



Final Draft

Comprehensive African Agriculture Development Programme (CAADP)

Pillar III

Framework for African Food Security (FAFS)

March 2008

Foreword

TO BE ADDED

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The Framework for African Food Security

Executive Summary

In most parts of the world, rates of hunger and malnutrition have fallen significantly in recent years, but those in Africa have shown little improvement. Africa has the highest proportion (one-third) of people suffering from chronic hunger. Hunger in sub-Saharan Africa is as persistent as it is widespread. Between 1990–92 and 2001–03, the number of undernourished people increased from 169 million to 206 million, and only 15 of the 39 countries for which data are reported reduced the number of undernourished. Efforts to reduce hunger in the region have been hampered by a range of natural and human-induced disasters, including conflicts and the spread of HIV/AIDS. Widespread hunger and malnutrition in Africa determine and reflect deep poverty in the region. 298 million Africans (31 percent of the continent's population) currently live on less than \$1 per day. In 1990, this figure stood at 241 million, 19 percent of the world's total.

Almost two-thirds of Africa's population is rural and thus directly or indirectly dependent on agriculture for employment and sustenance. Sustained growth in agriculture is therefore crucial to cutting hunger and poverty in the region. Indeed, recent increases in overall GDP growth rates in Africa track similar increases in agricultural GDP growth rates.

The Comprehensive Africa Agriculture Development Programme (CAADP)

The Comprehensive Africa Agriculture Development Programme (CAADP) has been endorsed by African Heads of State and Governments as a vision for the restoration of agricultural growth, food security, and rural development in Africa. A specific goal of CAADP is to attain an average annual growth rate of 6 percent in agriculture. To achieve this goal, CAADP aims to stimulate *agriculture-led development that eliminates hunger and reduces poverty and food insecurity*. More specifically, the NEPAD vision for Africa holds that, by 2015, Africa should:

- Attain food security;
- Improve agricultural productivity to attain a 6 percent annual growth rate;
- Develop dynamic regional and sub-regional agricultural markets;
- Integrate farmers into a market economy; and
- Achieve a more equitable distribution of wealth.

CAADP is a strategic framework to guide country development efforts and partnerships in the agricultural sector. Similar to the broader NEPAD agenda, it embodies the principles of peer review and dialogue, which, when adequately followed and applied, will stimulate and broaden the adoption of best practices, facilitate benchmarking and mutual learning and, ultimately, raise the quality and consistency of country policies and strategies in the agricultural sector.

CAADP directs investment to four mutually reinforcing and interlinked pillars:

- *Pillar I:* Extending the area under sustainable land management and reliable water control systems;
- *Pillar II:* Improving rural infrastructure and trade-related capacities for market access;
- *Pillar III:* Increasing food supply, reducing hunger and improving responses to food emergency crises; and
- *Pillar IV:* Improving agriculture research, technology dissemination and adoption.

CAADP Pillar III

CAADP Pillar III focuses on the chronically food insecure, and on populations vulnerable to and affected by various crises and emergencies in order to ensure that the CAADP agenda simultaneously achieves the agricultural growth agenda and Millennium Development Goal targets for addressing poverty and hunger (MDG 1 aims to cut extreme poverty and hunger in half by 2015). CAADP Pillar III focus draws together the central elements of the CAADP vision to ensure that growing agricultural productivity, well-integrated markets and expanded purchasing power of vulnerable groups combine to eradicate hunger, malnutrition and poverty. The pillar focus necessarily intersects with the other three CAADP pillars.

Pillar III ascribes to CAADP principles and promotes the specific pillar principles in the box that follows.

CAADP Pillar III Principles

- Principle 1: Protect the right to food for all citizens of Africa.
- Principle 2: Focus on the chronically hungry and malnourished, particularly women and children, in order to address short term crises and in the long term integrate them into broad agricultural development.
- Principle 3: Ensure that all parties and players automatically seek to understand and address hunger and malnutrition.
- Principle 4: Mainstream considerations of human diseases such as HIV/AIDS, malaria and TB.
- Principle 5: Ensure that emergency responses promote growth and reduce chronic hunger (i.e. do no harm to the overall CAADP Agenda).
- Principle 6: Protect and promote the resilience of the livelihoods of the vulnerable.
- Principle 7: Ensure that gender dimensions of hunger and malnutrition are addressed.
- Principle 8: Promote intra-regional trade, particularly in food staples to raise food supply, food quality and moderate price volatility.
- Principle 9: Integrate regular review and broad-based dialogue to ensure successful implementation of this Pillar.
- Principle 10: Be in coherence with the MDGs, especially MDG1 to cut extreme poverty and hunger.
- Principle 11: Integrate lessons from success stories in cutting hunger and malnutrition.

This document, the CAADP Framework for African Food Security (FAFS), brings structure and congruence to this effort to articulate an actionable food security agenda for Africa.

The Framework for African Food Security (FAFS)

The purpose of the FAFS is to guide and assist stakeholders in Africa to simultaneously meet the objectives of CAADP Pillar III and the broader African development agenda. The food security challenges addressed in the FAFS are threefold: (1) inadequate food supply, (2) widespread and persistent hunger and malnutrition, and (3) inadequate management of food crises. The FAFS aims to provide principles, recommended actions, coordination, peer review, and tools to guide national and regional policies, strategies, investments, partner contributions, and advocacy efforts to overcome these challenges, leading to increased food supply, reduced hunger and malnutrition, and improved food security risk management.

The FAFS recognizes previous AU/NEPAD work and pulls together previous key AU/NEPAD priorities, efforts and documents across sectors to address the challenges of improving food security in Africa. By addressing the multi-dimensional problem of food insecurity with multi-dimensional solutions, the FAFS creates an opportunity to generate a cycle of reinforcing benefits that will ameliorate the devastating impacts of food insecurity in Africa. The FAFS represents the first concerted attempt to build continent-wide consensus on the challenges and opportunities facing Africa in its efforts to reduce the food insecurity that plagues millions of its citizens and proposes interventions and systems for coordinated and integrated action within the CAADP implementation processes. The process used to develop the FAFS has been evidence-based, inclusive, and participatory. The FAFS therefore provides answers not only to the question of “what” needs to be done to increase food security in Africa, but also to “how” this might be done.

Food Insecurity Challenges in Africa

CAADP Pillar III focuses on three dimensions of food insecurity in Africa: inadequate food supply, widespread hunger and malnutrition, and food crises borne of a range of natural and man-made risks and hazards. The pillar recognizes that some of the solutions to addressing hunger and malnutrition may lie outside of direct agricultural interventions and that not all households will attain food security through agricultural production but that widespread agricultural growth depends on active and healthy people and that agricultural growth has widespread indirect benefits. However, any non-agricultural intervention or programme should not undermine the agricultural growth agenda.

Challenges Related to Inadequate Food Supply

Food supply in Africa is inadequate and erratic. African population growth rates are the highest in the world. With low agricultural productivity and rapid population growth, Africa is the only region of the world where per capita food production has fallen over the past 45 years. Cereal yields have stagnated for the past 45 years and currently average less than one ton per hectare. Livestock have always been a key element in African agriculture and household investment. However, livestock production and pastoral livelihoods in Africa face multiple threats related to trans-boundary disease, water shortages and climate change among others related to trade barriers and phytosanitary issues. Per capita fish consumption in Africa is likely to decline due to population pressure, despite increasing international trade.

The value of agricultural output per worker in Africa has stagnated. In 2003, the average African farm worker produced \$520 in farm output, compared to \$670 in Asia and \$4,100 in Latin America. Low on-farm productivity thus translates into low incomes, low purchasing

power, and lower incentives and capacities for investment in productivity growth. Low agricultural productivity also contributes to high food prices. Low asset endowments of small farmers combine with endemic livestock diseases to limit animal production, productivity, and traction. Pastoralists in semi-arid and arid lowland regions are relatively asset-rich in livestock but remain highly vulnerable. The direct consumption of livestock products – particularly milk – can comprise more than half of daily food energy needs. Milk is a particularly important food for children and women in these communities but milk supply is affected by livestock diseases and increasing rainfall variability. In these regions, there are limited livelihoods options other than livestock rearing.

Challenges Related to Hunger and Malnutrition

Stunting rates in Africa declined by less than 4 percentage points between 1980 and 2000. With population growth, the actual number of stunted children actually increased by more than 12 million. Both relative and absolute numbers of underweight children in Africa increased over the same period. These trends reflect challenges related to food access and food utilization. A key determinant of food access is the structure and functioning of food markets. Efficient markets emerge where demand is vibrant and sustained. Almost half of Africa's population lives on less than US \$1 per day. This implies a general inability to effectively express demand for food from market sources. Wages in Africa are generally low, especially for unskilled labor, and especially in agriculture. Large segments of populations are therefore unable to meet their food needs from market sources. Proper food utilization requires that an individual be able to consume diversified, properly prepared, safe foods and effectively absorb the energy and nutrients in the foods consumed. Nutrition status is determined by biological utilization of food by the body—a process that is itself determined by the health status of the individual. Diseases such as diarrhea, respiratory conditions, measles, malaria and HIV/AIDS thus interfere with proper food utilization. For proper food utilization, individuals must also have reliable access to health services, have sound food storage practices, live in sanitary environments with access to potable water, and, for children especially, be provided with knowledgeable care. Access to health, water, and improved food storage and good sanitation facilities is typically low and a seasonal fluctuation in food supply leads to cycles of inadequate intakes that affect children's growth in particular.

Challenges Related to Food Crisis Management

Extreme weather events such as droughts and floods (that are increasing in frequency and impact under global climate change), a range of pests, and communicable human and animal diseases often undermine fragile livelihoods and pose direct threats to food security in Africa. Climate change is likely to create additional challenges and threats to a range of production systems in future. So, too, do a range of disruptions borne of social and political strife, most notably the several civil conflicts raging across the continent. Food crises occur when these various hazards and disruptions encounter deeply-rooted vulnerability. Food crises can be prevented, or their effects significantly muted, if underlying vulnerabilities are confronted and addressed. However, few African countries possess the required physical, human, institutional, and financial capacities to do so. The capacity gaps that constrain adequate crisis prevention and preparedness also limit the depth and breadth of effective action *during* crises. The principal challenges during food emergencies center on coordination, logistics, and information management. National governments are not always able to take the lead in setting the broad framework for emergency response, or in prioritizing intervention modalities and locations. International agencies often face difficulties in translating commitments of support into concrete support and action on the ground. NGOs typically operate in tightly defined locations and are thus limited in their abilities to serve as focal points for broad-based

coordination, logistics, and information management. Many African countries are signatories to the Hyogo Framework for Action on Disaster Reduction, but few have taken the steps to implement the recommendations set out in the Framework.

Strategic Responses to Food Insecurity

Responses to these challenges will necessarily vary widely by country and region within Africa, depending on social, political, economic, and biophysical realities. A basic premise in the FAFS is that strategic priorities for reducing food insecurity are likely to be less divergent. Further, the FAFS proposes that the range of available scalable and replicable intervention options is likely to be fairly stable across countries and regions. It is useful to consider three types of responses under each of the three Pillar III action areas (increasing food supply, reducing hunger and malnutrition, and improving risk management): (1) *immediate* responses that yield impacts within 1-2 years; (2) *medium term* responses that generate impacts within 3-5 years; and (3) *long term* responses that produce impacts within 6-10 years. The framework lists specific immediate, medium and long term responses appropriate to the African growth agenda as recommended responses that countries and regions could consider as part of their total intervention and investment strategy.

Using the FAFS

The FAFS is intended to provide sound guidance on the overall direction in which all policy, strategies and actions might best address chronic hunger and malnutrition; bring vulnerable groups into mainstream agricultural growth and complement the priorities of the other CAADP Pillars. The FAFS is intended to provide an easy reference resource for countries and regions to apply principles and priorities to ongoing and future interventions and investments to ensure the simultaneous achievement of agricultural growth and reduction in food and nutrition insecurity. The FAFS is also intended as an advocacy tool that can offer leaders increased access to political, technical, methodological and financial support for their food security-related policies, plans and institutions. Further work is required to develop and test common tools for use in regions and countries for stock taking, assessment, scenario testing and monitoring and evaluation of strategies.

Monitoring Food Security Situations and Progress toward Pillar III Goals

Progress toward Pillar III's objectives must be objectively monitored and evaluated. Not only is it important to co-ordinate monitoring and evaluation across regions and countries to provide comparative measures and know where the hunger hot-spots are, such exercises are also crucial to realization of CAADP's peer review elements. Monitoring and evaluating Pillar III's objectives means tracking Africa's success in increasing food supply, reducing hunger and malnutrition, and improving the effectiveness of responses to food crises. Recommended indicators for monitoring and evaluating Pillar III are provided.

Co-ordination for Implementation, Monitoring, Evaluation and Peer Review

Food security and nutrition are seldom integrated into national development agendas. Responsibilities for these issues within the public sector are typically unclear. Resources for

programs to improve food security and nutrition are often insufficient. Budget constraints result in shortfalls in material supplies, trained workers, training and supervision, and in monitoring and evaluation. Moreover, there is little co-ordination of action and use of resources among agencies. With no clear responsibilities established on food security and, especially, nutrition issues, conflict rather than co-operation is likely to characterize the relationships between agencies and sectors of government. Coordination of food security and nutrition activities is therefore crucial for both implementation of Pillar III policies and programs, and for monitoring and evaluation of outcomes.

Coordination Model for FAFS Implementation

The country-level CAADP implementation process is primarily one of aligning national agricultural sector policies, strategies, and investment programs with the CAADP principles and targets, in particular the 6 percent growth rate and 10 percent public expenditure share for the sector. The CAADP process must build on ongoing country efforts and be led by national governments, with the necessary support from the Regional Economic Communities and the NEPAD Secretariat. In line with the NEPAD principles of ownership and accountability, the country CAADP process is initiated on a demand-driven basis, through consultation between RECs and their member countries. Country Round Tables (CRTs) and Regional Round Tables (RRTs) are the loci for these consultations. Resulting from these CRTs and RRTs are National Compacts comprising high-level agreements between governments, regional representatives, civil society, technical partners and development partners for a focused implementation of CAADP within the respective country. The compacts detail priority projects, programs and investment strategies that the various partners can support. Compacts include defined actions, commitments, partnerships and alliances and guide country policy and investment responses, planning of development assistance, public-private partnerships, and business-to-business alliances to raise and sustain the necessary investments.

A model for coordinating Pillar III policies and programs that are designed, implemented, monitored, and evaluated based on the FAFS is proposed. To ensure that FAFS policies and strategies have the necessary political authority to facilitate interactive action, coordinating bodies are required at national, regional and continental levels. To ensure this authority, National Coordinating Platforms (NCPs) should be created and located in a non-line Ministry with enough authority to move the Pillar III agenda forward. Ministries of Finance and Development, and Offices of the President or Prime Minister are possibilities. However, the choice of the government units within which NCPs will be located is left to countries. This national platform will be made up of various Ministries (Agriculture, Health, Welfare, Social Services, Trade, Foreign Affairs, etc.), in-country Technical Working Groups, Parastatals, Technical Agencies, Civil Society, Development Partners and Private Sector representation. Its main aim will be provide strategic national leadership and coordination for the monitoring, evaluation, planning, implementation and reporting of policy and interventions around food security. The NCP could be replicated at different levels of government, down to the local levels, as appropriate and feasible.

Regional Coordinating Platforms (RCPs) should be created and situated in RECs, reporting to the AU/NEPAD Secretariat. RCPs should provide the same analysis, evaluation, monitoring, planning and reporting elements as do the NCPs, but at regional level. This structure includes representatives from countries, the REC, technical agencies, civil society, development partners, sub-regional research organizations (SROs) and the private sector. The RCP plays an additional role in reporting and advocating for Pillar III related activities and policies in various other forums, such as the REC Parliamentary Forums and the Pan African Parliament.

The Regional Strategy Analysis and Knowledge Support Systems (ReSAKSS), will work with the regional and national agencies to facilitate access by the RECs and their member states to policy-relevant analyses of the highest quality in order to generate the necessary knowledge to improve policy making, track progress, document success and derive lessons that can feed into the review and learning processes associated with the implementation of the CAADP agenda. They operate under co-ordination and governance structures chaired by the RECs. NEPAD will encourage RCPs, NCPs and local coordinating platforms to draw upon ReSAKSS for information management support, data analysis and dissemination that could strengthen coordination and planning of activities, budgets and reporting.

Scaling up Food Security Investments in Africa

Africa's leaders recently committed the AUC, NEPAD, and RECS to establish criteria for identifying African successes that rely primarily on Africa's own resources and promote measures for their replication, adaptation and up-scaling. Identifying scalable food security enhancing interventions for an area as large and diverse as Africa is extremely challenging. Judicious simplification is required. One approach to such simplification involves gaining a quantitative appreciation of patterns of food insecurity across the continent. Such patterns likely derive partly from climatic factors, partly from underlying biophysical conditions in agricultural sectors, and partly from policy and institutional factors (including 'chronic conflict' situations in the Horn of Africa). Visualizing similarities and differences in agriculture across the region is a powerful first step toward focusing attention on areas and issues that cross national borders. The ReSAKSS is ideally suited to serve such a purpose.

The FAFS recommends that analysis be undertaken by the ReSAKSS, in collaboration with lead institutions, SROs, and NARS, to disaggregate Africa into geographical units (possibly termed "food security domains") in which similar food security problems or opportunities are likely to occur. Such "food security domains" would permit consideration of the following issues: Where are those geographic areas within and across African countries in which food security problems and opportunities are likely to be most similar? Where will specific types of food security policies, investments, and livelihood options likely be most effective? Given successful food security-enhancement in one location, where else do similar conditions obtain? What is the potential for targeted replication (scaling up) of successes to these similar areas?

The ReSAKSS will work with AU/NEPAD Centers of Excellence, to build national capacities to undertake the analysis required to develop and analyze food security domains. The CRTs and RRTs will provide forums for discussion and resource mobilization based on recommendations emerging from the analysis of prospects for up-scaling successes and best practices. A network of support institutions will be established drawing from the SROs, NARS, academic institutions and local experts.

The Framework for African Food Security

1 Introduction

In most parts of the world, rates of hunger and malnutrition have fallen significantly in recent years, but those in Africa have shown little improvement (IFPRI, 2007). Africa has the highest proportion (one-third) of people suffering from chronic hunger (FAO, 2006). Hunger in sub-Saharan Africa is as persistent as it is widespread. Between 1990–92 and 2001–03, the number of undernourished people increased from 169 million to 206 million, and only 15 of the 39 countries for which data are reported reduced the number of undernourished (FAO, 2006). Efforts to reduce hunger in the region have been hampered by a range of natural and human-induced disasters, including conflicts and the spread of HIV/AIDS. Widespread hunger and malnutrition in Africa determine and reflect deep poverty in the region. Currently 298 million Africans (31 percent of the continent's population) live on less than \$1 per day; in 1990, this figure stood at 241 million, 19 percent of the total (IFPRI, 2007).

Almost two-thirds of Africa's population is rural and thus directly or indirectly dependent on agriculture for food, employment, and income (FAOSTAT, 2006). Sustained growth in agriculture is therefore crucial to cutting hunger and poverty in the region. Indeed, recent increases in overall GDP growth rates in Africa track similar increases in agricultural GDP growth rates (IMF, 2007; World Bank, 2007).

1.1 The Comprehensive Africa Agriculture Development Programme (CAADP)

The Comprehensive Africa Agriculture Development Programme (CAADP) has been endorsed by African Heads of State and Governments as a vision for the restoration of agricultural growth, food security, and rural development in Africa (NEPAD, 2003). A specific goal of CAADP is to attain an average annual growth rate of 6 percent in agriculture. To achieve this goal, CAADP aims to stimulate *agriculture-led development that eliminates hunger and reduces poverty and food insecurity*. More specifically, the NEPAD vision for Africa holds that, by 2015, Africa should:

- Attain food security;
- Improve agricultural productivity to attain a 6 percent annual growth rate;
- Develop dynamic regional and sub-regional agricultural markets;
- Integrate farmers and pastoralists into a market economy; and
- Achieve a more equitable distribution of wealth.

CAADP is a strategic framework to guide country development efforts and partnerships in the agricultural sector. Similar to the broader NEPAD agenda, it embodies the principles of peer review and dialogue, which, when adequately followed and applied, will stimulate and broaden the adoption of best practices, facilitate benchmarking and mutual learning and, ultimately, raise the quality and consistency of country policies and strategies in the agricultural sector.

CAADP directs investment to the following four mutually reinforcing pillars, adhering to its seven principles and targets (Box 1):

- *Pillar I:* Extending the area under sustainable land management and reliable water control systems;
- *Pillar II:* Improving rural infrastructure and trade-related capacities for market access;
- *Pillar III:* Increasing food supply, reducing hunger and improving responses to food emergency crises; and
- *Pillar IV:* Improving agriculture research, technology dissemination and adoption.

Box 1: CAADP Principles and Targets

- Principle 1: Designating agriculture-led growth as a main strategy to achieve the Millennium Development Goal of halving the proportion of people living on less than a dollar a day (MDG1).
- Principle 2: Pursuing a 6 percent average annual sector growth rate at the national level.
- Principle 3: Allocating 10 percent of national budgets to the agricultural sector.
- Principle 4: Exploiting regional complementarities and co-operation to boost growth.
- Principle 5: Adopting the principles of policy efficiency, dialogue, review and accountability, shared by all NEPAD programmes.
- Principle 6: Strengthening and expanding partnerships and alliances to include farmers, agribusiness and civil society communities.
- Principle 7: Assigning programme implementation to individual countries, co-ordination to designated Regional Economic Communities (RECs), and facilitation to the NEPAD Secretariat.

Agricultural growth is at the centre of the CAADP agenda. Agricultural growth benefits both rural and urban populations by providing more food and raw materials at lower prices; providing capital and labor for development; and reducing poverty by increasing labor productivity and employment in rural areas. Agricultural growth is effective in reducing poverty and has been shown to have a stronger effect on poverty reduction than other sectors of the economy (Bresciani and Valdes, 2007; World Bank, 2007; Hendriks and Lyne, 2003; Delgado et al., 1998). However, even in Asia, where the Green Revolution of the 1970s drove substantial improvements in overall development and substantially reduced hunger and malnutrition, it is clear that economic growth alone is not sufficient to eliminate hunger (Task Force on Hunger, 2005).

The hungry and malnourished tend to be located primarily in agricultural areas. Hunger and malnutrition are more acute among the landless, pastoralists, smallholders and hired agricultural workers (Southgate et al., 2007). Many such populations do not have access to improved technologies and are beyond the reach of markets (the focus of CAADP Pillars I and II). Narrow livelihood options render many such populations vulnerable to various shocks. In addition, the poor and hungry often face social and political exclusion and are not able to demand their rights with regard to food and entitlements. It is well known that women and children make up the majority of those who are poor and hungry. They are the most prone to the life-threatening effects of hunger and malnutrition. It is therefore crucial that the growth agenda includes a special focus on those who may not be the immediate beneficiaries of agricultural growth but whose immediate needs to address hunger and malnutrition require

urgent and immediate attention and assistance. In addition, a sustainable growth agenda must ensure that the marginalized are the ultimate beneficiaries of growth and are not further marginalized by rapid development. Addressing hunger and malnutrition in Africa is crucial to attaining the Millennium Development and CAADP targets, especially in terms of attaining and maintaining a 6 percent annual growth rate through increased productivity. This is the basic rationale for CAADP Pillar III that seeks to identify ways to achieve reductions in hunger and malnutrition through or in the context of agricultural growth.

1.2 CAADP Pillar III

CAADP Pillar III focuses on the chronically food insecure, and on populations vulnerable to and affected by various crises and emergencies in order to ensure that the CAADP agenda simultaneously achieves the agricultural growth agenda and Millennium Development Goal targets for addressing poverty and hunger (MDG 1 aims to cut extreme poverty and hunger in half by 2015). CAADP Pillar III focus draws together the central elements of the CAADP vision to ensure that growing agricultural productivity, well-integrated markets and expanded purchasing power of vulnerable groups combine to eradicate hunger, malnutrition and poverty. The pillar focus necessarily intersects with the other three CAADP pillars.

Pillar III recognizes three key imperatives for enhancing food security on the continent:

First, *improved agricultural productivity* is necessary to achieve CAADP's poverty reduction and food output targets, while at the same time reducing production costs and food prices for the poor. Key components of this effort include: new technologies, better application and delivery of existing technologies (linked to Pillar IV) and improved farm incentives, driven by investments in infrastructure and rationalization of trade and marketing policies (link to Pillar II), and expanded farmer capacity to respond to improved incentives through greater access to productive assets, including fertile soils, reliable water, improved access to veterinary services, and finance, and a healthy, well-educated human workforce (linked to Pillar I).

Second, improved purchasing power of the poor hinges on broad-based economic growth. In the short run, particularly during food emergencies, safety nets are crucial. Yet in order to maintain compatibility with long-term poverty reduction efforts, emergency responses must include ways to facilitate asset accumulation, and to strengthen productivity and production incentives.

Third, fluid food distribution networks are necessary to channel farm surpluses to deficit households and zones (linked to Pillar II). In addition to widely publicized hunger hot spots, Africa is endowed with a broad range of surplus production zones. Often these food security-enhancing hot spots emerge in regions with good water management or where substitution possibilities among multiple food staples permit flexible supply responses. Yet national boundaries, wide rivers and man-made impediments such as tariffs and export restrictions cut across natural market sheds, impeding the free-flow of food from surplus to deficit zones. Poor infrastructure, lack of appropriate storage, lack of harmonized grades and standards and cumbersome border procedures further restrain trade (linked to Pillar II). Lack of adequate and efficient food reserves prevents effective and rapid mobilization of food stocks in emergencies.

In light of these imperatives, all Pillar III policies, strategies and activities should adhere to CAADP III principles, which reiterate and uphold various decisions and principles of the 2003

Maputo Summit, 2004 Sirte Summit, 2006 Abuja Fertilizer Summit; and 2006 Abuja Food Security Summit (Box 2).

Box 2: CAADP Pillar III Principles

- Principle 1: Protect the right to food for all citizens of Africa.
- Principle 2: Focus on the chronically hungry and malnourished, particularly women and children, in order to address short term crises and in the long term integrate them into broad agricultural development.
- Principle 3: Ensure that all parties and players automatically seek to understand and address hunger and malnutrition.
- Principle 4: Mainstream considerations of human diseases such as HIV/AIDS, malaria and TB.
- Principle 5: Ensure that emergency responses promote growth and reduce chronic hunger (i.e. do no harm to the overall CAADP Agenda).
- Principle 6: Protect and promote the resilience of the livelihoods of the vulnerable.
- Principle 7: Ensure that gender dimensions of hunger and malnutrition are addressed.
- Principle 8: Promote intra-regional trade, particularly in food staples to raise food supply, food quality and moderate price volatility.
- Principle 9: Integrate regular review and broad-based dialogue to ensure successful implementation of this Pillar.
- Principle 10: Be in coherence with the MDGs, especially MDG1 to cut extreme poverty and hunger.
- Principle 11: Integrate lessons from success stories in cutting hunger and malnutrition.

The elaboration of Pillar III Principles highlights the need to amend some CAADP Principles to reflect the true scope and nature of attaining food security on the continent and to reflect current thinking and policy changes since the drafting of the CAADP principles. While Pillar III ascribes to the CAADP principles, it is recommended that consideration be given to the following in the review of CAADP principles:

First, CAADP principles should more clearly articulate food security as a basic human right. Eradication of chronic hunger and effective emergency responses for vulnerable groups will address food rights in the short and long term. Encouraging the systematic integration of nutrition considerations in all government investments—especially in food security and agricultural interventions—would further the right not only to adequate diets, but also to quality diets for all.

Second, Pillar III principles focus on increasing staple cereals and legumes, livestock and fish production and inter-regional trade, with the aim of deepening regional integration of food markets to link surplus and deficit zones, and creating ‘food without borders’ to increase regional trade opportunities and rapid market-based regional responses to food emergencies. Please note that the term ‘food’ is used in this document to refer to crops, livestock and fish and includes recognition of the important role of indigenous foods.

Third, the AU/NEPAD Agriculture Expenditure Tracking System should include an evaluation of budgetary expenditure on food security. National food security coordinating agencies and

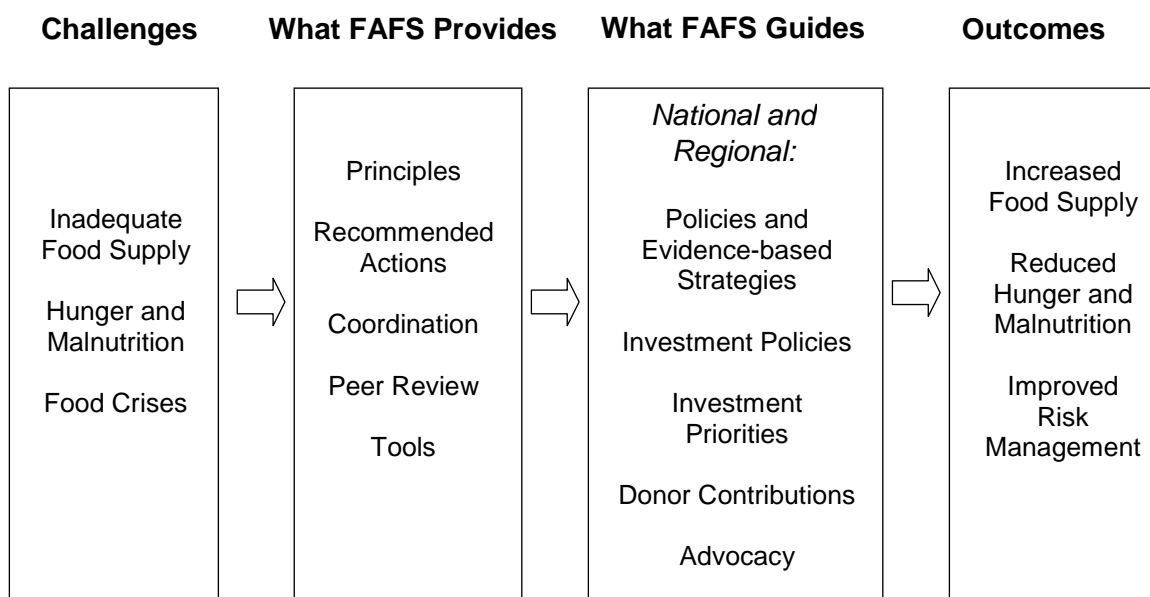
comprehensive functional national food security databases (that include nutrition information) should also be established as foundations for strong policy and program design, implementation, and evaluation.

This document, the CAADP Pillar III Framework for African Food Security (FAFS), brings structure and congruence to this effort to articulate an actionable food security agenda for Africa.

1.3 The Framework for African Food Security (FAFS)

The purpose of the FAFS is to guide and assist stakeholders in Africa to simultaneously meet the objectives of CAADP Pillar III and the broader African development agenda. The food security challenges addressed in the FAFS are threefold: (1) inadequate food supply, (2) widespread and persistent hunger and malnutrition, and (3) inadequate management of food crises. The FAFS aims to provide principles, recommended actions, coordination, peer review, and tools to guide national and regional policies, strategies, investments, partner contributions, and advocacy efforts to overcome these challenges, leading to increased food supply, reduced hunger and malnutrition, and improved food security risk management (Figure 1).

Figure 1: The Framework for African Food Security (FAFS)



The FAFS recognizes previous AU/NEPAD work and pulls together previous key AU/NEPAD priorities, efforts and documents across sectors to address the challenges of improving food security in Africa. Commitments reached at the Africa Food Security Summit are crucial to implement (AU, 2006). This document brings together commitments such as:

- The Pan-African Nutrition Initiative (PANI) that is dedicated to catalyzing multi-sectoral collaboration, facilitating capacity building, mobilizing resources and promoting the use of a Nutrition Lens to mainstream nutrition in investment planning to identify opportunities to

integrate nutrition initiatives across multiple sectors, define optimal nutrition inputs from each sector and review the potential impacts of proposed projects.

- The African Regional Nutrition Strategy (ARNS) for 2002-2015 that was endorsed by the AU Ministers of Health and represents a renewed commitment to the improvement of the nutrition situation in Africa and to the achievement of the MDGs.
- The African Ten Year Strategy (ATYS) that recognizes that focusing on food production and supply alone will not be enough to stem the rising tide of hunger and malnutrition in Africa. ATYS promotes a view that a coordinated approach is necessary to achieve significant reductions in micronutrient deficiencies.
- The AU protocol on African Women's Rights.
- AU Livingstone II Process for Social Protection.
- AU Child Survival Framework.

The FAFS therefore seeks to strengthen and harmonize existing efforts, and provide a platform for stakeholders to capitalize on synergies and complementarities. By addressing the multi-dimensional problem of food insecurity with multi-dimensional solutions, the FAFS creates an opportunity to generate a cycle of reinforcing benefits that will ameliorate the devastating impacts of food insecurity in Africa.

The framework that has guided development of the FAFS is shown in Figure 2.¹ An individual is food secure if she/he can reliably gain access to food in sufficient quantity and quality to enjoy a healthy and active life. Within households, the degree to which individuals have access to sufficient food may vary systematically owing to gender, age, or labor contribution criteria. Food security is therefore concerned with continuous and assured access to food. Food production does not ensure food security at household and individual levels. For urban households, sufficient income is typically required to acquire food in the market. For rural households, productive resources and accessible markets are required—cropland or livestock, together with sufficient labor and tools—as well as income to acquire that food they are unable to produce themselves.

Nutrition security explores individual requirements and inadequacies associated with utilization of food by individuals. A household achieves nutrition security when it has secure access to food coupled with a sanitary environment, adequate health services, and knowledgeable care to ensure a healthy life for all household members. Although the notion of nutrition security has received far less attention in the literature on hunger and economic development than has food security, it constitutes a critical component in any discussion about how renewed dynamism in African economies can be translated into general welfare improvements for the poor and undernourished (Benson, 2004).

Reliable access to food is also closely linked to notions of sustainability and vulnerability. When households are unable to acquire sufficient food using their regular means of access to food—for example, because of poor crop production or a loss of a source of income—they will employ a sequence of coping strategies to meet their food needs. With an extended shortfall in access, the nature of the coping strategies employed shifts from those that will have a relatively short-term impact on the future welfare and access to food of the household—reduction in food consumption levels, seeking piece work, and the like—to those that compromise the household's ability to regain the standard of living it had before the crisis. These coping strategies might include sale of land or other productive assets or withdrawing children from

¹ The description of this framework draws significantly from Benson (2004).

school to provide labor and income. Food security, then, incorporates the notion that a household must not have to sacrifice the long-term ability of its members to acquire sufficient food in order to meet current, short-term food needs.

The quality of the food to which an individual or household has access must also be considered. To enjoy a productive, healthy, and active life, all people require sufficient and balanced levels of carbohydrate, protein, fat, vitamins, and minerals in their diets. Households or individuals are not food secure if they face deficiencies or other imbalances in diet because they lack access to the necessary food for a balanced diet. Similarly, the health status of the individuals consuming the food must be considered.

The definition of food security used in the FAFS is therefore concerned with physical and economic access to food of sufficient quality and quantity. It is also concerned with the utilization of the food obtained by households and individuals. Malnutrition is the outcome of specific development problems related directly to the level of dietary intake and the health status of individuals. The availability of health services and a healthy environment and the quality of care the individual receives are therefore crucial. A sustained healthy and active life is possible only when these underlying determinants of the nutritional status of household members are of a sufficiently beneficial character.

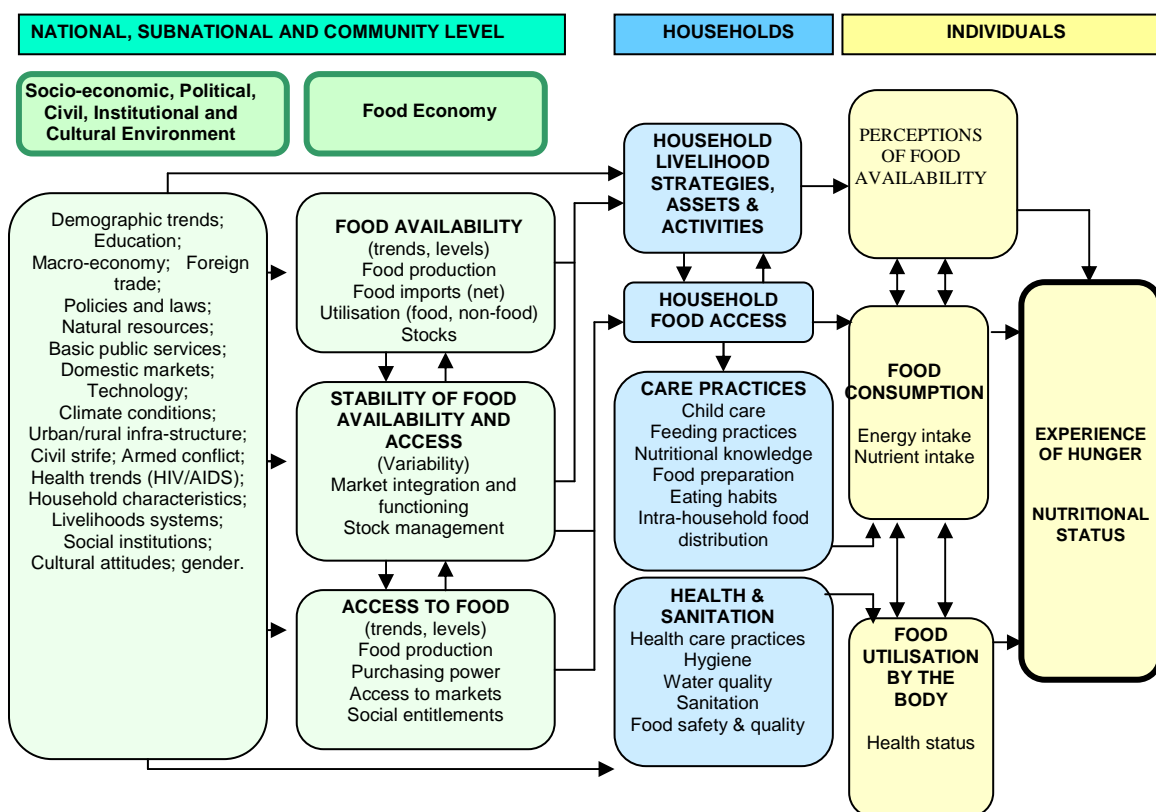


Figure 2: Food Security – A Multi-Dimensional, Multi-Sectoral Phenomenon
Sources: Adapted from UNICEF (1990), Jonsson (1993), Smith and Haddad (2000), Benson (2004).

This framework is neither novel nor controversial. Yet its implications for policy and program design and implementation have yet to be fully recognized and embraced by African governments and their development partners. The FAFS represents the first concerted attempt

to build continent-wide consensus on the challenges and opportunities facing Africa in its efforts to reduce the food insecurity that plagues millions of its citizens. The process used to develop the FAS has been evidence-based, inclusive, and participatory. The FAFS therefore provides answers not only to the question of “what” needs to be done to increase food security in Africa, but also to “how” this might be done.

The remainder of this document is organized as follows. Section 2 outlines the key food insecurity challenges in Africa, covering those related to inadequate food supply, hunger and malnutrition, and food crisis management. Section 3 sets out priority responses to these challenges. Section 4 outlines how FAFS can be used. Section 5 describes how progress on achieving Pillar III objectives can be monitored and evaluated using the FAFS. Section 6 details coordination structures and processes under the FAFS at national, regional, and continental levels. The final section discusses issues related to scaling up investments to combat food insecurity in Africa.

2 Food Insecurity Challenges in Africa

As explained in the previous section, CAADP Pillar III focuses on three dimensions of food insecurity in Africa as set out in Figure 1: inadequate food supply, widespread hunger and malnutrition, and food crises borne of a range of natural and man-made risks and hazards.

2.1 Challenges Related to Inadequate Food Supply

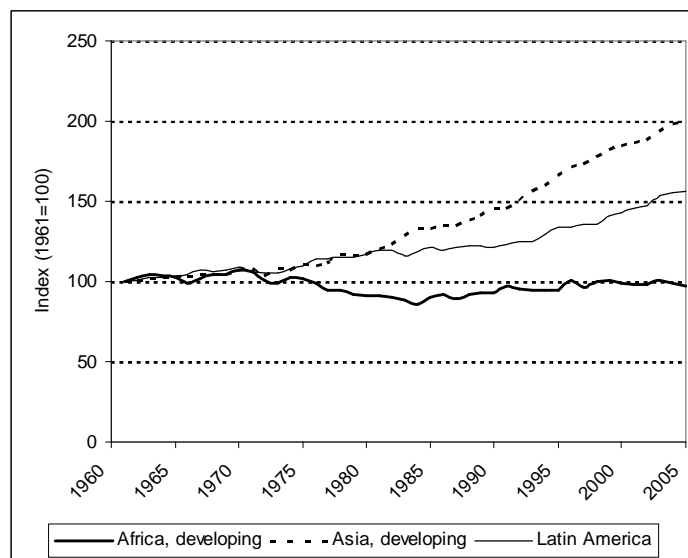
Food supply in Africa is inadequate, erratic and not growing at the required rate to meet growing demand (Figure 3). African population growth rates are the highest in the world. With low agricultural productivity and rapid population growth, Africa is the only region of the world where per capita food production has fallen over the past 45 years. Cereal yields have stagnated for the past 45 years and currently average less than one ton per hectare. Livestock have always been a key element in African agriculture and household investment. However, livestock production and pastoral livelihoods in Africa face multiple threats related to trans-boundary disease, water shortages and climate change among others related to trade barriers and phytosanitary issues. Per capita fish consumption in Africa is likely to decline due to population pressure despite increasing international trade.

The value of agricultural output per worker in Africa has stagnated. In 2003, the average African farm worker produced \$520 in farm output, compared to \$670 in Asia and \$4,100 in Latin America. Low on-farm productivity translates into low incomes, low purchasing power, and lower incentives and capacities for investment in productivity growth. Low agricultural productivity also contributes to high food prices. Low asset endowments of small farmers combine with endemic livestock diseases to limit animal production, productivity and traction (Scoones and Wolmer, 2006, Catley et al 2004), particularly in tsetse fly and trypanosomiasis infested portions of the continent. Large animals attain slaughter weight at advanced ages (3-5 years) and annual milk yields range between 600 and 1,500 liters. Small stock such as sheep, goats, and poultry have shorter production cycles but are also susceptible to diseases. The seasonality of production and availability of food leads to repeated cycles of inadequate intake that affects children’s growth in particular.

By contrast, pastoralists in semi-arid and arid lowland regions are relatively asset-rich in livestock but remain highly vulnerable. The direct consumption of livestock products – particularly milk – can comprise more than half of daily food energy needs. Milk is a particularly important food for children and women in these communities but milk supply is affected by livestock diseases and increasing rainfall variability. In these regions, there are limited livelihoods options other than livestock rearing. Despite increasing quantities of fish being traded in the world, annual per capita fish consumption in Africa is projected to decline from 6.7 to 6.6 kg by 2020, driven by increasing population and declining incomes.

Low agricultural productivity also contributes to high food prices. Dependence on rain-fed agriculture and pervasive trade barriers induce extreme price volatility. In the face of erratic production, thin markets, and frequent barriers to trade, seasonal price spreads of 50 percent are common. Food prices can easily vary by 100 percent from one year to the next.

Droughts, floods, pests, and civil strife disrupt food systems and exert additional pressures on the chronically poor. By reducing farm productivity and purchasing power of vulnerable groups below their already meager normal levels, these disruptions raise food prices and lower incomes, placing a double squeeze on poor households and leaving them vulnerable to descent into poverty traps. Food aid has become a quasi-permanent feature of Africa’s food system.



Source: FAOSTAT (2006)

Figure 3: Trends in per capita food production, by region.

Unlike in Asia, where irrigated rice and wheat dominate the productive landscape, African farming is highly diversified. In most locations, farmers rely heavily on human labor for land preparation, weeding, and harvesting. In the rain-fed production systems that dominate African agriculture, the timing of land preparation, planting and weeding is critical to crop yields and overall farm productivity. Seasonal labor bottlenecks constrain output in most areas.

Chemical fertilizers are expensive due to high fuel and transport costs in Africa. Given reliance on rain-fed cultivation, and the consequent lack of reliable water control, yield responses to fertilizer are low. High costs and low returns to fertilizer lead to extremely low levels of fertilizer use. On average, African farmers apply about 20 kg/hectare (9 kg/ha in sub-Saharan Africa) compared to 150 kg/ha in Asia and 90 kg/ha in Latin America (FAO, 2005).

This inadequate performance of African agriculture is linked to challenges related to (1) markets, (2) natural resource management, and (3) technology development and uptake. These issues are primarily addressed through CAADP Pillars I, II and IV. Climate change and the treats and opportunities presented by growing interest in bio-pharming and bio-fuels will affect agricultural production, trade and food security in Africa in future and future policy development will need to carefully consider the impact of these factors on food security in Africa. The sections below highlight related production and marketing elements that are pertinent to Pillar III.

2.1.1 Challenges related to markets

Domestic Markets

The supply chains that deliver food to Africa's 800 million consumers are composed of three key linked components: domestic production, food imports and internal distribution networks. Domestic grain production currently supplies 80 percent of African households' cereal consumption (FAO, 2005). But given the declining per capita production this share has been falling over time. Imports account for a growing share of African food supplies. On average, imports supply roughly 20 percent of African cereal consumption. Drought-prone countries may depend on imports for as much as 30 percent to 50 percent of their consumption requirements. Domestic marketing systems connect food surplus and deficit areas. Low population density, long distances, poor infrastructure and limited competition imply high marketing costs, which frequently account for over half of the final food costs (Omamo, 1998). High food prices result as much from marketing constraints as they do from low farm productivity. Further, vacillating policies affecting agricultural markets generate uncertainties that raise costs and discourage private sector investment in marketing systems (Jayne et al., 2002).

Regional Markets

Considerable cross-border trade occurs within Africa. Between 1996 and 2000, intra-African annual trade was estimated at \$2.5 billion. This figure grew to \$4.5 billion between 2001 and 2004, or 7.5 percent of total exports. Intra-African trade in agricultural products was also about twice the level of non-agricultural products during the same period for both exports and imports. However, much of this intra-African trade is informal, due to a range of government controls that limit cross-border exchange. Failure to allow regional trade in food staples not only limits the ability of markets to respond to food deficits in the short run, it risks stalling production growth and private investment in agriculture in the long run. In thin national markets without export outlets, production surges lead to price collapses, dampening incentives for long-term investment in agricultural growth.

International Markets

Africa was a net food exporter during the 1960s but now imports 20 percent of its cereal consumption (FAO, 2005). In 2002-04, Africa's trade deficit in food amounted to \$9 billion—a deficit that has been growing in recent years. Given the widespread hunger and malnutrition on

the continent, these high levels of agricultural imports would appear to be only partially filling the consumption needs of a population lacking purchasing power. Indeed, food aid shipments to Africa amounted to over 3.5 million MT in 2006, reaching 115 million people at a cost of over \$2.4 billion (WFP, 2007). These shipments were central elements of humanitarian relief initiatives on the continent. However, reliance on such shipments to bridge food gaps is neither desirable nor sustainable. Moreover, governments and humanitarian agencies face important challenges in design and implementation of food assistance programs that promote long-term development.

2.1.2 Challenges related to natural resource management

African farmers face formidable ecological constraints, including depleted soils, natural disasters and limited irrigation potential (Bloom and Sachs, 1998). African farmers irrigate only 7 percent of arable land, partly because of low potential resulting from the structure of Africa's hydrogeology, and partly because of high energy, equipment, and operating costs. Due to this lack of water control, African farmers pursue a wide range of crop and livestock diversification strategies as hedges against the risks inherent in rain-fed cultivation.

Africa's high population growth rate suggests a massive food supply challenge. Over the past 40 years, the African population has grown at an average of 2.7 percent per year, compared to 2 percent in developing Asia and 2.2 percent in Latin America (FAOSTAT, 2006). African economies must therefore grow faster than the rest of the world just to keep up with the continent's rapidly growing population.

Because of this population pressure, both land availability and soil fertility have declined. On average, per capita land availability for those who are dependent on agriculture has fallen from 0.54 ha in 1980 to 0.42 ha in 2000 (NEPAD, 2003). Meanwhile, deforestation, soil erosion and a reduction in fallow periods (the historical means of restoring soil fertility) have resulted in declining soil fertility. Today, nearly half of Africa's farmland suffers from erosion and nutrient depletion (Cleaver and Schreiber, 1994; NEPAD, 2003). The value of nutrients lost in Africa is estimated at \$4 billion per year (Henao and Baanante, 2005).

Population pressure has also resulted in relegation of livestock production to marginal areas with highly fragile eco-systems characterized by steep gradients, sandy soils, and elevated incidences of boulders or gravel. "Free rider" problems in communal areas play against the adoption of innovative livestock management systems and exacerbate soil erosion due to soil compaction, poor infiltration of rain water, increased run-offs, and lowered water tables. Over-exploitation of palatable pasture species is common. The quantity and quality of kraal manure, which complements crop production, has dwindled.

2.1.3 Challenges related to technology development and uptake

Africa has produced some striking technological successes (Nweke et al., 2002; Rusike, 1998; Byerlee and Eicher, 1994; Manners, 2008). Yet these successes have proven too few and irregular to counter the pressures produced by Africa's burgeoning population. The full potential of conventional productivity-enhancing technologies has yet to be realized. Newer technologies—such as tissue culture, gene splicing and trans-genetics—have yet to take root in Africa.

With limited control of water resources, low returns to fertilizer use under rain-fed conditions, and the high cost of chemical fertilizers in Africa, the high-input technologies that drove Asia's Green Revolution have proven less profitable in Africa. Moreover, the diversity of African farming systems limits the breadth of impacts generated by breakthroughs in single crop and livestock systems of the type that underpinned the Asian Green Revolution. Africa may require more management-intensive solutions due to the critical timing required in rain-fed agriculture and consequent peak-season labor constraints in many settings. Yet, the development of agronomic systems feasible for African small farms will require extensive interaction between researchers and farmers. This interaction will prove difficult, for operational budgets of many national agricultural research and extension programs are highly restricted.

Veterinary systems are generally weak. Several livestock diseases are endemic in many areas, severely limiting livestock rearing, animal traction, and mixed farming, especially in the tropical zones. Livestock research has focused mainly on characterization of breeds, with very little done to develop new and improved breeds, including research into improved indigenous breeds and characteristics. Africa is witnessing increasing cases of endo- and ecto-parasite resistance to most marketed remedies, due to various forms of drug abuse and natural selection following prolonged use of the same drug, resulting in wasting and increased mortality of livestock of all ages. Again, little has been researched related to indigenous practices in this area.

Food storage and preservation technologies have largely been neglected in agriculture and food security debates yet efficient food storage and safety practices are essential for ensuring that food reserves at all levels (national to household) are sufficient to tide populations over lean periods and seasonal fluctuations. Weak food storage and unsafe food handling practices contribute directly to malnutrition.

Several other factors combine to constrain technology supply and demand. Poor access to credit, low purchasing power in input markets, low literacy rates, and limited voice in local community organizations render poor farmers across Africa unable to access productivity-enhancing technologies. Debilitating diseases such as HIV/AIDS, malaria, tapeworm and yellow fever limit the productivity of the human labor force on which much of Africa's agriculture depends. HIV/AIDS has also taken a serious toll on many national research and extension programs (Bloom and Sachs, 1998; Sachs, 2001; Masters and McMillan, 2001).

2.2 Challenges Related to Hunger and Malnutrition

As mentioned above, Africa is an unfortunate exception to global progress in reducing hunger and malnutrition (Table 1). Stunting rates in Africa declined by less than 4 percentage points between 1980 and 2000. With population growth, the actual number of stunted children actually increased by more than 12 million. Both relative and absolute numbers of underweight children in Africa increased over the same period. These trends reflect challenges related to reducing hunger and malnutrition that can be categorized into two broad themes: (1) those linked to food access; and (2) those linked to food utilization.

2.2.1 Challenges related to food access

A key determinant of food access is the structure and functioning of food markets. The challenges raised by poor market development in Africa have been outlined in a Section 2.1.1. A crucial recognition is that efficient markets emerge where demand is vibrant and sustained. Almost a third of Africa's population lives on less than US \$1 per day. This implies a general inability to effectively express demand for food from market sources.

Table 1: Estimated prevalence and number of stunted children, 1980-2005

UN regions and sub-regions	Prevalence of stunting (%)						Number stunted (million)					
	1980	1985	1990	1995	2000	2005	1980	1985	1990	1995	2000	2005
<i>Africa</i>	40.5	39.2	37.8	36.5	35.2	33.8	34.78	38.51	41.68	44.51	47.30	49.40
Eastern	46.5	46.9	47.3	47.7	48.1	48.5	12.88	14.83	17.13	19.28	22.03	24.41
Northern	32.7	29.6	26.5	23.3	20.2	17.0	6.01	6.01	5.55	4.90	4.44	3.86
Western	36.2	35.8	35.5	35.2	34.9	34.6	9.04	10.51	11.99	13.47	14.74	16.03
<i>Asia</i>	52.2	47.7	43.3	38.8	34.4	29.9	173.37	169.72	167.66	143.49	127.80	110.19
South Central	60.8	56.5	52.2	48.0	43.7	39.4	89.36	93.45	93.36	83.62	78.53	72.28
South-East	52.4	47.5	42.6	37.7	32.8	27.9	27.71	26.47	24.24	21.51	18.94	15.78
<i>Latin America and the Caribbean</i>	25.6	22.3	19.1	15.8	12.6	9.3	13.19	11.87	10.38	8.59	6.82	5.11
Caribbean	27.1	24.4	21.7	19.0	16.3	13.7	0.92	0.86	0.81	0.71	0.61	0.51
Central America	26.1	25.6	25.0	24.5	24.0	23.5	3.87	3.81	3.87	3.94	3.92	3.82
South America	25.1	21.1	17.2	13.2	9.3	5.3	8.38	7.35	6.05	4.55	3.16	1.84
<i>Oceania</i>	<i>n/a</i>	<i>n/a</i>	<i>n/a</i>	<i>n/a</i>	<i>n/a</i>	<i>n/a</i>	<i>n/a</i>	<i>n/a</i>	<i>n/a</i>	<i>n/a</i>	<i>n/a</i>	<i>n/a</i>
<i>All developing countries</i>	47.1	43.4	39.8	36.0	32.5	29.0	221.35	220.10	219.73	196.59	181.92	164.70

Source: Benson (2004), using data from WHO (2003).

Households' economic access to food in markets is a function of their incomes and the prices they must pay for food. Income is largely dependent upon employment. Rising food prices negatively affect household purchasing power and access to sufficient and diverse diets. Unemployment is therefore a key determinant of household food insecurity. Although the economies of Africa remain predominantly agricultural, many African households no longer have access to agricultural land or the skills necessary to produce their own food. Their livelihood strategies typically feature significant reliance on wage employment. This is important in both rural and urban areas. However, wages in Africa are generally low, especially for unskilled labor, and especially in agriculture. Large segments of populations are therefore unable to meet their food needs from market sources.

2.2.2. Challenges related to food utilization

Proper food utilization requires that an individual be able to consume diversified, properly prepared, safe foods and effectively absorb the energy and nutrients in the foods consumed.

Nutrition status is determined by biological utilization of food by the body—a process that is itself determined by the health status of the individual. Diseases such as diarrhea, respiratory conditions, measles, malaria and HIV/AIDS thus interfere with proper food utilization.

For proper food utilization, individuals must also have reliable access to health services, live in sanitary environments with access to potable water, and, for children especially, be provided with knowledgeable care. Such conditions do not obtain in many African contexts. Access to health, water, and improved sanitation facilities is typically low.

Many cultural practices in Africa limit food intake by certain members of households. Further, there is often a limited range of nutritious foods available to the poor due to the narrow food basket they can afford. Levels of dietary diversification are low, with over-dependence on a short range of staples common. There is often inadequate knowledge of food preparation, preservation and storage. Several highly nutritious traditional and indigenous foods and preparation practices have been lost. Literacy levels among women and girls are often very low, further exacerbating poor access to nutrition information, and transmitting such ignorance across generations.

2.3 Challenges Related to Food Crisis Management

Extreme weather events such as droughts and floods (which are increasing in frequency and impact under global climate change), a range of pests, and communicable human and animal diseases often undermine fragile livelihoods and pose direct threats to food security in Africa. So, too, do a range of disruptions borne of social and political strife, most notably the several (some protracted) civil conflicts raging across the continent. Food crises occur when these various hazards and disruptions encounter deeply-rooted vulnerability. Food crises can be prevented, or their effects significantly muted, if underlying vulnerabilities are confronted and addressed. However, few African countries possess the required physical, human, institutional, and financial capacities to do so and on-going conflict erodes this capacity further. Not all food emergencies are caused by short-term shocks.

2.3.1 Challenges related to early warning and crisis prevention

The first respondents to natural and man-made hazards are individuals and households, followed by communities, then local and national governments, and then international actors. Seldom do households and communities have the resources they need to make decisions that increase their abilities to prevent crises. Seldom do they have access to early warning systems that integrate traditional knowledge systems with science-based systems. Where early warning systems exist, they tend to concentrate narrowly on food supply and thus seldom do they extend beyond data collection processes to become people centered mechanisms for identifying vulnerabilities and informing responses. Similarly lacking in most cases are credible contingency plans, backed by solid logistical capacity. Some countries are experimenting with disaster preparedness funds of various kinds, but the efficacy of these arrangements is unclear. Design and implementation of effective food reserve systems remains elusive. While most governments and donors have embraced the notions of crisis prevention and mitigation, they have yet to commit significant resources to prevention and mitigation programs. These gaps likely reflect the fact that it is much easier to demonstrate effective crisis response than it is to show that a crisis has been effectively averted.

Most countries thus lack overall disaster management policies and plans. Baseline information on food insecurity and vulnerability is typically weak, implying limited capacity to forecast the food demand and supply. Information sharing across line ministries is typically limited and disorganized, leading to long delays in publication and release of results of key surveys. Data collection and reporting functions are often separated from policy-making processes, and as a result governments and other stakeholders are unable to respond in a timely fashion to information on threats and risks to prevent crises. Food reserves at local, national, regional and continental levels are often limited or non-existent.

2.3.2 Challenges related to management of emergencies

The capacity gaps that constrain adequate crisis prevention and preparedness also limit the depth and breadth of effective action *during* crises. The principal challenges during food emergencies center on coordination, logistics, and information management. National governments are not always able to take the lead in setting the broad framework for emergency response, or in prioritizing intervention modalities and locations. International agencies often face difficulties in translating commitments of support into concrete support and action on the ground. NGOs typically operate in tightly defined locations and are thus limited in their abilities to serve as focal points for broad-based coordination, logistics, and information management. Considerable controversy and debate continues to surround the form in which assistance should be provided to communities in need—i.e., in-kind food versus cash. The appropriate response is necessarily context-specific, based on the nature of vulnerabilities in affected communities. Reliable information about these vulnerabilities is still lacking. The impacts of given interventions on these vulnerabilities is also poorly understood. This feeds the controversy and delays emergence on consensus principles and best practices. There is limited use of local and cross-border trade to stabilize food supplies during crises. Weak information systems and poor coordination mean that inappropriate distribution of humanitarian resources is not uncommon.

Efficient responses to food emergencies depend to a large extent on having the ready resources and stocks to mobilize resources. The management of food reserves in Africa has been problematic. Complicated management structures, overlapping responsibilities, poor management practices and inadequate reserves make food reserves inefficient and ineffective in mitigating in emergencies and crises (NEPAD, 2004). Lack of skilled managers and financial resources has crippled food reserve systems in Africa yet the establishment, stocking, maintenance and management of strategic reserves (at least two to three months supply) is crucial for providing a market for over production, mechanisms for mobilizing reserves for rapid responses and promoting self-sufficiency and self-reliance.

2.3.3 Challenges related to policies and institutions

Effective disaster risk reduction begins with high-level political involvement. Such involvement is very difficult to mobilize when crises are not imminent. Many African countries are signatories to the Hyogo Framework for Action on Disaster Reduction (UNISDR, 2005). But few have taken steps, as set forth in the Framework, to ensure that disaster risk reduction is a national and local priority with a strong institutional basis for implementation. Few are identifying, assessing and monitoring disaster risks and enhancing early warning. Few are using knowledge, innovation and education to build a culture of safety and resilience. Few are taking steps to reduce underlying risk factors. Few are strengthening disaster preparedness

for response at all levels through targeted capacity development. Simultaneously, the international community continues to be less willing to invest in disaster risk reduction in than it is in disaster response when crises break out. Where food crisis management bodies exist, they tend to be under-funded and poorly integrated with other branches of government. As noted earlier, barriers to cross-border trade are sometimes significant, potentially exacerbating food shortages and worsening crises.

3 Strategic Responses to Food Insecurity

Responses to these challenges will necessarily vary widely by country and region within Africa, depending on social, political, economic, and biophysical realities. A basic premise in the FAFS is that strategic priorities for reducing food insecurity are likely to be less divergent. Further, the FAFS proposes that the range of available scalable and replicable intervention options is likely to be fairly stable across countries and regions. This section of the FAFS presents these priorities and options.

It is useful to consider three types of responses under each of the three Pillar III action areas (increasing food supply, reducing hunger and malnutrition, and improving risk management): (1) *immediate* responses that yield impacts within 1-2 years; (2) *medium term* responses that generate impacts within 3-5 years; and (3) *long term* responses that produce impacts within 6-10 years.

3.1 *Priorities and options for increasing food supply*

The market value of Africa's food staples amounts to \$50 billion per year, almost three-quarters of the value of all agricultural production (Diao et al, 2005). With growing urbanization and low but increasing incomes, Africa's marketed share of food staples promises to grow dramatically in coming decades. Production of food staples destined for consumption in rapidly expanding urban markets (both domestic and in neighboring countries) represents a dynamic growth opportunity available for millions of African farmers. African countries should therefore give priority to developing production and marketing potential in such key staples sectors such as maize, sorghum, cassava, and potatoes. Growth emanating in staple sub-sectors is especially growth-promoting and poverty-reducing. Many staples are so-called "non-tradables." Greater production of such commodities causes their prices to fall, leading to higher demand, and, crucially, opportunities for consumers to reallocate income to other items. This reallocation, in turn, leads to supply responses from producers engaged in the production of other crops or commodities, which results in a larger economy-wide effects.

Increased supply of these staples is best attained through raising productive capacity, harnessing trade opportunities and effective management of natural resources. In response to these recognized needs, the African leaders attending the Abuja Summit on Food Security in Africa (December 2006) committed to the following agenda:

- Member states and RECs will promote and protect rice, legumes, maize, cotton, oil palm, beef, dairy, poultry and fisheries products as strategic commodities² at the continental level,

² Strategic commodities are defined by the Abuja Food Security Summit Action Plan as those that carry an important weight in the African food basket; have an important role in the trade balance in a region though their

and cassava, sorghum and millet at the subregional level, without prejudice to focused attention being given also to products of particular national importance;

- AUC and NEPAD will facilitate the attainment of continental self-reliance by 2015 for the following: rice, maize, sorghum/millet and cassava, oil palm, beef, poultry, aquaculture (tilapia/cat fish); and to process 50 percent of cotton produced in Africa by 2015 while also making efforts to rapidly increase the share of local processing for other commodities;
- Member States and RECs will take the following urgent measures to accelerate the development of the strategic commodities:
 - Fast-track the implementation of trade arrangements adopted in the Regional Economic Communities (RECs) through lowering tariff barriers and the elimination of non-tariff barriers, both technical and non-technical, by 2010, and take account of these measures during global negotiations in the Doha Round and Economic Partnership Agreement (EPA);
 - Ratify and implement harmonized standards and grades, including sanitary and phytosanitary standards, within and across RECs by 2010;
 - Construct and maintain critical infrastructure to facilitate the movement of strategic agricultural products across national boundaries at minimal cost;
 - Request the AUC in collaboration with the RECs and development partners to develop continental and regional market information systems, and to support the development of the same at national level by 2008.

These commitments and priorities are fully endorsed by the FAFS.

While recognizing that principal responsibility for expanding technology development, strengthening markets, and improving natural resource management in Africa resides with Pillars I, II, and IV, Table 2, 3, and 4 offer a range of immediate, medium term, and long term options with demonstrated efficacy in meeting these goals in different contexts. Analysis, deliberation, and decisions during CAADP Country Round Tables will yield country portfolios of food supply-enhancing policies and programs.³

Table 2: Immediate options for increasing food supply

Options for raising productive capacities

- Preserve and enhance the productivity of key staples and commodities while accelerating the distribution of new varieties of food staples, particularly drought-resistant, long-duration crops such as cassava, sweet potatoes and bananas for which underutilized improved varieties have been developed but are not yet fully distributed, while simultaneously recognizing the importance of promoting and protecting the inherent coping strategies and traditional wisdom of small holders (eg in the practice of inter-cropping, rotational cropping and mixed cropping)
- Promotion of crop-livestock integration
- Where appropriate and efficient, targeted subsidies as temporary measures to promote technology and raise productive capacity
- Accelerate the transfer and adoption of technologies that overcome livestock constraints

contribution to foreign exchange earnings or are imported in large quantities to make up the gap between Africa's production and demand; and have considerable unexploited production potential in Africa owing mostly to internal supply side constraints and external impediments such as agricultural subsidies and support measures used by Africa's trading partners (African Union, 2008)

³ The CAADP Country Round Table process is described in section 6 below.

such as feed quality and availability

- Technical support to farmers in the setting up and management of small animal production enterprises
- In pastoralist areas, reducing losses due to endemic livestock diseases through scaling-up community-based approaches to veterinary care

Options for harnessing trade

- Accelerate the production of strategic commodities
- Removal of policy uncertainties to private trade in food staples
- Fast-track implementation of trade arrangements already adopted by the RECS by lowering tariff barriers and eliminating non-tariff barriers
- Immediate attention to commodity-based approaches to trade in livestock products

Options for improving natural resource management

- Scaling up of successful integrated natural resource management technologies

Table 3: Medium term options for increasing food supply

Options for raising productive capacities

- Increased investment in research and extension on key food staples and quality nutritious foods
- Investment in small- and large-scale irrigation infrastructure
- Conservation and improvement of indigenous animal genetic resources
- Development of farmer capacity (knowledge and planning skills) to align and manage animal production systems with the natural cycle of resource availability
- In pastoralist areas, further policy and legislative support to privatized community-based veterinary services under government supervision
- Development of technologies that overcome key livestock constraints such as feed quality and availability, incidences and occurrence of diseases
- Development of policies that facilitate the delivery of animal health services
- Develop post-harvest technologies (at all levels including community and household level technologies) to increase the shelf life of commodities including livestock products
- Promotion of low-cost and sustainable production technologies for quality and nutritious foods among the poor and vulnerable including through the application of emerging technologies and scientific methods
- Promotion of low-cost and sustainable processing technologies for quality and nutritious foods among the poor and vulnerable including through the application of emerging technologies and scientific methods
- Harmonization of sound phytosanitary and animal health legislations across countries in each sub-region
- Establishment of seed regulatory frameworks in each sub-region
- Creation of bio-safety regulatory frameworks in each sub-region

Options for harnessing trade

- Investment in critical regional infrastructure, both hard and soft
- Promotion of low-cost and sustainable marketing and processing technologies for quality and nutritious foods favored by the poor and vulnerable

- Investment to improve market infrastructure for food staples
- Investment to strengthen norms and standards in food markets
- Removal of policy uncertainties to private trade in food staples
- Develop policies to promote and exploit commodities and resources with competitive advantages
- Creation of customs unions to increase trade within the member countries
- Promoting intra-regional trade in livestock commodities by facilitating linkages between countries with growing demand for livestock products, and major livestock producing countries

Options for improving natural resource management

- Increased support for community-based efforts to conserve and improve soil and water resources
- Increased support for tree-planting in fragile areas
- Investment to explore scope for utilizing carbon credits to support natural resource conservation in poor areas

Table 4: Long term options for increasing food supply

Options for raising productive capacities

- Capacity development in biotechnology and other modern methods to increase agricultural productivity and combat pests and diseases in food staples and other nutritionally important foods
- Development of productive animal based production and marketing systems that are sensitive to the environment, belief systems and to the socio-economic circumstances of livestock farmers
- Development and enforcement of policies related to the use of exotic animal genetic resources
- Improve and enforce land tenure arrangements
- Investment to strengthen organizational capacities of farmers to access technologies, markets and training
- Investment to strengthen national phytosanitary legislations and improve the national seed systems

Options for harnessing trade

- Reduce barriers and constraints to promote domestic and intra-regional trade, especially in staple foods
- Harmonize customs procedures and standards, especially as regards sanitary and phytosanitary measures, across national borders
- Scaling up of investment in infrastructure, including efficient feeder road systems and market facilities in rural areas, ensuring trade links among sectors and communities

Options for improving natural resource management

- Development of management systems that are accessible to the poor to enhance their food and nutrition security
- Investment in improved watershed and landuse management

Investment in strengthened capacity for natural resource management program design and implementation in public agencies

3.2 *Priorities and options for reducing hunger and malnutrition*

As detailed in Figure 2, food insecurity is complex and multi-dimensional. Not only must adequate and nutritious food be available and accessed, sanitary environments, adequate health services and knowledgeable care are required to ensure that individuals and households can utilize food properly. Actions to enhance food security must be taken by agencies drawn from several sectors, often in partnership for greatest impact. Poverty reduction is not synonymous with cutting hunger and malnutrition. Economic growth has played an important role in improvements in many countries, but the income-malnutrition relationship is often modest (NEPAD, 2008). In many developing countries where incomes have increased substantially, malnutrition has not declined correspondingly. Other specific interventions are needed in order to obtain better results. In countries with stagnant economies, undernutrition can be reduced through a range of direct interventions aimed at improving nutrition especially for children.

Commitments made at the 2006 Abuja Summit on Food Security in Africa, recognize these imperatives. For instance, member states committed to invest in technologies and industries for the production of nutritionally adequate foods. They also committed to increasing capacity to diversify and add value to agricultural products through, inter-alia, public private partnerships to enhance competitiveness of these products and sustainable incomes from them. The Summit's commitments aimed at ensuring the systematic integration of nutrition considerations into agricultural and food security interventions are especially relevant. These commitments read as follows:

- AUC (African Union Commissions) and NEPAD, in collaboration with development partners, will initiate the implementation of the African Regional Nutrition Strategy, the NEPAD African Nutrition Initiative within CAADP, and the NEPAD 10-year strategy for combating Vitamin and Mineral Deficiency by 2008, with a focus on long-term household food security and ending child hunger and under nutrition;
- Member states and development partners will protect and promote the nutritional well-being, food security and productivity of people living with and affected by HIV/AIDS in the near and longer terms;
- Member states will adopt and/or strengthen a holistic and multi-sectoral approach in agricultural development to better address the multi-dimensional nature of food and nutrition security;
- Member states will promote home gardening and small animal husbandry as important contributions to household food security and dietary diversity.

These commitments and priorities are fully endorsed by the FAFS.

Table 5, 6, and 7 respectively identify immediate, medium term, and long term options with demonstrated efficacy for improving food access and food utilization. Again, country-specific portfolios will be agreed during CAADP Country Round Tables. None of these suggestions should be seen as a single dimensional solution to the complexities of hunger and malnutrition but should rather be seen as options with a complete package of interventions to address hunger and malnutrition within and complementary to the agricultural growth agenda.

Table 5: Immediate options for reducing hunger and malnutrition

<i>Options for improving food access</i>
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- Conditional and unconditional direct transfers of food, cash, agricultural inputs, or other goods to vulnerable populations
- Food-based public works programs
- School feeding programs
- Maternal and child health programs
- Targeted food supplementation
- Investment to improve market infrastructure, especially in staple food value chains
- Investment to provide incentives for local processing and the marketing of nutritionally-rich foods
- Where appropriate, public procurement programs to enhance market demand for nutritious foods

Options for improving food utilization

- Micronutrient supplementation
- Food fortification
- Prenatal and neonatal health, nutrition, and care programs
- Rationalization of food price policies to improve incentives for production, processing, and marketing of food favored by vulnerable populations

Table 6: Medium term options for reducing hunger and malnutrition

Options for improving food access

- Investment to increase opportunities for employment and income generation, especially for women
- Expansion of school meals programs to cover all children in hunger spots by using locally produced foods
- Development and testing of livelihoods diversification options in pastoralist areas
- Unconditional transfers of food, cash, and other items where appropriate
- Conditional transfers of food, cash, and other items

Options for improving food utilization

- Investment to improved maternal and adolescent girl nutrition
- Integration of nutrition in child health promotion programs
- Promotion of technologies for production and processing of nutrient-rich crops
- Fiscal policy measures to promote health outcomes
- Training initiatives in household dietary diversification
- Invest in post-harvest management programmes
- Establishment of objective criteria for selecting among resource transfer modalities, focusing on in-kind food and cash transfers
- Promotion of public/private partnerships in the provision of efficient services for delivery of electricity, water, and sanitation services

Table 7: Long term options for reducing hunger and malnutrition

Options for improving food access

- Investment to improve water and sanitation infrastructure

- Investment to enhance girls' education
- Investment to improve women's status and employment opportunities

Options for improving food utilization

- Investment in women's education, behavior change and social marketing
- Investment to expand access to safe water, sanitation and proper housing
- Promotion of production and consumption of traditional indigenous crops
- Development of communication and education tools to promote healthy and diversified diets, with particular attention to the most vulnerable
- Promotion of the generation, development and packaging of nutrition information for the general public
- Investment in increased capacities for increasing micronutrient content of basic staples
- Promotion of indigenous food practices, focusing on storage, preservation and preparation practices that retain the quality of food

3.3 Priorities and options for improving risk management

Africa has endured an average of 20 food emergencies per year since 1998 (ECOSOC, 2005). Effective food insecurity risk management ensures that the needs of the most vulnerable are addressed and protects developmental gains against shocks and disasters. Emergency prediction, preparedness and response management are crucial for mobilizing assistance to meet immediate and dire needs, often in remote and difficult circumstances.

Prevention measures are generally less expensive than relief and recovery measures. Given the poor state of financial affairs in African countries, investment in risk-reduction strategies and programs is essential. The Hyogo Framework for Action on Disaster Reduction to which many African countries are signatories identifies the following strategic goals for disaster risk reduction (UNISDR, 2005):

- More effective integration of disaster risk considerations into sustainable development policies, planning and programming at all levels, with a special emphasis on disaster prevention, mitigation, preparedness and vulnerability reduction;
- Development and strengthening of institutions, mechanisms and capacities at all levels, in particular at the community level, that can systematically contribute to building resilience to hazards; and
- Systematic incorporation of risk reduction approaches into the design and implementation of emergency preparedness, response and recovery programs in the reconstruction of affected communities.

The FAFS endorses these goals. Also endorsed are the Hyogo Framework's strategic priorities for action by governments:

- Ensure that disaster risk reduction is a national and a local priority with a strong institutional basis for implementation;
- Identify, assess and monitor disaster risks and enhance early warning;
- Use knowledge, innovation and education to build a culture of safety and resilience at all levels;
- Reduce underlying risk factors; and

- Strengthen disaster preparedness for effective response at all levels.

International food assistance has constituted an important element of the national food security of several African countries over the past 30 years. But while food aid may sometimes be necessary to achieve food security, it is never sufficient. Too often, food aid is asked to do the wrong things, or too much is asked of food aid. Food aid is but one among many tools available for fighting food insecurity.

As the agricultural sector develops in many of those countries that in the past have been most reliant on food aid, the continuing value of food assistance for food security must be evaluated. Indeed, one potential indicator of a food secure Africa is that it does not require international food aid. However, a considered approach in reducing reliance on international food assistance is required. Food assistance is a potentially useful resource for consolidating social and economic development gains and for rendering considerably more sustainable gains. Such assistance is also useful in the short to medium term for maintaining food-for-education programs, food-based nutrition interventions and public works programs to improve local transport, markets and social infrastructure, while providing needed employment. Moreover, by assisting the destitute and most vulnerable meet their food needs and strengthen livelihoods, food aid can be an important component of social protection programs. However, as a long-term objective, African governments should seek to use local food resources for food assistance programs, either through sales to the agencies that run them, or through the use of food vouchers that program beneficiaries will redeem in local markets. Such mechanisms will serve to strengthen local agriculture and contribute to improved nutrition. The “Home Grown School Feeding” and “Purchase for Progress” programs being piloted in a few African countries with support from NEPAD and RECs is an excellent example of the potential of such an approach. The FAFS strongly endorses such initiatives.

On-going efforts to reform the global Food Aid Convention (FAC) seek to enhance transparency, expand membership, and links to broader food security and development objectives and architectures (FAC, 1999). Similar necessities underpin the FAFS’s perspective on the role of food aid in promoting African food security. The FAFS therefore endorses these intentions, and encourages the AU and NEPAD to engage with the FAC reform process. Further, the FAFS proposes development of a *Pan-African Food Aid Charter* at the AU level as crucial to building consensus on the appropriate role and boundaries of food aid in Africa, and to setting priorities and principles for the use of food aid on the continent.

The depth and breadth of food insecurity in Africa suggests scope for expansion of social protection systems. These are institutionalized policies and programs that *protect* against shocks and *promote* livelihoods and welfare of poor and vulnerable people thereby building their resilience to such shocks via strengthened and expanded asset holdings and livelihood options. They include both *entitlement-based instruments* (such as unconditional cash and food transfers, employment guarantee programs, nutrition programs, and school feeding) and *incentive-based instruments* (such as conditional transfer programs, drought insurance, and targeted subsidies). The extent to which national budgets in Africa can accommodate large-scale social protection programs is in question. But the FAFS endorses social protection interventions as critical components of effective food security architectures on the continent and recognises that there is a role for cash transfers in the management of emergencies where market access to necessary products exists.

Risk management should be mainstreamed in countries to ensure cost-effective preparedness and capacity for rapid responses. All risk management strategies should reinforce the principles of other CAADP pillars and not undermine the development strategies of countries. Tables 8, 9, and 10 respectively identify immediate, medium term, and long term options with demonstrated efficacy in food security risk management in different contexts.

Table 8: Immediate options for improving risk management

<p><i>Options for improving early warning systems and crisis prevention</i></p> <ul style="list-style-type: none"> • Comprehensive risk assessments at national, district and community levels followed by the formulation of risk-reduction strategies at all administrative levels • Facilitation of peer learning among African policymakers through the CRTs, based on best practices in policy design and implementation • Invest in village level livestock disease monitoring, reporting and prevention mechanisms <p><i>Options for improving emergency responses</i></p> <ul style="list-style-type: none"> • Unconditional transfers of food, cash, and other items where appropriate • Increased utilization of domestic and regional trade to stabilize food supplies (and prices) in affected markets <p><i>Options for strengthening risk management policies and institutions</i></p> <ul style="list-style-type: none"> • Immediate follow-up on country priority action areas in Hyogo Framework for Action
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Table 9: Medium term options for improving risk management

<p><i>Options for improving early warning systems and crisis prevention</i></p> <ul style="list-style-type: none"> • Strengthening of sectoral information monitoring systems relevant to food and nutrition • Institutionalization of food insecurity risk management systems at national, regional and continental levels <p><i>Options for improving emergency responses</i></p> <ul style="list-style-type: none"> • Development of broad-based logistics capacities, decentralizing functions where feasible • Development of protocols to enhance coordination among government, civil society, and international humanitarian actors • Incorporation of food and nutrition security under special recovery plans and existing poverty reduction strategies and plans <p><i>Options for strengthening risk management policies and institutions</i></p> <ul style="list-style-type: none"> • Formulation of improved risk management policies, including proactive review and use of alternative instruments to deal with crises, e.g., food and financial reserves, weather-based insurance and futures options • Incorporation of food and nutrition security under special recovery plans and existing poverty reduction strategies and plans • Establishment of objective criteria for selecting among resource transfer modalities, focusing on in-kind food and cash transfers • Development of policies and institutions for improved management of food surpluses
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Table 10: Long term options for improving risk management

Options for improving early warning systems and crisis prevention

- Establishment of national, regional and Pan-African emergency response mechanisms including trans-boundary animal disease control
- Integration of local capacities and coping strategies into national and regional crisis preparedness strategies

Options for improving emergency responses

- Strengthening of logistics capacities

Options for strengthening risk management policies and institutions

- Development of broad-based social protection systems
- Strengthening of food security platforms within social protection systems

4 Using the FAFS

The FAFS is intended to provide sound guidance on the overall direction in which all policy, strategies and actions might best address chronic hunger and malnutrition, bring vulnerable groups into mainstream agricultural growth and complement the priorities of the other CAADP Pillars. The FAFS is intended to provide an easy reference resource for countries and regions to apply principles and priorities to ongoing and future interventions and investments to ensure the simultaneous achievement of agricultural growth and reduction in food insecurity. The FAFS is also intended as an advocacy tool that can offer leaders increased access to political, technical, methodological and financial support for their food security-related policies, plans and institutions.

National agricultural productivity institutions that are committed to developing their own policies, institutions and related strategies and plans in the directions suggested by FAFS will be able to attract political support, technical co-operation and financial support from their governments, RECs, NEPAD and donors. Such commitment on the part of each country would be expected to be signaled in the context of government's Poverty Reduction Strategy Papers (PRSPs) and sectoral strategies concerned with agricultural productivity. This could be signaled through an MoU between the government and donor groups, pledging joint support for the strategy, related institutional strengthening (including reform where appropriate) and activities.

At a regional level, RECs will be able to seek support from member countries, NEPAD, RECs and donors for political, technical, methodological and financial support to programs that are developed along the lines advocated by the FAFS and its principles. Each REC would be expected to prepare and adopt a long-term strategy and a medium-term operational plan for enhancing its food security program. Donors would be expected to align and co-ordinate their support for these national, sub-regional and regional interventions in the manner suggested above.

5 Monitoring Food Security Situations and Progress toward Pillar III Goals

Progress toward Pillar III's objectives must be objectively monitored and evaluated. Not only is it important to co-ordinate monitoring and evaluation across regions and countries to provide comparative measures and know where the hunger hot-spots are, such exercises are also crucial to realization of CAADP's peer review elements.

As implied in Figure 1, monitoring and evaluating Pillar III's objectives means tracking Africa's success in increasing food supply, reducing hunger and malnutrition, and improving the effectiveness of responses to food crises. Recommended indicators for monitoring and evaluating Pillar III are shown in Appendix 1. The matrix summarizes indicators for monitoring and evaluating Pillar III policies and programs under the FAFS. First, six "mandatory" indicators are proposed, cutting across the three FAFS action areas (increasing supply, reducing hunger and malnutrition, and improving risk management). Two indicators are identified in each area. Second, additional indicators are then proposed for each of the three action areas.

Where possible, Pillar III measuring systems should use existing data systems. While many data sets and systems are in use, they are not always consistent, comparable and available for public analysis or for integration across sectors. Too few information systems are able to identify who is vulnerable, where they are and why they are vulnerable (DFID, 2002). This implies the need for special attention to indicators that provide early warning of impending vulnerability.

The majority of the recommended indicators are quantitative to be collected at national and regional levels. These quantitative indicators will be supplemented by qualitative information from both national and international sources such as Regional Economic Communities, UN agencies, WTO and others.

Indicators of some outputs, outcomes and impacts may require that data be collected using surveys or special studies, including those that use participatory methods. Where it is possible, it is almost always better to piggyback regular surveys onto existing nationally- or internationally-supported surveys (such as rural household surveys, livelihood surveys, or agricultural censuses) than to create a new data collection facility. Special studies may be managed by the mandated institution directly or subcontracted to a private entity.

Collection of some indicators, particularly outcome and impact indicators (such as crop production, trade and income) may depend on the existence and quality of national census or survey systems. Many output indicators are derived from records kept by the participating agencies, often at project field sites. For this reason, for the purposes of monitoring and evaluation design (including indicator selection), project planners should examine the implementing agency's record-keeping and reporting procedures to assess its capacity to generate data.

The essential points are that data should be collected and used close to the source and that data collection be cost-effective, reliable and comparable. It is important not to create a separate measurement bureaucracy but having a common (harmonized) methodology would provide more comparative information. Having a bureaucratic home for data production is not usually cost-effective and presents the risk that those responsible for producing the data may have little

contact with those responsible for using it. The data should measure results, not just processes and measure vulnerability needs beyond food balance sheet approaches, focusing on livelihoods approaches and including household level analysis and market and trade information. The performance measured by the data should focus on what Pillar III is trying to accomplish, especially in terms of its impact on people. The point is not only to know what Pillar III is achieving, but also whether these impacts are doing any good. Performance analysis should be limited to the few areas that are directly relevant to Pillar III's strategic objectives. Capacity to meet these requirements must be built at the country level, where significant gaps exist.

The next section outlines the co-ordination system recommended for monitoring, evaluation, and peer review of achievements under Pillar III, within the broader CAADP agenda.

6 Co-ordination for Implementation, Monitoring, Evaluation and Peer Review

As noted, the socio-economic and political environment is an important determinant of whether sufficient food is available in a society, the degree to which individuals, households, and communities can gain access and effectively utilize that food, and the level of vulnerability to food insecurity. As such, there is a range of particular challenges to effectively addressing food insecurity and undernutrition at multiple levels.

A key challenge regarding co-ordination of FAFS and Pillar III activities is the lack of policy frameworks and poor definition of mandates and responsibilities for the various sectors and agencies in the public sector that have a role to play in enhancing food security and nutrition. Food security and especially, nutrition, do not fit easily into the bureaucratic organization of government sectors and agencies. Fragmentation and limited communication across these agencies and the programs that they are implementing further limits the impact. The hierarchical and sector-specific organization of government structures contribute to limited communication and, more importantly, limited sharing of experiences and new technologies in addressing food insecurity and malnutrition within a country or region. Attaining food security objectives requires a range of actions that is not neatly circumscribed within a single sector. High-level political directives and pressures have often been shown to be needed for effective action to be mounted by the various sectors and agencies concerned to improve food security sustainably and to combat malnutrition effectively.

Capacity and organizational constraints are equally important. Only a small number of food security and nutrition professionals exist in most African countries. The shortage of trained professionals in nutrition is especially acute at local levels. In the absence of national bodies mandated to provide leadership for FAFS activities, agencies working on such activities tend to define their own intervention packages. Technical oversight, supervision, and co-ordination during implementation is often insufficient. Without clear coordination mechanisms to harmonize and integrate approaches and interventions, synergies between activities implemented by different agencies have often proven difficult to realize.

Food security and nutrition are seldom integrated into national development agendas. Responsibilities for these issues within the public sector are typically unclear. Resources for programs to improve food security and overcome malnutrition are often insufficient. Budget constraints result in shortfalls in material supplies, trained workers, training and supervision, and in monitoring and evaluation. Moreover, there is little co-ordination of action and use of resources among agencies. With no clear responsibilities established on food security and,

especially, nutrition issues, conflict rather than co-operation is likely to characterize the relationships between agencies and sectors of government.

Coordination of food security activities is therefore crucial for both implementation of Pillar III policies and programs, and for monitoring and evaluation of outcomes. Achieving food security for all requires well coordinated systems that assemble, analyze and disseminate information on who the food insecure are, where they are located, why they are food insecure and how vulnerable they are, advocate for resources, and monitor implementation. Coordination and management of information systems and emergency responses requires collaboration and facilitation at the country, regional and continental levels.

In taking action to improve food security and reduce malnutrition, there is a pressing need to address some of the institutional barriers in the public sector that often make such efforts far less effective than they otherwise might be. There are multiple reasons why policies related to food and nutrition security fail to reach their objectives. A model for coordinating Pillar III policies and programs that are designed, implemented, monitored, and evaluated based on the FAFS is presented below. This model is based on experience and principles drawn from a range of relevant coordination mechanisms in African agriculture (ASARECA, 2008; CILSS, 2008; COMESA, 2008; SETSAN, 2008; SADC-RVAC, 2008).

6.1 Coordination Model for FAFS Implementation

The FAFS aims to provide principles, recommended actions, coordination, peer review, and tools to guide national and regional policies, strategies, investments, donor contributions, and advisory efforts to overcome these challenges, leading to increased food supply, reduced hunger and malnutrition, and improved food security risk management (Figure 1). The FAFS guides Pillar III implementation at the national level, with strong links to regional and continental policy platforms and processes.

The country-level CAADP implementation process is primarily one of aligning national agricultural sector policies, strategies, and investment programs with the CAADP principles and targets, in particular the 6 percent growth rate and 10 percent public expenditure share for the sector. The CAADP process is supposed to build on ongoing country efforts and be led by national governments and other stakeholders, with the necessary support from the RECs and the NEPAD Secretariat. In line with the NEPAD principles of ownership and accountability, the country CAADP process is initiated on a demand-driven basis, through consultation between RECs and their member countries. Country Round Tables (CRTs) and Regional Round Tables are the loci for these consultations. Resulting from these CRTs and RRTs are National Compacts comprising high-level agreements between governments, regional representatives and development partners for a focused implementation of CAADP within the respective country. CRTs are meant to detail programs and projects that address national priorities, and that the various partners can support. National Compacts are to include defined actions, commitments, partnerships and alliances and guide country policy and investment responses, planning of development assistance, public-private partnerships, and business-to-business alliances to raise and sustain the necessary investments (NEPAD Secretariat, 2005).

The FAFS proposes the following Pillar III-specific coordination mechanisms (Figure 4):

- To ensure that FAFS policies and strategies have the necessary political authority to facilitate interactive action, coordinating bodies are required at national, regional and continental levels.

- To ensure this authority, National Coordinating Platforms (NCPs) should be created and located in a non-line Ministry with enough authority to move the Pillar III agenda forward. Ministries of Finance and Development, and Offices of the President or Prime Minister are possibilities. However, the choice of the government units within which NCPs will be located is left to countries.
- This national platform will be made up of various Ministries (Agriculture, Health, Welfare, Social Services, Trade, Foreign Affairs, etc.), Parastatals, Technical Agencies, Civil Society, Development Partners and Private Sector representation. Its main aim will be provide strategic national leadership and coordination for the monitoring, evaluation, planning, implementation and reporting of policy and interventions around FAFS priorities. The NCP could be replicated at different levels of government, down to the local levels, as appropriate and feasible.
- One of the main functions of the NCPs is to gather relevant reports and information in order to influence and shape decision making. It is suggested that the following reports be gathered and then submitted to higher level platforms quarterly and annually. The goals should be based on the key performance indicators outlined in section 7 above (Monitoring and Evaluation).
- National and Regional Platforms will report to various levels of government including Heads of State, Governments, Ministers and other international, regional and national bodies and inter-ministerial and inter-state bodies.
- National Technical Working Groups and other similar committees should provide the information required by the NCP, using existing data (Census, Demographic and Health Surveys etc) and information systems where appropriate.
- Regional Coordinating Platforms (RCPs) should be created and situated in RECs, reporting to the AU/NEPAD Secretariat. RCPs should provide the same analysis, evaluation, monitoring, planning and reporting elements as do the NCPs, but at regional level. This structure includes representatives from countries, technical agencies, civil society, development partners and the private sector. The RCP plays an additional role in reporting and advocating for Pillar III related activities and policies in various other forums, such as the REC Parliamentary Forums and the Pan African Parliament.
- Both the NCPs and RCPs will be required to meet regularly and prepare quarterly and annual progress reports. The timing of the submission of these reports is crucial and should ensure that critical decision making data and policy recommendations are available at all times.
- At the Continental level, the AU/NEPAD will play an advisory, monitoring and coordination role to RECs. AU/NEPAD will encourage regular consultation and harmonization of the actions on food security (monitoring, evaluation and analysis) and promote the improvement and testing of tools together with the associated Centers of Excellence (currently ACFS and CILSS have been identified to play this role).
- Various AU Agencies (eg IBAR) will provide support to RECs and countries.
- The Regional Strategy Analysis and Knowledge Support Systems (ReSAKSS), will work with the regional and national agencies to facilitate access by the RECs and their member states to policy-relevant analyses of the highest quality in order to generate the necessary knowledge to improve policy making, track progress, document success and derive lessons that can feed into the review and learning processes associated with the implementation of the CAADP agenda. They operate under co-ordination and governance structures chaired by the RECs. NEPAD will encourage RCPs, NCPs and local coordinating platforms to draw upon ReSAKSS for information management support, data analysis and dissemination that could strengthen coordination and planning of activities, budgets and reporting.

- Lead institutions (Centers of Excellence) will play a coordinating and facilitatory role in the provision of technical support, research evidence and capacity development through networks of institutions located within each REC to ensure local capacity development and identification and involvement of local experts who are well grounded in the policy, cultural, economic and production context and establish/expand networks of practitioners who can be drawn on to support the long term implementation of CAADP.

The FAFS also proposes six principles to guide coordination activities. These are listed in Box 3.

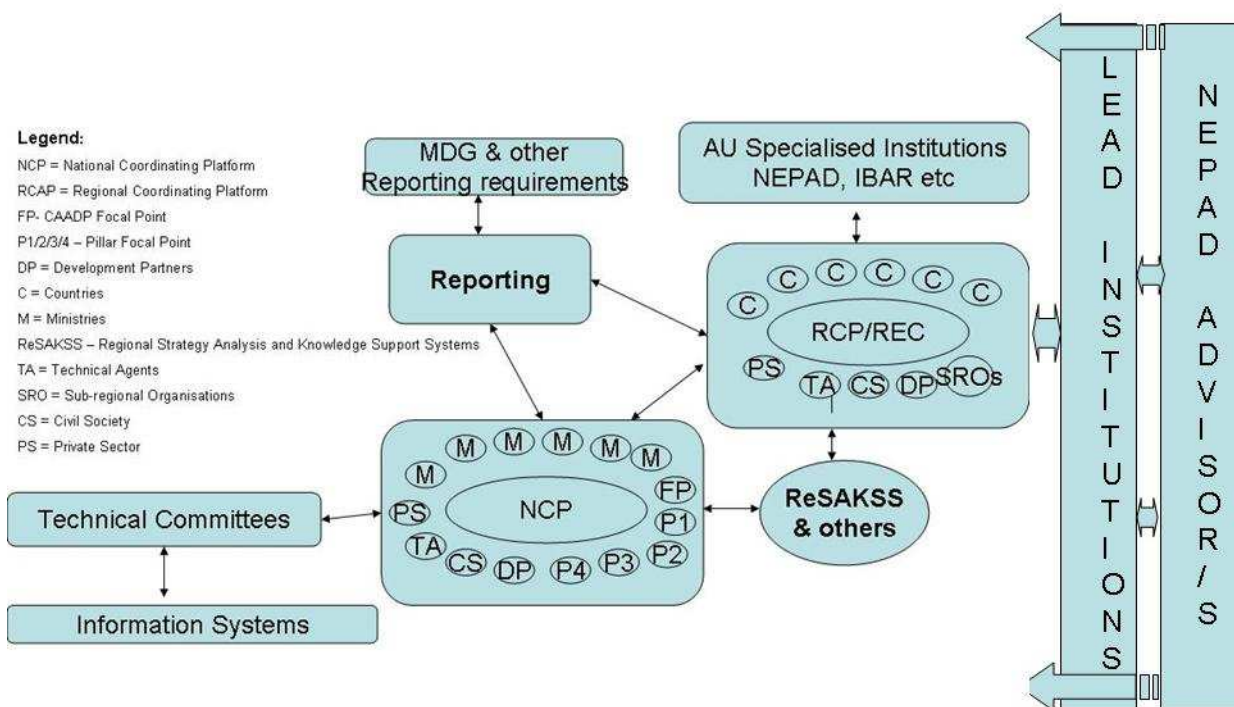


Figure 4: Proposed coordination structure for Pillar III implementation under the FAFS

Box 3: FAFS Coordinating Principles

1. Pillar III activities should link with and enable simultaneous attainment of related government priorities such as PRSPs, Medium-Term Plans (MTPs) and MDG goals.
2. Where appropriate, existing institutions could be strengthened or restructured to provide the required coordination;
3. The NCPs and RCPs should promote trust and collaboration between local and international technical agencies.
4. Monitoring and evaluation of Pillar III activities should draw on and influence existing national data collection systems rather than creating new mechanisms.
5. Reporting should not focus only on filling short term food gaps. Rather reporting and actions should relate to longer term development and short term emergency elements.
6. Advocacy for addressing hunger and malnutrition is required at all levels.

6.2 Peer Review

The CAADP Pillar IV Framework for African Agricultural Productivity (FAAP) has shown that progress and success are greatly increased if close attention is paid to regularly measuring impacts and learning from past experiences. The milestones in Appendix 1 (Monitoring and Evaluation Matrix) will be used for monitoring and evaluating the progress towards goals. A Peer Review mechanism be created at all levels in order to provide this regular assessment of overall impact of the FAFS process. The modalities for such peer review are still to be finalized. One suggestion is to have National Coordination Platform (NCP) teams evaluate NCP performance of another country.

Peer review should include regular (annual and 5-yearly) reviews of performance on this pillar at continental, regional and national level. Reviews should address, but not be limited to areas such as:

- Why goals, objectives and targets were or were not achieved;
- How programs are performing, and if they should be scaled up;
- Analysis of program beneficiaries and their characteristics, including gender, age, and income level;
- Positive and negative unintended results of the program;
- Effectiveness of program activities and whether results can be attributed to Pillar III interventions;
- Lessons learned that can be applied to other projects of a similar nature;
- Impact on economic growth, poverty reduction, and the income of Pillar III beneficiaries against the Pillar III Principles;
- Long-term sustainability of impacts.

7 Scaling up Food Security Investments in Africa

It is clear that implementation and monitoring of the Pillar III principles and activities will require political will, investment and co-ordination. Through the Abuja Summit (Dec 2006), Africa's leaders committed to:

- Alignment of national and regional policies and programmes with CAADP policies and strategies including the Pillar Frameworks;
- AUC and NEPAD establishing a technical assistance program for agriculture and food security based on African resources and expertise and in collaboration with development partners, and develop regional Centers of Excellence;
- AUC establishing funding mechanisms or adapt existing ones to mobilize additional resources in consultation with the African Development Bank (ADB) and the International Fund for Agricultural Development (IFAD) and for purposes of up-scaling agricultural successes within and across countries in Africa; and
- AUC, NEPAD and RECs establishing criteria for identifying African successes that rely wholly or largely on Africa's own resources and promote measures for their replication, adaptation and up-scaling.

Identifying scalable food security enhancing interventions for an area as large and diverse as Africa is extremely challenging. Judicious simplification is required. One approach to such simplification involves gaining a quantitative appreciation of patterns of food insecurity across the continent. Such patterns likely derive partly from climatic factors, partly from underlying biophysical conditions in agricultural sectors, and partly from policy and institutional factors. Visualizing similarities and differences in agriculture across the region is a powerful first step toward focusing attention on areas and issues that cross national borders. The ReSAKSS is ideally suited to serve such a purpose.

Two basic analytical challenges must be met. First, the spatial extent, distribution, and intensity of food insecurity across Africa must be illustrated, juxtaposed with some key resource and infrastructure features. Second, Africa must be disaggregated into geographical units (possibly termed “food security domains”) in which similar food security problems or opportunities are likely to occur. From a national and regional policy perspective, food security domains might be used to represent areas of broadly similar strategic importance. From a household or development agency perspective, food security domains offer a way of identifying and scaling up viable sets of livelihood options.

A key goal is to use a single set of domain criteria and to apply them consistently across the continent. Only with such a consistent approach can the true similarity or dissimilarity of conditions existing in, say, the highlands of Tigray in Ethiopia, be properly compared and contrasted with those in Kenya and Tanzania. And only then can food security-enhancing interventions and practices found to be effective in one part of one country be credibly argued to have relevance in other parts of Africa.

Such “food security domains” would permit consideration of the following issues: Where are those geographic areas within and across African countries in which food security problems and opportunities are likely to be most similar? Where will specific types of food security policies, investments, and livelihood options likely be most effective? Given successful food security-enhancement in one location, where else do similar conditions obtain? What is the potential for targeted replication (scaling up) of successes to these similar areas?

Beyond mapping food security domains, additional empirical evidence is needed to explore which specific strategies are both feasible and advantageous in each domain. Such evidence provides the basis for assessing the degree to which successful interventions (best practices) from one domain are relevant in others. It also provides a basis for development of a compendium of success stories in African food security.

The ReSAKSS will work with the Centers of Excellence to build national capacities to undertake the analysis required to develop and analysis food security domains. The CRTs and RRTs will provide forums for discussion and resource mobilization based on recommendations emerging from ReSAKSS analysis of prospects for up-scaling successes and best practices.

The ReSAKSS will work with appointed lead institutions or Centers of Excellence to build national capacities to undertake the analysis required to develop and analyse food security domains. The CRTs and RRTs will provide forums for discussion and resource mobilization based on recommendations emerging from ReSAKSS analysis of prospects for up-scaling successes and best practices. Additional regional academic, SROs and NARS institutions will be identified per REC to broaden the network of institutions available to support the CRTs and

RRTs by providing technical support, research and evidence building and capacity development within their respective regions and associated countries.

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Append 1: Monitoring and Evaluation Matrix

This matrix summarizes indicators for monitoring and evaluating Pillar III policies and programs under the FAFS. First, six “mandatory” indicators are proposed, cutting across the three FAFS action areas (increasing supply, reducing hunger and malnutrition, and improving risk management). Two “mandatory” indicators are identified in each area. These will be integrated into the CAADP-wide measuring, monitoring and peer review systems. The matrix then proposes additional indicators for each of the three FAFS action areas that could be used by regions and countries.

Indicator	Indicator definition	Data source	Data collection methodology	Frequency of data collection	Who is responsible for data collection
Suggested mandatory indicators for Pillar III					
Increasing Supply					
<ul style="list-style-type: none"> Increased overall food production per capita 	<ul style="list-style-type: none"> Food production: increased HH crop production per unit of land (ha) 	<ul style="list-style-type: none"> Agricultural Census FAOSTAT R/NEWS 	<ul style="list-style-type: none"> Household surveys Rapid surveys Crop cutting 	<ul style="list-style-type: none"> Annual Cropping season 	<ul style="list-style-type: none"> Countries
<ul style="list-style-type: none"> Increased overall food production per capita by 2015 	<ul style="list-style-type: none"> Food production: increased area under cultivation 	<ul style="list-style-type: none"> Agricultural Census FAOSTAT R/NEWS 	<ul style="list-style-type: none"> Household surveys Rapid surveys Remote sensing 	<ul style="list-style-type: none"> Annual Cropping season 	<ul style="list-style-type: none"> Countries
Reducing hunger and malnutrition					
<ul style="list-style-type: none"> Number of household consuming a greater diversity of nutritious foods by 2015 	<ul style="list-style-type: none"> Dietary diversity of households 	<ul style="list-style-type: none"> National and regional agricultural and health statistical data UN agencies NGOs 	<ul style="list-style-type: none"> Household demographic surveys Dietary Diversity Score 	<ul style="list-style-type: none"> Annual/4-5 years 	<ul style="list-style-type: none"> Countries
<ul style="list-style-type: none"> Reduced household vulnerability to food insecurity and hunger by 2015 	<ul style="list-style-type: none"> Magnitude of perceived consumption changes 	<ul style="list-style-type: none"> National and regional agricultural and health statistical data UN agencies NGOs 	<ul style="list-style-type: none"> HFIAS and CSI in: Community/ livelihood surveys Household surveys 	<ul style="list-style-type: none"> Annual/4-5 years 	<ul style="list-style-type: none"> Countries
Improving Risk Management					
<ul style="list-style-type: none"> Increased capacity to deal with natural disasters by 2015 	<ul style="list-style-type: none"> Institutional competency measured through response time to a crisis 	<ul style="list-style-type: none"> Disaster relief agencies 	<ul style="list-style-type: none"> National and regional database UN database 	<ul style="list-style-type: none"> Annual 	<ul style="list-style-type: none"> National and regional disaster mitigation bodies

Indicator	Indicator definition	Data source	Data collection methodology	Frequency of data collection	Who is responsible for data collection
<ul style="list-style-type: none"> Increased capacity to deal with natural disasters by 2015 	<ul style="list-style-type: none"> Disaster relief contingency plans adopted/ in place and resources allocated 	<ul style="list-style-type: none"> Disaster relief unit Planning/ Finance Ministry 	<ul style="list-style-type: none"> Interviews Policy documents Budgets 	<ul style="list-style-type: none"> Annual 	<ul style="list-style-type: none"> Countries

Indicator	Indicator definition	Data source	Data collection methodology	Frequency of data collection	Who is responsible for data collection
Indicators for monitoring and evaluating initiatives to improve productivity and supply					
<ul style="list-style-type: none"> Attain 6 percent annual growth in food production by 2015 	<ul style="list-style-type: none"> Increased household crop production per unit of land (ha) 	<ul style="list-style-type: none"> Agricultural Census FAOSTAT R/NEWS 	<ul style="list-style-type: none"> Household surveys Rapid surveys Crop cutting 	<ul style="list-style-type: none"> Annual Cropping season 	<ul style="list-style-type: none"> Countries FAO
<ul style="list-style-type: none"> Attain 6 percent annual growth in food production by 2015 	<ul style="list-style-type: none"> Increased area under cultivation 	<ul style="list-style-type: none"> Agricultural Census Ag statistics FAOSTAT R/NEWS 	<ul style="list-style-type: none"> Household surveys Rapid surveys Remote sensing 	<ul style="list-style-type: none"> Annual Cropping season 	<ul style="list-style-type: none"> Countries
<ul style="list-style-type: none"> percent of population consuming more than 2,100 kcal/p/day by 2015 	<ul style="list-style-type: none"> Attained adequate energy consumption per person per day 	<ul style="list-style-type: none"> FAOSTAT 	<ul style="list-style-type: none"> Food Balance Sheets CFSAM NFCS Household surveys 	<ul style="list-style-type: none"> Annual 5 yearly 	<ul style="list-style-type: none"> Countries FAO
<ul style="list-style-type: none"> Increased by 6 percent per annum the yield of strategic staple food⁴ by 2015 	<ul style="list-style-type: none"> Increased food production of strategic staple food 	<ul style="list-style-type: none"> Ag census Ag statistics FAOSTAT 	<ul style="list-style-type: none"> FBS Post-harvest surveys Marketing surveys 	<ul style="list-style-type: none"> Annual 	<ul style="list-style-type: none"> Countries
<ul style="list-style-type: none"> Cross-border trade on staple food increased by 6 percent per annum by 2015 	<ul style="list-style-type: none"> Increased cross-border trade, especially of staple food Reduced trade constraints between countries such as export limitations on export and imports of food crops. 	<ul style="list-style-type: none"> Ag statistics Min of Trade FAOSTAT WTO statistical database Min of Agriculture 	<ul style="list-style-type: none"> FBS Interviews Policy reviews Secondary data analysis Post-harvest surveys Marketing surveys 	<ul style="list-style-type: none"> Annual 	<ul style="list-style-type: none"> Countries/R ECs

⁴ Strategic food products as defined in the Abuja Declaration 2006

Indicator	Indicator definition	Data source	Data collection methodology	Frequency of data collection	Who is responsible for data collection
<ul style="list-style-type: none"> Increased domestic surplus on staple food 6 percent per annum by 2015 	<ul style="list-style-type: none"> Increased national production capacity through increased productivity and production 	<ul style="list-style-type: none"> Min of Trade/ Agriculture 	<ul style="list-style-type: none"> FBS Interviews Policy reviews Secondary data analysis 	<ul style="list-style-type: none"> Annual 	<ul style="list-style-type: none"> Countries
<ul style="list-style-type: none"> Food aid imports reduced by 6 percent per annum by 2015 	<ul style="list-style-type: none"> Reduced national dependency on food aid imports 	<ul style="list-style-type: none"> Min of Trade/ Agriculture WTO statistical database 	<ul style="list-style-type: none"> FBS 	<ul style="list-style-type: none"> Annual 	<ul style="list-style-type: none"> Countries

Indicator	Indicator definition	Data source	Data collection methodology	Frequency of data collection	Who is responsible for data collection
Indicators for monitoring and evaluating initiatives to reduce hunger and malnutrition					
<ul style="list-style-type: none"> Stunting, wasting and underweight and BMI rates reduced by 50 percent by 2015 	<ul style="list-style-type: none"> Reduced stunting rate Reducing percent of children under 5 years who are underweight 	<ul style="list-style-type: none"> National and regional health statistical data WHO database 	<ul style="list-style-type: none"> Epidemiological monitoring system DHS 	<ul style="list-style-type: none"> Annual 5 yearly 	<ul style="list-style-type: none"> Countries
<ul style="list-style-type: none"> Child mortality ratio reduced by 2/3 in children less than 5 years by 2015 	<ul style="list-style-type: none"> Reduced child mortality as defined by the MDGs 	<ul style="list-style-type: none"> National and regional statistical sources UN statistical data and report 	<ul style="list-style-type: none"> DHS 	<ul style="list-style-type: none"> 5 yearly 	<ul style="list-style-type: none"> Countries
<ul style="list-style-type: none"> Maternal mortality ratio reduced by ¾ by 2015 	<ul style="list-style-type: none"> Reduced maternal mortality as defined by the MDGs 	<ul style="list-style-type: none"> National and regional statistical sources UN statistical data and report 	<ul style="list-style-type: none"> DHS 	<ul style="list-style-type: none"> 5 yearly 	<ul style="list-style-type: none"> Countries
<ul style="list-style-type: none"> Reduce micronutrient deficiencies by 50 percent by 2015 	<ul style="list-style-type: none"> Reduced occurrence of micronutrient deficiency cases. Reduce iron deficiency anaemia in women of child-bearing age by one third Virtually eliminate iodine and vitamin A deficiencies Reduce other micronutrient 	<ul style="list-style-type: none"> National and regional statistical sources UN statistical data and report Min of Health data Clinic records 	<ul style="list-style-type: none"> Food Consumption survey 	<ul style="list-style-type: none"> 5 yearly 	<ul style="list-style-type: none"> Countries

Indicator	Indicator definition	Data source	Data collection methodology	Frequency of data collection	Who is responsible for data collection
	deficiencies such as zinc and folate <ul style="list-style-type: none"> Increased consumption of vitamin-A rich foods, especially meat from small livestock, eggs, fish, yellow sweet potatoes, palm oil and green leafy vegetables Increased fortification of staple foods with micronutrients 				
<ul style="list-style-type: none"> Improved household resilience 	<ul style="list-style-type: none"> Reduced incidence of asset eroding coping strategies 	<ul style="list-style-type: none"> NGOs / UN agencies Risk management and analysis units 	<ul style="list-style-type: none"> Livelihoods surveys Household surveys 	<ul style="list-style-type: none"> 4/5 years Annual 	<ul style="list-style-type: none"> Countries NGOs UN
<ul style="list-style-type: none"> Improved food access by consumers 	<ul style="list-style-type: none"> Annual inflation index Consumer price index Increased kms of tarred roads 	<ul style="list-style-type: none"> Nat Stat Office District offices Min of Transport 	<ul style="list-style-type: none"> Labor surveys LSM data Quality of life surveys Marketing surveys CPI 	<ul style="list-style-type: none"> Annual 	<ul style="list-style-type: none"> Countries
<ul style="list-style-type: none"> Availability of social safety nets for targeting the vulnerable 	<ul style="list-style-type: none"> Availability of funds for various safety nets 	<ul style="list-style-type: none"> Min of Finance/ Planning Min of Social Development/Affairs 	<ul style="list-style-type: none"> Budget reviews 	<ul style="list-style-type: none"> Annual 	<ul style="list-style-type: none"> Countries

Indicator	Indicator definition	Data source	Data collection methodology	Frequency of data collection	Who is responsible for data collection
Indicators for monitoring and evaluating initiatives to improve risk management					
<ul style="list-style-type: none"> Number of people receiving food aid reduced by 6 percent per annum by 2015 	<ul style="list-style-type: none"> Reduced number of people receiving food aid 	<ul style="list-style-type: none"> WFP Other relief agencies 	<ul style="list-style-type: none"> Project administration 	<ul style="list-style-type: none"> Annual 	<ul style="list-style-type: none"> Countries

Indicator	Indicator definition	Data source	Data collection methodology	Frequency of data collection	Who is responsible for data collection
<ul style="list-style-type: none"> Establishment of operational National and Regional Early Warning Systems (crop monitoring) 	<ul style="list-style-type: none"> National and regional early warning systems institutionalized with budget 	<ul style="list-style-type: none"> R/NEWS Disaster Management units Min of Planning/finance 	<ul style="list-style-type: none"> Annual Budgets MTEF Donor funding 	<ul style="list-style-type: none"> Annual 	<ul style="list-style-type: none"> Countries/R ECs
<ul style="list-style-type: none"> Food insecurity risk management systems at national, regional and continental levels institutionalised by 2015 	<ul style="list-style-type: none"> Institutionalised food insecurity risk management systems at both national and regional levels 	<ul style="list-style-type: none"> National and regional disaster mitigation bodies UN statistical data and report 	<ul style="list-style-type: none"> Annual reports MTEF Donor funding 	<ul style="list-style-type: none"> Ongoing 	<ul style="list-style-type: none"> Countries/R ECs
<ul style="list-style-type: none"> National and regional capacity to disaster mitigation and response mechanism by 2015 	<ul style="list-style-type: none"> Established national and regional policy frameworks and coordination mechanisms established 	<ul style="list-style-type: none"> National Disaster Mgt units Parliament 	<ul style="list-style-type: none"> National Legislation Summit documents Etc. 	<ul style="list-style-type: none"> Ongoing 	<ul style="list-style-type: none"> Countries/R ECs/ AU
<ul style="list-style-type: none"> Pan-African emergency response body/unit established by 2015 	<ul style="list-style-type: none"> Built pan-African emergency response capacity 	<ul style="list-style-type: none"> AU/NEPAD/RECs 	<ul style="list-style-type: none"> Annual reports/ Budget AU/NEPAD 	<ul style="list-style-type: none"> Once off 	<ul style="list-style-type: none"> AU
<ul style="list-style-type: none"> Pan-African Charter on Food Assistance Policy Framework developed by 2015 	<ul style="list-style-type: none"> Established pan-African charter on food assistance 	<ul style="list-style-type: none"> AU/NEPAD/RECs 	<ul style="list-style-type: none"> Annual reports/ Budget AU/NEPAD 	<ul style="list-style-type: none"> Once off 	<ul style="list-style-type: none"> AU
<ul style="list-style-type: none"> Food reserve management policies formulated and operationalised by 2015 	<ul style="list-style-type: none"> Formulated food reserves management policies at national and regional levels 	<ul style="list-style-type: none"> National and regional disaster mitigation bodies 	<ul style="list-style-type: none"> National Legislation 	<ul style="list-style-type: none"> Ongoing 	<ul style="list-style-type: none"> Countries/R ECs
<ul style="list-style-type: none"> Policies and institutions for improved management of food surplus developed by 2015 	<ul style="list-style-type: none"> Developed policies and institutions to manage food reserves 	<ul style="list-style-type: none"> National and regional disaster mitigation bodies 	<ul style="list-style-type: none"> National Legislation 	<ul style="list-style-type: none"> Ongoing 	<ul style="list-style-type: none"> Countries/R ECs