COMESA Region Concept Paper for CAADP Pillar 3. Increase Food Supply, Reduce Hunger and Improve Responses to Food Emergency Crises

I. Introduction

Throughout Africa, significant reductions in poverty and hunger will require sustained growth in agricultural productivity and output. To reduce dependence on imported food aid, Africa will need to boost domestic food production and enable the free flow of food staples across borders, from Africa's many surplus producing areas to its hunger hot spots. Over 60% of Africa's poor work primarily in agriculture. For them, increased agricultural productivity offers the surest means of raising income, ensuring adequate food consumption, and accumulating the assets necessary to survive periodic shocks. Africa' urban poor, who spend over half of their income on food staples, depend on growing productivity of farmers to moderate the food prices on which their consumption and welfare primarily depend. Rapid urbanization makes this productivity challenge especially great: with urban population growth of 3%-4% per year and rural growth at 1% or less, production per farmer in Africa will have to rise by 60% to 80% over the next 20 years to keep pace with domestic demand. Because of the central role agriculture must play in Africa's battle to eradicate poverty and hunger, the African Union's New Partnership for Africa's Development (AU/NEPAD) has placed top priority on agricultural development, challenging African governments to boost budgetary allocations for agriculture to 10% of total spending, up from their current level of 6%.

Through the Comprehensive Africa Agricultural Development Programme (CAADP), the AU/NEPAD has provided an Africa vision and strategic framework for boosting agricultural productivity and growth. The CAADP provides a strategic framework aimed at increasing agriculture growth to at least six percent per year, thereby enabling income growth and wealth creation sufficient to cut poverty in half by 2015. The CAADP identifies the following four complementary pillars that will prove central to achieving the required growth in agriculture:

- *Pillar 1*: Extending the area under sustainable land management and reliable water control systems;
- *Pillar 2*: Improving rural infrastructure and trade-related capacities for market access;
- *Pillar 3*: Increasing food supply, reducing hunger, and improving responses to food emergency crises; and
- *Pillar 4*: Improving agriculture research, technology dissemination and adoption.

This concept note focuses on Pillar 3 and on the efforts envisioned to ensure food security in the Common Market for Eastern and Southern Africa (COMESA) region. The AU has requested that COMESA take the lead in developing and coordinating a Pillar 3 strategy that will ensure adequate food supplies, eradicate chronic hunger and ensure adequate emergency responses in the COMESA region. As Africa's largest regional economic community (REC), and one with large clusters of highly visible vulnerable groups, the COMESA region houses both the requisite expertise and the compelling motivation to address these critical food security concerns.

COMESA is well-positioned to play this coordinating role for its 20 member states. Many key problems require regional solutions; the importance of a regional approach is embodied in the "Nairobi Declaration" and confirmed in the "Cairo Declaration" during the COMESA Agricultural Ministers' Meeting of November 2005. COMESA has long adopted such a regional approach to food security by promoting infrastructure development and harmonized policies that will enable a free flow of food staples from surplus to deficit areas driven primarily by price incentives and market forces. Successful containment of livestock and plant diseases demand careful coordination across borders, as past experience combating rinderpest and cassava mosaic virus in the region attest. The sharing of improved plant and livestock breeding material across countries, likewise, offers significant prospects for reducing costs and accelerating productivity gains across countries that straddle common agroecological zones. Early warning and forecasting systems work most efficiently when conducted on a regional framework. Even purely national programs such as emergency and school feeding programs, clearly benefit from the sharing of information and experience across countries. This paper outlines the COMESA region's strategy for CAADP Pillar 3.

II. Food Security in the COMESA Region

Chronic poverty and hunger stalk the COMESA region. National poverty rates range from a high of 84% in the DRC in 2002 to a low of 38% in Uganda in 2003. Everywhere, rural poverty surpasses that in cities and towns. As a result of chronic poverty, hunger and undernourishment prevail widely. Within the region, the share of undernourished in total population ranges from 19% in Swaziland and Uganda to a high of 73% in Eritrea.

Natural shocks and human conflict exacerbate these vulnerabilities. Drought, flooding and conflict erupt intermittently, exposing the chronically poor to the dangers of asset depletion and potentially lethal undernutrition, which trigger humanitarian crises in the region. In August of 2006, over 10 million people were at risk in Ethiopia. In neighboring Kenya, 3.6 million people receive food aid, and the food situation in pastoral areas remains critical. Nearly 2 million people are dependent on food aid in Southern Sudan, while a further 2 million are at risk in Uganda including many internally displaced persons. The situation in Darfur likewise remains critical.

While regional food emergencies frequently concentrate in pastoral and conflict-afflicted areas such as the Horn of Africa, nearby Kenya remains a structurally deficit maize producer and Southern Africa remains vulnerable to periodic drought. One year ago, Zimbabwe, Malawi, Zambia, Swaziland, and adjacent countries in Southern Africa faced a serious food security crisis when the pressures of drought compounded problems of structural food insecurity and poverty in the region. Nearly 5 million people were at risk in Malawi, with over 4 million receiving food aid. In Zimbabwe, roughly 3 million people received food aid. Poor rains in Rwanda led to crop losses, while about 40% of its cattle quarantined due to foot and mouth disease.

Trends in agricultural productivity have remained flat over the past generation, barely keeping pace with population growth. Meanwhile, unpredictable rains lead to wide fluctuations in output and significant price volatility from one year to the next. As a result, many cereal producers in the COMESA region face the threat of a boom and bust cycle, where good yields one season lead to local surpluses and price collapse. In response, farmers may plant less in the next season, triggering price increases or even severe price spikes when

drought accompanies the downturn in planted area. Open borders and regional trade offer a critical means of moderating price falls in boom years and placing a ceiling on price spikes in bad years. Yet trade barriers remain prevalent within the region, triggering increased price volatility and farmer disincentives. Following a bumper harvest in 2006, Zambian authorities initially imposed a maize export ban, even in the face of rapidly falling domestic farm prices and stated demand from surrounding deficit countries such as DRC and Zimbabwe. Policy impediments to cross-border trade remain prevalent throughout the region, in spite of COMESA treaty agreement to free up these flows. Closed borders, intermittent flooding and drought, generally low levels of investment in agricultural research, livestock disease, and sporadic conflict plague farmers and poor consumers throughout the region. Despite their clear vulnerability, pastoralist groups remain frequently ignored in agricultural policy debates. Likewise secondary food staples such as cassava, sweet potatoes, sorghum and millet remain frequently neglected, while maize and fertilizer subsidies for maize typically dominate agricultural policy discussions.

As a result, the COMESA region remains highly dependent on food aid. Half of COMESA's member states are chronically food insecure, and eleven out of twenty member countries receive regular food aid inflows. These inflows offer stark testimony to the region's past failure to achieve food security. For this reason, the COMESA Ministers have identified improved food security as the primary objective of their CAADP efforts. And they have targeted a reduction in the number of countries receiving food aid as their primary measure of success.

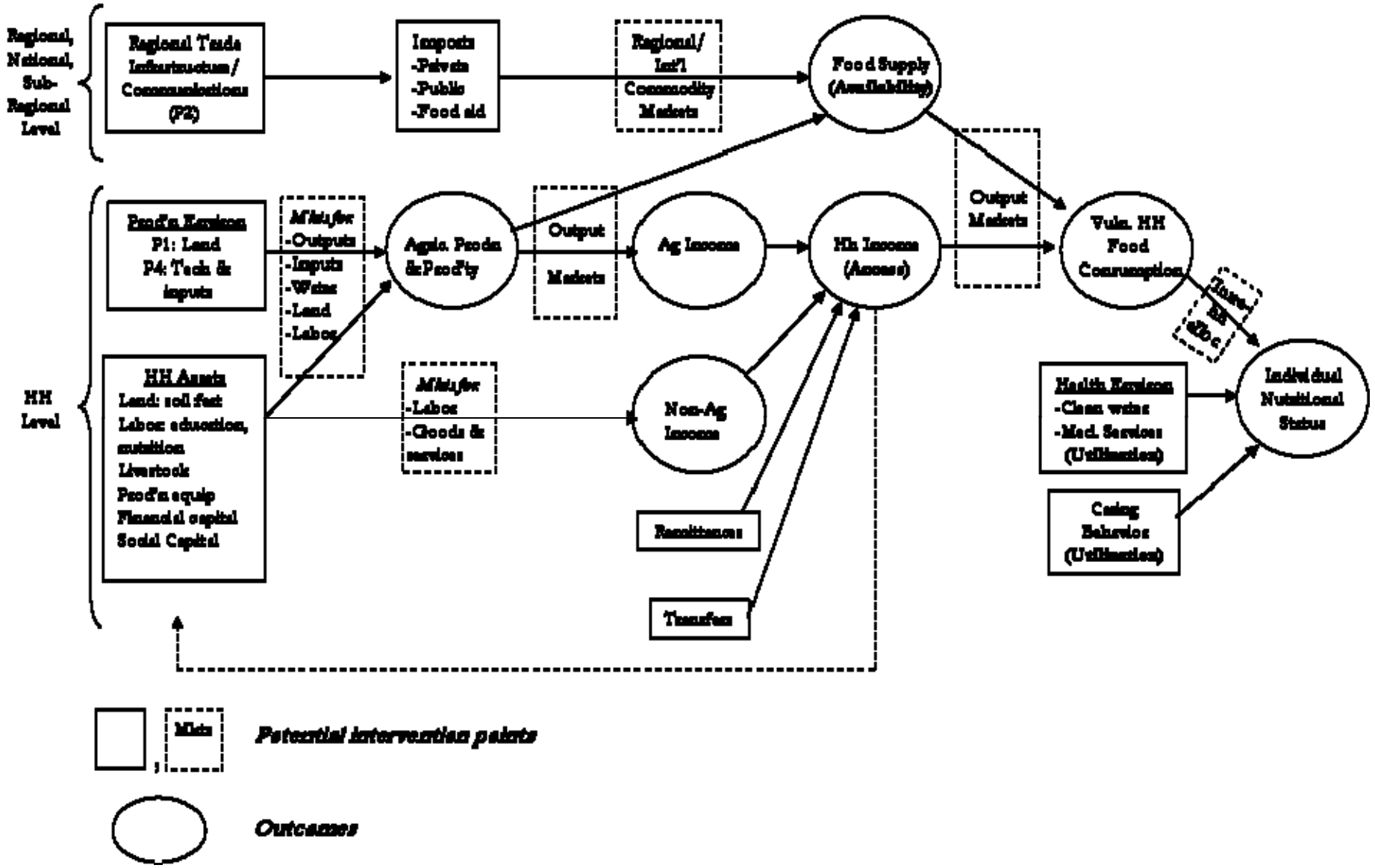
To achieve this goal, the COMESA CAADP plan focuses a series of key structural relationships that govern farm productivity, food supply, marketing efficiency and household purchasing power. Figure 1 in the next section summarizes these key structural relationships while the following discussion outlines the strategic framework and long-run COMESA strategy that ensues.

III. Strategic Framework

Food security is the result of a complex set of interactions between households, the environment in which they operate (physical, technological, policy, social), and markets. Assuring food security for vulnerable households requires that decision makers understand this process sufficiently to identify intervention points that will efficiently and effectively improve these households' situation. Figure 1 summarizes this process, distinguishing between outcomes (circles) and potential intervention points (rectangles).

As embodied in this figure, CAADP's approach to food security is based on the widely accepted concepts of food availability, access, and utilization. Household access to food is determined by its income, which depends on the results of its agricultural production and marketing activities, incomes earned off the farm, remittances sent from outside the farm, and any transfers the household might receive. Food availability is simultaneously determined by local food production and by imports. Together, household incomes and the availability of food determine the household's food consumption. The nutritional status of individuals in the household depends on allocation processes within the household, on elements of the health environment that influence the body's ability to properly utilize food, and, in the case of infants, on the feeding practices of caretakers.

Figure 1. Structural Causes of Food Security and Insecurity



The long-run ability of households to achieve food security depends fundamentally on their productivity. Because nearly all rural African households participate in food markets, productivity matters at two levels: at the farm level, as households produce food and non-food items, and at the market level, as they convert some of these items into cash and then convert that cash back into the range of food and non-food items they require to meet their basic needs. At the farm level, the quality of the productive environment -- land, water, and available technologies – determines the household's potential productivity; its actual productivity and total production depend on the amount and quality of its assets and on the efficiency and accessibility of markets, especially but not only for agricultural inputs. At the market level, a given quantity and mix of agricultural production will be more valuable to the household, and will contribute more to food security, if output markets function effectively to allow ready sale of food and non-food items at remunerative prices, and ready purchase of a range of food and non-food items at affordable prices.[1]

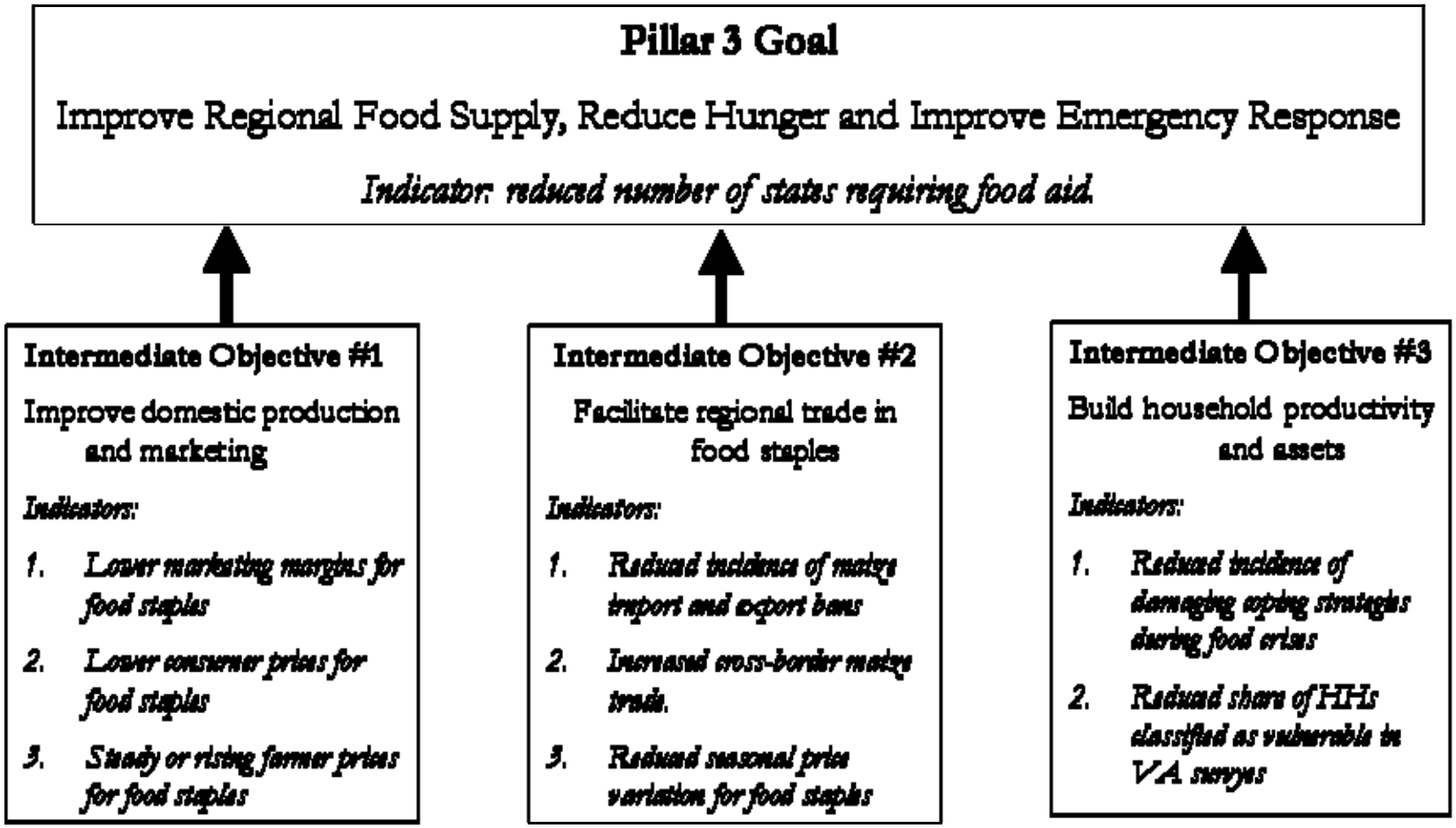
As noted in the previous section, African agriculture suffers from low productivity in both production and marketing. The continent is also subject to extreme and increasing shocks (natural, such as drought, and man-made such as civil unrest) that temporarily reduce production and incomes and that may erode productivity over the long-run. As a result, many households have few assets, are unable through their own production, marketing, and off-farm activities to accumulate more assets (note the feedback in Figure 1 from household income to household assets), and are at risk of depleting their already limited assets to cope with recurrent shocks. These households are trapped in poverty and may be at risk of destitution when conditions turn against them; almost by definition, they are food insecure. For such households, external transfers can be crucial in the short-run to maintain incomes and protect or replace assets during shocks, and even in the medium-run to help build assets over time, so that they can become and remain food secure on their own efforts. A key challenge for any food security strategy is to design transfer programs that meet the basic needs of the most vulnerable households at the lowest feasible cost, and that promote rather than undermine long-run productivity growth.

IV. Long-Run Strategy

The discussion in the previous section suggests that any strategy to improve food security must accomplish three intermediate objectives (Figure 2). First, it must improve the productivity of the domestic agricultural production and marketing system, especially but not only for food staples. Second, it must facilitate efficient regional trade so that domestic food production can be cost effectively complemented by imports when needed. Finally, it must protect, build, and, when necessary, replace household incomes and productive assets. This section discusses key elements of a long-run strategy for attaining these intermediate objectives.

[1] We include non-food items in this list because basic needs are never limited to food; even the poorest and most food insecure households will, unless faced with imminent starvation, allocate some of their scarce resources to meeting non-food needs. The more efficiently they can do this, the more resources they will be able to devote to meeting their food needs.

Figure 2. COMESA CAADP Pillar 3 Strategy



a. Intermediate Objective #1: Improve the Productivity of the Domestic Production and Marketing System

CAADP Pillars 1 and 4 partially address this issue by focusing on improved land and water resources (Pillar 1) and on technology generation and dissemination (Pillar 4). If successful, efforts under these Pillars will dramatically increase the productive potential of African smallholder farmers. To fully realize this potential, Intermediate Objectives 2 and 3 must be realized; within IO1, the input and output markets serving small farmers must be more accessible and operate at lower cost. The rest of this section focuses first on input markets, then on output markets, before considering two additional policy issues with important implications for the performance of output markets.

Input Markets:[2] Major differences exist among analysts on the way forward in promoting cost-effective agricultural input use and market development in Africa. Despite these differences, most would agree on at least the following points. First, there is a need to assess the farm-level profitability of using inputs (and possible reasons for lack of profitability) before concluding that the problem is market failure and that governments need to reinstitute their own input distribution programs to reach smallholder farmers. Input profitability analyses can make a major contribution to policy design and implementation.

Second, resources need to be concentrated on reducing the costs of input marketing. The public sector has a major role to play by driving down transport and port costs, which typically account for a major share of the farm-gate cost of fertilizer. Stable government policy in input markets can also help reduce the "risk premium" that private traders typically charge – a cost that is ultimately passed on to farmers.

Third, targeted programs to promote input use among vulnerable smallholders have proven difficult to implement and have often become the focus of patronage activities. Effective targeting requires strong implementing organizations and overall systems of governance and accountability. Donors and governments could invest in strengthening activities over the long run, but that use of scarce resources for that purpose would have an opportunity cost. Unless targeted programs can be effectively implemented, their potential negative impacts on the development of private sector trading networks will remain a major drawback.

Fourth, promoting agricultural input use and market development requires simultaneous attention to output market development and effective agricultural research and extension systems. Promoting input use requires a market-oriented approach that considers the full range of factors affecting farmers' willingness to pay for inputs and the costs of providing them.

Fifth, one of the most important contributions to the long-term development of sustainable input markets and patterns of input use lies in helping SSA governments improve their policy analysis, design, and implementation capability. This will be a formidable challenge given that much

[2] This section draws heavily on Kelly, Valerie A., Eric W. Crawford, and T. S. Jayne (2003). "Agricultural Input Use and Market Development in Africa: Recent Perspectives and Insights". Policy Synthesis # 70. Michigan State University Department of Agricultural Economics.

agricultural policy analysis is still conducted by externally funded projects with weak links to government ministries. Key approaches for accomplishing this include:

- Human resource development for policy analysts and decision makers, on-the-job training, policy analysis courses taught through distance learning programs, and graduate degree training;
- More frequent and systematic *ex ante* analysis of policy/investment options, incorporating lessons learned from *ex post* studies;
- Better links between decision makers and analysts, and encouragement for agricultural decision makers to become more active advocates for policies and investments that favor agriculture;
- Support for development of sustainable systems for the collection of agricultural census data (area, production, yields).

Output Markets: Debate on desirable output market policies for Africa, like that for input markets, generates strong differences among analysts. However, several well documented empirical regularities have important implications for the choice of policies and programs. This section documents those empirical regularities, highlights their implications for common policy debates, and then briefly addresses two additional key issues: the role of food reserves, and the desirability of food fortification.

Six empirical patterns in the agricultural sectors of COMESA countries are especially worth considering in any debate about output market policies. First, empirical analysis in several countries of the region shows that between 4% and 8% of smallholder farmers produce about three-quarters of the marketed maize surplus. These farmers have more land, much higher incomes, and even higher assets than other farmers. As a result, subsidies on maize and fertilizer (which is predominantly used on maize) are heavily concentrated among a small group of relatively well off farmers.

Second, in every country of the region where household survey data are available, at least two-thirds of smallholder farmers are net buyers of maize: either they do not sell maize and do purchase it (the most common case), or they purchase more than they sell. This means that most small, poor farmers are hurt by higher maize prices, not helped.

Third, smallholder farmers can and do diversify into other food and cash crops when opportunities arise. In Zambia since the early 1990s, for example, production of cassava has risen by 6%-7% per year, while marketed volumes have risen at twice that rate. This rapid and sustained growth followed the release of a series of highly productive new cassava varieties and the reduction of maize subsidies in Zambia. During the same period, smallholder production of cotton has increased by more than ten times.

Fourth, following the dismantling of highly controlled maize systems in the region in the early 1990s, decentralized private food distribution systems have emerged to redistribute maize and other locally produced foods between surplus and deficit households within local areas, and between surplus and deficit areas within countries and across borders. These systems, based on small-scale milling and consumption of more of types of maize meal (especially less refined

meal), have proven far less costly than the older, more centralized and large-scale systems; in Zambia and Kenya, these small-scale systems are responsible for substantial reductions in the margin between prices of maize grain at wholesale and maize meal at retail[3].

Fifth, and despite a relative move away from maize over the past decade, government expenditure on agriculture in the region tends to be heavily concentrated on subsidies to maize and to fertilizer, which is primarily used on maize. Very little is spent on varietal research, extension, or rural infrastructure that would reduce marketing costs. In Zambia in 2006, for example, 56% of agricultural spending went to maize and fertilizer subsidies, and only 10% to investments designed to raise long-term productivity in the agricultural sector.

These five empirical patterns suggest that the distributional effects and opportunity costs (in terms of productivity growth and sustainable poverty reduction) of heavy subsidies on maize need to be carefully considered. If a transfer program is desired, would it not be possible to design a productive safety net that targets a broader array of more vulnerable households? Alternatively, what would be the payoff to investing those funds in agricultural research or extension, rather than recurrent subsidies?

A final important empirical pattern is that ownership of cell phones and geographical coverage of cell networks has expanded dramatically in rural areas of the COMESA region over the past decade; more recently, the cost of cell phone use has also fallen substantially. The reality on the ground is that large numbers of even very small traders – and a growing number of small farmers – either own or have access to cell phones. This revolution in communications technology provides opportunities for innovation to make existing and new marketing information systems much more accessible to small farmers and traders

Strategic Grain Reserves:[4] After maize sector reforms in COMESA during the early 1990s, debate regarding Strategic Grain Reserves (SGRs) lessened, and several countries abolished or greatly reduced their reserves. SGRs are, however, back on the policy agenda of governments and several donors. A comprehensive review of SGR performance by NEPAD[5] had this to say:

... in Southern Africa, continued attempts to use strategic grain reserves to help stabilize cereal prices for both producers and consumers have undermined market incentives for private traders to perform normal arbitrage functions that could otherwise have satisfied governments' food security objectives in most years. As a consequence, small farmers have often been penalized for producing a surplus crop by falling prices and lack of market. This has led them to reduce plantings with subsequent adverse impact on the overall production and grain availability situation in following years. At the same time, consumers have also faced greater instability in grain markets, with respect to both physical quantities available and price. In most cases,

[3] Jayne, T.S. and Antony Chapoto (2006). "Emerging Structural Maize Deficits in Eastern and Southern Africa: Implications for National Agricultural Strategies". Food Security Research Project Policy Synthesis Number 16. Lusaka.

[4] This section draws heavily on Tschirley, et al (2006). "Anticipating and Responding to Drought Emergencies in Southern Africa: Lessons from the 2002-2003 Experience". MSU International Development Working Paper Number 90. East Lansing.

[5] NEPAD. 2004. NEPAD Study to Explore further Options for Food-Security Reserve Systems in Africa. Pretoria: New Partnership for Africa's Development.

therefore, experience with strategic grain reserves in this part of Africa up to now has been less than satisfactory.

SGRs played no role in the successful response to the 2002/03 food crisis in southern Africa; effective early warning was able to mobilize more than enough support, primarily through commercial imports but also through food aid, to avoid a humanitarian disaster. Early Warning really was early in 2002/03, and local governments, COMESA, and donors need to make sure it remains that way.

Any review of the anticipated costs and benefits of SGRs, especially regional SGRs, needs to take carefully into account their past management history, realistic assessments of the prospects for improved management, and an in-depth understanding of the strengths and weaknesses of local and regional early warning systems. As with any other investment, the opportunity cost in terms of foregone investments needs also to be considered.

Food Fortification: Substantial momentum has built up in recent years throughout Africa behind the idea of fortifying staple foods, especially maize meal, with crucial micronutrients such as iron, iodine, Vitamin A, and zinc. Proponents see fortification as a potentially cost effective way of reducing the large human and economic costs associated with micronutrient deficiency in Africa. These costs include elevated infant and child death, blindness, reduced nutrition due to inability to properly metabolize ingested foods, and others. Some studies conclude that industry-led fortification would be highly cost effective, but note, among other caveats, that "fortification … is most attractive … where processing is more centralized"[6]. Those who have studied the benefits of maize sector reform in Africa raise serious questions about mandatory fortification for this very reason: a key benefit of these reforms, as noted above, has been increased competition from small-scale millers, resulting in substantial reductions in marketing margins in some countries. These analysts are concerned that mandatory fortification will undermine the competitiveness of the small-scale system and threaten one of the major food security benefits of maize sector reform. In Zambia, the Ministry of Health very recently withdrew the mandatory maize meal fortification bill at the urging of consumer associations, the Competition Commission, and other organizations. In light of these divergent viewpoints about a very important issue, the most reasonable position for COMESA at this time may be to encourage further rigorous study of the costs and benefits of mandatory food fortification, and to examine the scope for and benefits of promoting voluntary approaches.

b. Intermediate Objective #2: Facilitate Efficient Regional Trade

Africa's hunger hot spots are well known. Less well advertised are a series of highly productive, regularly surplus food production zones across Africa. In many instances, these food-security-enhancing hot spots (FSEHS) [7] emerge in areas of favorable rainfall and in watersheds where irrigation proves economical. In other cases, regular food surpluses emerge in flexible ecosystems that combine the production of multiple staples, particularly cereals in combination

[6] Horton, Sue (2006). "The Economics of Food Fortification". Journal of Nutrition. 136:1068-1071, April 2006. See also Wesley, Annie (2004). "Small and Medium Scale Milling and Fortification Background Paper (Draft)". Micronutrient Initiative, Ottawa, Canada

[7] FSHES, pronounced "fishes".

with perennial foodcrops such as bananas, cassava or root crops. Examples of critical regional food-security-enhancing hotspots (FSEHS) include: Northern Mozambique, where cassava and Irish potatoes provide local food security, enabling regular maize exports, Uganda, where banana and cassava ensure food security, thereby enabling maize export to chronically deficit Kenya; northern Zambia, where cassava ensures food security and enables regular export of both cassava chips and maize to DRC, and South Africa, where mechanization, modern input use and increasing irrigation enable cereal export northward in most harvest seasons. Acting as built-in shock absorbers, these FSEHS serve a valuable role in moderating food shortages across zones and frequently across national borders. But, currently, a variety of natural and man-made constraints limit their potential responses, even within the COMESA region. By breaking down these barriers to trade, between surplus and deficit zones, the region's internal FSEHS will be able to respond more effectively to emergencies as well as chronic deficits elsewhere.

Over the next generation, improved systems of domestic marketing and regional trade in food staples will be essential to enabling agricultural growth and hence poverty reduction in Africa. Growing trade in food staples will dwarf that in all other African agricultural markets. Production of food staples, for growing urban markets and regional cross-border trade, represent probably the largest growth opportunity available for African farmers. However, in recent years, imported food is accounting for an ever increasing share of urban food consumption. Facilitating the development of local and regional markets will, therefore, be critical to link smallholders to growing markets and to stimulate agricultural production growth, broad-based income expansion, and poverty reduction.

Given highly arbitrary political boundaries, which cut across natural market sheds, more fluid regional trade flows will be essential to enabling farm production growth and hence poverty reduction. Production gains cannot be sustained within the confines of small countries, where erratic rainfall and pervasive trade barriers result in boom and bust cycles that discourage farm production and investments. Across national boundaries, political borders cut across natural market sheds, impeding the free flow of food staples and other goods. To maintain and sustain producer incentives, farmers in the FSEHS need access to growing markets, both internal and across national borders.

Achieving these potential gains will require investment in improved infrastructure, especially for transport and communications (Pillar 2), and much greater commitment by governments to open trade regimes. The latter must include a reduction in non-tariff barriers to trade. In this regard, one can make a long list of needed changes: harmonize phyto-sanitary standards, maximum weight limits, and insurance requirements; simplify and harmonize trade documentation and make government agencies which provide this documentation more accessible; clarify and define more narrowly when physical inspections are necessary; and relax rules of origin within the SADC Trade Protocol. What such a list highlights, however, is that trade regulations – and the bureaucracies that exist to enforce them – exist for good reason: crop diseases need to be contained; roads can be damaged by trucks that carry excessive loads; insurance generally has a high social and private payoff; and government has a legitimate interest in knowing the volume of trade crossing its borders. While the regulations themselves can often be unduly complicated or restrictive and, thus, constitute barriers to trade, the more fundamental issue may be that the

bureaucracies enforcing them are typically staffed by under-trained and poorly remunerated individuals with little vision of the purpose of their job.

This line of reasoning suggests that, at the same time that they take the steps outlined above to simplify and harmonize trade regulations, governments and donors in the region need to invest seriously in the professionalization of their customs services. What is needed is a customs service which facilitates legal trade, rather than the all-too-frequent pattern of using trade legalities to hinder open commercial trade and promote its informalization.

Similar professionalization needs to take place among the market information services in the region. Three key changes need to be made. First, these services need to see their role as promoters of trade, not just reporters of trade. This requires training and mentoring over time. Second, they need to collect and report on a broader array of information, including changing policies and practices that affect trade. Third, they need to be linked together with efficient means of communication so that information available in one country is immediately available in all countries of the region.

Donors have for some years been frustrated with the moribund status of many public market information systems. Indeed, many of these systems do little more than collect market prices and report them – too often late and inconsistently – in national newspapers. In some cases (e.g., in Kenya and Malawi), the tendency has been to bypass public systems in favor of private systems which are seen as potentially more dynamic and sustainable. Such initiatives are important and will undoubtedly generate important lessons for improving market information. Yet the basic public good nature of market information, especially in the underdeveloped market systems that prevail in the region, means that fully private systems will not be profitable for the foreseeable future. We suggest that a hybrid approach is needed. First, government needs to maintain and strengthen its commitment to collecting and disseminating basic market information. At the same time, these information services, or sister organizations linked to them, need to have the financial and managerial autonomy to generate revenue, seek additional outside funds (e.g., from donors), and manage these funds. The objective is to provide increasingly relevant information for the private trade, while at the same time providing policy makers with analysis and perspective that strengthens and refines government commitment to making markets work.

c. Intermediate Objective #3: Build, Protect, and Replace Household Productive Assets[8]

Chronic poverty, diseases such as AIDS and malaria, recurrent drought, and sporadic civil conflict are increasing the number of emergency response operations in the COMESA region and make it likely that the region will periodically require such operations for the foreseeable future. By meeting immediate humanitarian needs during emergencies, emergency response helps households to protect productive assets (including human health) and to replace assets they may have lost or liquidated while coping with the shock; properly designed and executed, emergency response makes crucial contributions to the long-run productivity growth that is needed to ensure food security in the COMESA region.

[8] This section draws heavily on Tschirley, et al (2006), ibid.

Chronic poverty worsens the impact of any natural or man-made shock and therefore increases the cost of emergency response. Furthermore, many of the chronic poor find themselves in poverty traps, with too few human, financial, and physical assets to escape poverty in reasonable time through normal economic growth processes. In principle, this combination of facts creates a clear rationale for "productive social safety nets", independent of any specific emergency, that endeavor to lift the chronically poor above threshold levels of key assets so that they can enter a self-sustaining growth path and free themselves of the need for future emergency assistance.

In the rest of this section we lay out a vision for how both types of interventions – short-run emergency response and longer-run productive safety nets – can avoid common pitfalls and contribute to long-term productivity growth.

More Efficient and Effective Emergency Response: An efficient and effective response to future food crises in the COMESA region will provide enough resources (whether food aid or cash) to meet the needs of two groups of people: those unable to meet their own current needs, and those who can do so only by engaging in unsustainable asset liquidation and other coping mechanisms that undermine their ability to handle future crises. At the same time, an efficient and effective response will rely on and encourage private markets to provide food from the lowest cost sources to those who have the ability to purchase it. It won't provide so much food aid that current and future market response is inhibited, nor will it rely so much on markets that household vulnerability is increased.

Striking this balance requires conceptual clarity, accurate information, and a willingness of relief agencies and governments to use these concepts and information to step out of established modes of behavior and learn new approaches. Conceptual progress has been made in recent years, clustered around the "vulnerability" literature and the concepts of safety nets, cargo nets, poverty traps, and relief traps (Barrett and Maxwell 2004). However, great progress needs to be made in developing systems to provide the required information and in using that information in actual response.

Improved information is needed in at least five areas. First, countries and relief agencies need ***better food balance sheets***. As unsatisfactory as this approach might be for those steeped in concepts of rural livelihood and income strategies, they are now and will likely remain the starting point in emergency planning. Thus, improvements in the comprehensiveness and accuracy of these sheets will have a high payoff. Better balance sheets will require inclusion of roots and tubers and better estimates of their production and harvestable in-ground stocks.

Second, planners need information on ***household budget shares and cross-price elasticities of demand*** among staples, broken down by income level. Empirical research over many years has shown that households, especially the poor, are strongly price sensitive in their consumption patterns. Integrating baseline budget share data and reasonable cross-price elasticities of demand into more comprehensive and accurate food balance sheets will begin to provide the broader view that is needed to avoid in-built biases towards overestimating food aid needs in crises.

Third, planners need ***improved market information***. Information on price levels and trends for food staples and the assets that tend to be liquidated during crises (especially livestock), simple seasonal indices to put current staple price rises into context, and spatial price differences between surplus and deficit areas within and across countries are all crucial. These data should be combined with simple models to predict likely internal and regional informal trade flows.

Fourth, planners need information on the ***incidence of different coping mechanisms*** by households, classified by their likely order of appearance during a crisis (and thus implicitly by their level of sustainability), and compared to some baseline.

Finally, ***household income shares*** and an assessment of the likely impact of the crisis on the level of income from each source can be very useful in determining the balance between food aid, cash transfers, and market responses.

Operationally, we suggest that emergency operations follow a three-step process. First, they should start by focusing on markets. Agencies and government should determine what markets are capable of in terms of the volume of additional grain they can bring to the country through commercial imports (both formal and informal), geographical areas they can cover, and proportions of the population in these areas that will have sufficient purchasing power, at expected price levels, to ensure a minimally adequate diet.

Next, governments and emergency planners should take concrete measures to facilitate market response. Food markets in developing countries suffer from high unit costs for domestic marketing, constrained access to foreign exchange and credit to finance food imports, and frequent policy constraints that further limit import response. Combined, these factors can, in the short-run during a crisis, lead to skyrocketing food prices. Yet governments can, with selected assistance from donors, put in place temporary and longer-term measures which may dramatically increase the ability of markets to respond to these crises. Eliminating policy barriers to trade and ensuring more transparent statements and actions by government regarding food imports should always be the first step; Mozambique has shown that this open and clear policy stance greatly facilitates trade's contribution to stable prices and food security.

Additional balance of payments support from donors or a foreign exchange credit facility for use in importing food staples may be called for if import needs threaten macroeconomic stability. Additional measures could include direct cash transfers to affected households where markets could work but purchasing power may be limited, cash for work if done early enough that households' health is not already compromised, and even temporary transport subsidies on specific routes. Direct cash transfers and cash for work projects should be well publicized, including timing, location, and total cash to be disbursed, to ensure that traders realize ahead of time that there will be increased purchasing power in the area.

Finally, planners should turn to food aid if markets and market-facilitating measures are expected to be insufficient to meet immediate food needs and protect vulnerable households from excessive indebtedness or asset depletion. These food aid programs should be designed to cover only those geographical areas and populations that markets are not expected to cover. In addition, because even the best designed emergency programs can have important effects on

markets, governments and relief agencies need aggressively to make information about the food aid program widely and publically available. If traders fear that food aid quantities will be too large or poorly targeted, they will reduce the amount of food they import, further increasing the burden on the emergency response program. Government and donors should prioritize food aid procured locally or regionally. Food aid procured in this way on average costs only 55% to 65% as much as food aid shipped in-kind from donors, and in most cases is much more timely. These cost and timeliness advantages are especially large for valued-added products such as Faffa in Ethiopia or Likuni Phala in southern Africa (these products are comparable to corn-soy blend and wheat soy blend in the United States and Europe).

***Productive Safety Nets*:** The key distinctions between productive safety nets and emergency response operations are that the former are on-going and not linked to any specific emergency, and they aim to build household and community assets rather than replacing assets that have been lost. In principle, productive safety nets that are properly designed and implemented will save resources in the long-run by helping people out of poverty and out of periodic reliance on emergency assistance.

A range of tools are used in productive safety net programs, including food- or cash for work, cash transfers conditional on the education of children and sometimes on investments in health care and adoption of improved health practices, targeted fee reductions or elimination for health clinics and primary education, school feeding programs, and others. In Africa, by far the largest productive safety nets program is in Ethiopia, where 5 million people have been enrolled since 2005. The program's two major innovations are conditional transfers based on public works to the chronically food deficit, rather than as emergency aid, and transfers in cash for the majority of total transfers. Some observers consider Malawi's input subsidy programs to be productive safety nets, though these remain quite controversial. Other examples (not exhaustive) include conditional cash transfer programs in Kalomo district of Zambia, operated by Oxfam, and a range of interventions in Kenya.

While comprehensive productive safety nets have been successful in middle-income countries like Mexico (*Progresa* later expanded and renamed *Oportunidades*), Brazil (*Bolsa Familia*), and to a lesser extent South Africa (Child Support Grant -- CSG), their application in Sub-Saharan Africa is too recent to allow full assessment. To be effective and efficient, such programs need to be well targeted, must have demonstrable effects on the productive asset levels – not just incomes -- of participating households, and must have clear criteria for when households will be required to exit the program into self-sustaining growth. Additionally, effective monitoring and evaluation are crucial to determine whether the program is having its intended effects on households' long-run ability to ensure their own food security. Arguably, such M&E is most important in the poorest countries, since these countries have so many other pressing investment needs that could go unmet as funds are used for the safety nets.

These conditions can be very difficult to meet in poor countries of Sub-Saharan Africa. As a result, there is little agreement whether comprehensive productive safety nets are an appropriate expenditure at this point, or whether the required funds would be more effectively allocated to infrastructural and other investments that directly increase the economy's productivity. At the same time, much experimentation is already going on in the region. Given this, the most

reasonable position for CAADP's Pillar III is to remain abreast of this on-going experimentation, to support additional experimentation for well conceived programs, and to ensure sufficient monitoring and evaluation of them so that reliable conclusions can be drawn regarding cost effectiveness and best design.

V. Early Action Priorities for the COMESA Region

The early actions proposed in this section reflect project and program proposals that have been recently funded or are likely to be funded in the very near future, that are consistent with the strategic approach laid out in this document, and that are expected to be able to yield quick impact. These actions do not constitute, and are not intended to constitute, a comprehensive approach to realizing CAADP's strategy.

Regional Enhanced Livelihoods for Pastoral Areas (RELPA), funded by USAID ($19.8 million). This Horn of Africa program for enhancing livelihoods of pastoralists across three countries has been launched. COMESA acts as the umbrella for RELPA to ensure cross border emphasis in the collaboration with the three member states in the program. COMESA is responsible for coordinating on the ground implementation of activities in the three countries; movement and trade of animals across borders; regional Early Warning mechanisms and response to emergencies and conflict; and sanitary and phyto-sanitary harmonization for export across borders and to other countries. A key component of the program is to enhance trade within COMESA and with the Middle East through negotiating reasonable animal disease certification or through alternatives such as export of chilled meat, building on successes in place.

Regional Food Security and Risk Management Program for Eastern and Southern Africa (REFORM), funded by the European Union (€10 million). This program is mostly capacity building (i.e., skills transfer, technical studies, documentation of best practice, information sharing, policy dialogue, etc.). Long-term professional staff are to be recruited for the duration of the program to coordinate and offer technical expertise on day-to-day implementation of the program within IGAD and COMESA Secretariats. The program anticipates four results: improved core capacities to implement food security mandates; Cross Border Trade Associations (CBTAs) for small-scale traders established and/or strengthened; improved regional and national capacities to analyze policies and programs to manage chronic food insecurity, and assess the potential of alternative social protection approaches; and improved regional and national capacities to analyze current disaster management policies, programs, and policy alternatives.

Making Markets Work for the Poor: Enhancing Food Security and Productivity Growth in Eastern and Southern Africa (MMWP), funded by World Bank/DfID ($3.8 million). This project involves a three-year program of practical analysis, policy outreach, consensus building, and capacity strengthening to promote the goals of national and regional food security, poverty reduction, and agricultural productivity growth. Activity will focus on food and input market development in Eastern and Southern Africa, but will address this issue holistically, based on a recognition of the important allied public investments and institutional strengthening that will be required to achieve these goals. Agricultural and food security policy in the region revolve around the widely accepted goals of food security, poverty reduction, agricultural productivity

growth, and equity considerations. But progress toward these goals can rarely be achieved without a solid understanding of how the agricultural economy really works, which requires up-to-date information, analysis, and subsequent dissemination and education. This program is based on the premise that improved empirical information about the behavior of farmers, consumers, and marketing agents can improve agricultural sector decision making, private sector performance and private/public sector partnerships in the region. It also recognizes the need for information to be converted into local analytical capacity and understanding, through intensive collaboration with influential public agencies, brokering understanding and trust between government and private sector stakeholders, and the nurturing of sustainable agricultural policy analysis networks in the region. Ultimately the project aims to foster better policies and therefore better-functioning markets which will improve food security for vulnerable households throughout the region.

Improved Regional Trade in Food Staples (RTFS), total $5 million, with startup funding by the World Bank. This program of work aims to assemble spatial evidence on existing regional production and trade in food staples and to develop predictive analytical tools that will enable spatial mapping of the outcomes resulting from common natural and policy shocks. By making these results available to policy makers and private sector stakeholders, the partners will help to facilitate regional policy dialogue aimed at expanding regional trade in food staples. The partners involved in this effort will focus on a series of key activities. First, they will define market sheds for key food staples by mapping production, prices and known trade flows -- seasonally, in drought years and in normal years – in Southeastern and Eastern Africa and identifying, within each, key food-security enhancing hot spots (FSEHS). Then the team will develop a predictive model that will enable projection of the likely impact of various shocks – such as drought, major plant disease attacks, bountiful harvests in normally deficit zones, civil strife, and government policy instruments affecting production and trade in food staples. Interaction with traders and policy makers will be required to ground truth early findings and to facilitate policy dialoge. Drawing on recent GIS techniques the team will develop tools for visual representation to policy makers of results. As a key part of this effort, COMESA and partners will promote regional policy dialogue among farm groups, agribusiness and government in an effort to effect change in policies, public investments and private sector institutions required to facilitate and lubricate private regional trade in food staples.

Cassava Transformation in Southern Africa (CATISA), total $2 million, with startup funded by SIDA. The CATISA project aims to analyze and help accelerate cassava commercialisation in Southern Africa in order to help improve food security in the region. The project focuses on the rapidly growing commercialization of cassava in five countries – Malawi, Zambia, DRC, Tanzania and Mozambique – an integrated food staple market-shed in which cassava commercialization offers significant potential for improving food security in drought-prone areas of the region. Since the early 1990's, following significant gains in cassava productivity and the dismantling of maize subsidies in this sub-region, cassava production and marketing have grown rapidly. Studies tracking cassava marketing in Zambia and export flows into DRC suggest that marketed volumes of dried cassava have grown at roughly 13% per year over the past six years. The cassava belt that runs across these five countries represent a potentially powerful "food security-enhancing hot spots" (FSEHS). Because cassava can be harvested over a 2-3 year period, because these zones are highly productive maize producers, and

because local consumers prefer cassava, these multi-staple FSEHS can adjust cassava production very rapidly (upwards or downwards), moderate internal maize consumption, and release large quantities of both maize and cassava to other regions. Thus, they serve as built-in food security shock absorbers for the region. Based on a value chain approach and a comparative regional perspective, the CATISA project will assess production, marketing, processing technology across the region as well as the contrasting policy environments. Through regional technology and information exchange as well as coordinated policy dialogues, CATISA research will feed into a series of policy round tables aimed at identifying policy and infrastructural investments required to improve the ability of these cassava-producing zones in moderating regional supply shortages in food staples.

Home-grown school feeding (HGSF), funded by World Food Program and DfID ($25 million). NEPAD, WFP and the Millennium Hunger Task Force (MHTF) launched a pilot Home-Grown School Feeding and Health Program designed to link school feeding to agricultural development through the purchase and use of locally and domestically produced food. The program has generated considerable interest and expectations. Nigeria is one of ten African countries that NEPAD selected to pilot the HGSF.