th>
<th>Share of food aid in consumption</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Group 1</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Djibouti</td>
<td>-</td>
<td>1.5</td>
<td>102</td>
</tr>
<tr>
<td>Angola</td>
<td>-0.8</td>
<td>6.7</td>
<td>26</td>
</tr>
<tr>
<td>Congo</td>
<td>0.1</td>
<td>3.1</td>
<td>90</td>
</tr>
<tr>
<td>Namibia</td>
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<td>2.9</td>
<td>46</td>
</tr>
<tr>
<td>Mauritania</td>
<td>1.9</td>
<td>1.3</td>
<td>76</td>
</tr>
<tr>
<td>Cape Verde</td>
<td>1.7</td>
<td>2.6</td>
<td>122</td>
</tr>
<tr>
<td>Lesotho</td>
<td>-0.7</td>
<td>4.7</td>
<td>49</td>
</tr>
<tr>
<td>Seychelles</td>
<td>-</td>
<td>-</td>
<td>115</td>
</tr>
<tr>
<td>Gabon</td>
<td>4.1</td>
<td>1.7</td>
<td>113</td>
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<td><strong>TOTAL Group 1</strong></td>
<td>0.0</td>
<td>4.4</td>
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</tr>
<tr>
<td><strong>Group 2</strong></td>
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<td></td>
<td></td>
</tr>
<tr>
<td>Ghana</td>
<td>3.7</td>
<td>4.2</td>
<td>26</td>
</tr>
<tr>
<td>Niger</td>
<td>2.4</td>
<td>2.8</td>
<td>2</td>
</tr>
<tr>
<td>Kenya</td>
<td>1.4</td>
<td>0.2</td>
<td>-2</td>
</tr>
<tr>
<td>Togo</td>
<td>3.4</td>
<td>4.2</td>
<td>12</td>
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<tr>
<td>Guinea</td>
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<td>15</td>
</tr>
<tr>
<td>Cameroon</td>
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<td>4.1</td>
<td>18</td>
</tr>
<tr>
<td>Côte d'Ivoire</td>
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<td>Benin</td>
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<td>13</td>
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<tr>
<td>Chad</td>
<td>1.1</td>
<td>5.0</td>
<td>5</td>
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<tr>
<td>Central African Republic</td>
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<td>7.9</td>
<td>15</td>
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<tr>
<td><strong>TOTAL Group 2</strong></td>
<td>2.0</td>
<td>3.7</td>
<td>10</td>
</tr>
<tr>
<td><strong>Group 3</strong></td>
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<td></td>
<td></td>
</tr>
<tr>
<td>Mozambique</td>
<td>1.6</td>
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<td>21</td>
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<tr>
<td>Ethiopia *</td>
<td>-</td>
<td>6.4</td>
<td>3</td>
</tr>
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<td>Malawi</td>
<td>1.6</td>
<td>4.5</td>
<td>2</td>
</tr>
<tr>
<td>Sao Tome and Principe</td>
<td>6.4</td>
<td>5.3</td>
<td>8</td>
</tr>
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<td>Uganda</td>
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<td>3.0</td>
<td>4</td>
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<td><strong>TOTAL Group 3</strong></td>
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<td>5.3</td>
<td>5</td>
</tr>
<tr>
<td>South Africa</td>
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<td>2</td>
<td>21</td>
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<tr>
<td><strong>Group 4</strong></td>
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<td></td>
</tr>
<tr>
<td>Zimbabwe</td>
<td>0.8</td>
<td>-0.8</td>
<td>-33</td>
</tr>
<tr>
<td>Sudan</td>
<td>2.7</td>
<td>2.3</td>
<td>4</td>
</tr>
<tr>
<td>Mauritius</td>
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<tr>
<td>Mali</td>
<td>2.6</td>
<td>1.9</td>
<td>11</td>
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<tr>
<td>Burkina Faso</td>
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<td>3.1</td>
<td>10</td>
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<tr>
<td><strong>TOTAL Group 4</strong></td>
<td>2.4</td>
<td>1.4</td>
<td>1</td>
</tr>
<tr>
<td>Nigeria</td>
<td>3.3</td>
<td>1.4</td>
<td>1</td>
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</table>
### Building a case for public support

<table>
<thead>
<tr>
<th>Countries</th>
<th>Annual rate of growth of cereal production</th>
<th>% of net imports in consumption (including food aid) in supply</th>
<th>Share of food aid in consumption</th>
</tr>
</thead>
<tbody>
<tr>
<td>Group 5</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Madagascar</td>
<td>1.3</td>
<td>0.8</td>
<td>9</td>
</tr>
<tr>
<td>Senegal</td>
<td>1.3</td>
<td>-0.6</td>
<td>43</td>
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<tr>
<td>Zambia</td>
<td>0.6</td>
<td>-2.9</td>
<td>16</td>
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<tr>
<td>Gambia</td>
<td>1.8</td>
<td>5.5</td>
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<td>Swaziland</td>
<td>1.9</td>
<td>0.3</td>
<td>57</td>
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<td>0.3</td>
<td>8</td>
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<td>Sierra Leone</td>
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<td>-7.1</td>
<td>19</td>
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<td>Botswana</td>
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<td>-6.5</td>
<td>63</td>
</tr>
<tr>
<td>TOTAL Group 5</td>
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<td>-0.8</td>
<td>27</td>
</tr>
<tr>
<td>United Republic Of Tanzania</td>
<td>4.2</td>
<td>1.3</td>
<td>11</td>
</tr>
<tr>
<td>Group 6</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Eritrea**</td>
<td>-</td>
<td>1.1</td>
<td>-</td>
</tr>
<tr>
<td>Liberia</td>
<td>-0.5</td>
<td>4.6</td>
<td>33</td>
</tr>
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<td>Comoros</td>
<td>1.3</td>
<td>0.6</td>
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<td>Burundi</td>
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<tr>
<td>Democratic Republic of the Congo</td>
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<td>42</td>
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<tr>
<td>TOTAL Group 6</td>
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<td>0.5</td>
<td>42</td>
</tr>
</tbody>
</table>

*Some data only available after 1992
**Only after 1992

**Sources:** FAOSTAT, FAO/SOFI, World Bank, UNAIDS
### Appendix 4.1: Share of agriculture in total GDP (%)*

<table>
<thead>
<tr>
<th>Average Period</th>
<th>Less than 20%</th>
<th>20-39.99%</th>
<th>40% and above</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>(9 Countries)</td>
<td>(23 Countries)</td>
<td>(6 Countries)</td>
</tr>
<tr>
<td></td>
<td>(16 Countries)</td>
<td>(17 Countries)</td>
<td>(13 Countries)</td>
</tr>
</tbody>
</table>

*Source: World Bank, African Development Indicators 2004*

*Some countries are missing (no data) especially in the earlier period*
# Appendix 4.2: Performance of agriculture: growth rate of agricultural GDP

<table>
<thead>
<tr>
<th>Period</th>
<th>&gt;5.00%</th>
<th>3.00-5%</th>
<th>1.00-3%</th>
<th>&lt;1.00%</th>
</tr>
</thead>
</table>


*Some countries are missing (no data) especially in the earlier period.*
## Appendix 4.3: Growth of agricultural export in SSA countries by period

<table>
<thead>
<tr>
<th>Period</th>
<th>More than 3%</th>
<th>From 3 to 2%</th>
<th>From 1 to 2%</th>
<th>Less 1%</th>
</tr>
</thead>
<tbody>
<tr>
<td>(12 Countries)</td>
<td>(9 Countries)</td>
<td>(10 Countries)</td>
<td>(11 Countries)</td>
<td></td>
</tr>
<tr>
<td>1975-84</td>
<td>Lesotho, Côte d’Ivoire, Togo, Swaziland, Gabon, Malawi, Mali, Djibouti</td>
<td>Kenya, Sudan</td>
<td>Angola, Mozambique, Senegal, Rwanda, Tanzania, Comoros, Ghana, Sierra Leone, Nigeria, Burkina Faso, Gambia, Burundi, Madagascar, Zimbabwe, Seychelles</td>
<td>Congo, Dem Republic of, Sao Tome and Principe, Central African Republic, Ethiopia, Uganda, Mauritania, Benin, Somalia, Namibia, Cameroon, Niger, Chad, Mauritius, Guinea, Botswana, Guinea-Bissau, Congo, Republic of</td>
</tr>
<tr>
<td>(8 countries)</td>
<td>(2 countries)</td>
<td>(15 Countries)</td>
<td>(17 Countries)</td>
<td></td>
</tr>
<tr>
<td>(10 Countries)</td>
<td>(4 Countries)</td>
<td>(14 Countries)</td>
<td>(14 Countries)</td>
<td></td>
</tr>
<tr>
<td>(11 countries)</td>
<td>(5 countries)</td>
<td>(13 countries)</td>
<td>(12 countries)</td>
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</tr>
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</table>

Source: FAOSTAT data 2005
### Appendix 4.4: Performance of the cereal subsector (average annual growth rate %)

<table>
<thead>
<tr>
<th>Period</th>
<th>More than 3%</th>
<th>From 3 to 2%</th>
<th>From 1 to 2%</th>
<th>Less than 1%</th>
</tr>
</thead>
</table>

Source: FAOSTAT data, 2005
Appendix 4.5: Maize production per capita in seven SSA countries
## Appendix 4.6: Export of major cash crops

<table>
<thead>
<tr>
<th>Year</th>
<th>Coffee and Cof. Extracts</th>
<th>Total Cocoa and Coc. Extracts</th>
<th>Total Tea and Tea Extracts</th>
<th>Total Sugar</th>
<th>Textile Fibres - Ex26</th>
<th>Tobacco</th>
</tr>
</thead>
<tbody>
<tr>
<td>1960-69</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1970-79</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1980-89</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1990-99</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2000-MR</td>
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</table>

*Note: The diagram shows the export value of major cash crops over different years.*
## POLICY ASSISTANCE SERIES

<p>| | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
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</thead>
</table>
| **1/1** (RAP 2006/04) | FAO Regional Office for Asia and the Pacific | Rapid growth of selected Asian Economies – Lessons and implications for agriculture and food security  
*Synthesis report* |
| **1/2** (RAP 2006/05) | FAO Regional Office for Asia and the Pacific | Rapid growth of selected Asian Economies – Lessons and implications for agriculture and food security  
*China and India* |
| **1/3** (RAP 2006/06) | FAO Regional Office for Asia and the Pacific | Rapid growth of selected Asian Economies – Lessons and implications for agriculture and food security  
*Republic of Korea, Thailand and Viet Nam* |
| **2** | FAO Subregional Office for Southern and East Africa | Food security and agricultural development in sub-Saharan Africa - Building a case for public support  
*Main Report* |
This publication contains the main report of a study championing the case for increased public support to agricultural and food security in sub-Saharan Africa (SSA). It advances four main reasons why agriculture in SSA deserves more public support.

The first is a moral imperative. SSA governments cannot and should not ignore a sector on which about 70 percent of their population directly depend for their livelihoods if they are serious about their commitment to MDG1.

Second, in spite of its generally poor performance, SSA countries do not have any realistic strategic option that they can rely upon for achieving sustainable economic development other than agriculture.

Third, there is evidence from a number of SSA countries that appropriate policies and direct public sector investment have combined to trigger agriculture sector-led economic growth. This publication argues for countries to build on their success stories and for others to explore such opportunities, taking into account their specific environmental, economic and social conditions.

Fourth, on average, agriculture in SSA has generally performed better than most other sectors, except in countries endowed with mineral resources.