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## STATUS OF FOOD SECURITY AND PROSPECTS FOR AGRICULTURAL DEVELOPMENT IN AFRICA

2005

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ANNEX 1: Current Food Security Highlights

# STATUS OF FOOD SECURITY AND PROSPECTS FOR<sup>1</sup> AGRICULTURAL DEVELOPMENT IN AFRICA

#### 1. INTRODUCTION

### 1.1 Background

A review of the importance of the agriculture sector, in terms of its contribution to GDP, export earnings and employment, reveals the unchallenged prominence of the sector in the economies of most African countries. For the continent as a whole, the agriculture sector accounts for approximately 60 per cent of total employment, 20 per cent of total exports and 15 per cent of GDP. Accelerating agricultural growth in African countries is therefore crucial not only for achieving food security and reducing hunger but also for generating employment and trade. NEPAD's Comprehensive Africa Agriculture Development Programme (CAADP), which has been adopted by African Heads of State and Government, provides a common framework for fostering broad-based agriculture-led economic growth in African countries. The AU Commission's Department of Rural Economy and Agriculture's (DREA) Strategic Plan of Action aims to initiate and promote policies and strategies for developing Africa's agriculture and the livelihoods of its people within this common CAADP framework.

Almost all African countries, with varying degrees of commitment and success, have identified food security as an important policy goal. The African Union (AU) is concerned by the fact that, despite this commitment, too many Africans continue to be food insecure (i.e., without physical and economic access to sufficient and safe food to lead a healthy and productive life).

Given the importance and critical situation of food security to Africa, the Fourth Ordinary Session of the AU Heads of State and Government in Abuja, Nigeria called on the AU Commission to prepare a "Status of Food Security Report" and present it to the Assembly every July. The report is not supposed to be an all-exhaustive report but should present a brief descriptive and analytical general overview of the state of food security in Africa.

## 1.2 The Major Challenges

Though there have been some pockets of success in African agriculture such as NERICA Rice, high yielding caAfricava varieties, etc., the goal of food security in Africa has remained elusive for many decades. While agriculture is transforming economies across much of Latin America and Asia the transformation has not been the same for Africa. For example, during the

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<sup>&</sup>lt;sup>1</sup> Some sections of this report have borrowed concepts from the FAO report on "Food Security and Agricultural Development in Sub-Saharan Africa: Building a Case for More Public Support".

period 1993 to 2003, Africa's rate of population growth has been higher than the rate of food production, while the continent's share of world trade declined for nine of ten of its major agricultural exports during the period. African agricultural production has to increase by at least four to six percent per annum on a sustained basis to meet the food needs of a rapidly growing African population that is expected to increase from about 900 million today to 1.3 billion by the Year 2020.

African governments face formidable challenges as they strive to achieve food security and reduce poverty. These challenges include but are not neceAfricarily limited to: high poverty rates and high income inequality; resurgent conflicts and political upheavals; poor infrastructure; the HIV/AIDS pandemic and other debilitating diseases such as malaria; high external debts; soil degradation; increasing water scarcity and poor water use management; desertification; and climate change. However, some of these challenges can be resolved or alleviated by bold policy measures and initiatives.

#### 2. THE CURRENT FOOD SECURITY SITUATION IN AFRICA

### 2.1 Summary across the Continent

As is well known, the current food security or "hunger situation" in Africa is significantly worse on average than it is in other parts of the developing world, as these latest estimates from FAO indicate (see figure 1 below)

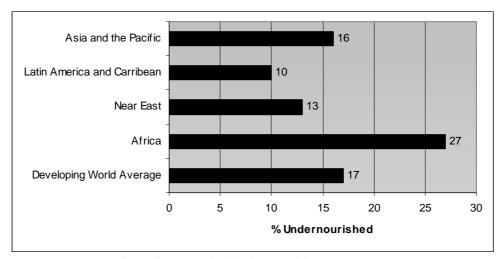


Fig. 1: Proportion of the Population Undernourished

Source: State of Food Insecurity in the World, 2004, FAO.

Twenty seven percent of the African population is estimated to be "undernourished" or hungry and this percentage has only declined by two percent (from 29 percent) over the 10 year period of 1990/02-2000/02. Since

<sup>&</sup>lt;sup>2</sup> Undernourished is defined as consuming less than 2100 Kcal/person/day. MDG goal 1 objective 2.

Africa's total population has increased from 589 million to 764 million over the same ten year period, the estimated absolute number of undernourished people has risen from 176 million to 210 million, a 20 percent increase. UNICEF estimates that 39 percent and 29 percent of African children less than five years were stunted and underweight respectively, over the 1995-2002 period.

## A Decade of Evolution in Africa's Food Security Situation

Over the ten year period of 1990-92 to 2000-02, AU Commission analysis of available information shows:

- A slight decrease in the percentage of the population estimated to be under-nourished (29 to 27 percent);
- An increase in the number of persons "hungry" from 176 to 210 million due to population increasing more rapidly than the percentages of hunger reduction;
- Quite striking differences in reducing hunger across the sub-regions with the North already at low rates and the Southern sub-region having made the most significant progress;
- Country and sub-regional performance in hunger-reduction has been strongly affected by conflict situations, with conflict causing substantially more disruption than natural disasters; and
- Sixty-three percent of Africa's people live in countries where the percentage of the population suffering from under-nutrition has declined from 36 to 29 percent.

#### 2.2 Sub-Regional Situation and Trends

However, Africa is not homogenous and one must not generalize across the large and diverse African continent with its diversity of physical environments and socio-economic conditions among sub-regions and among the 53 countries of the AU. The food security situation varies enormously across the 5 sub-regions.

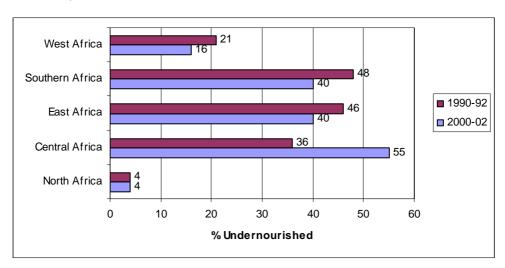
Table 1: Performance of African Sub-Regions in Reducing Hunger (in millions and percentages), 1990/92 – 2000/02

African	Number Persons Under-Nourished		Percent Population Under-Nourished		Percent
Sub-Regions	(millions)				Change in
	1990/92	2000/02	1990/92	2000/02	10 Years
North	5.4	6.1	4	4	0
Central	22.7	45.2	36	55	+ 19
East	76.4	86.2	46	40	- 6
Southern	34.1	35.7	48	40	- 8
West	37.2	36.4	21	16	- 5
Africa	175.8	209.6	29	27	- 2

Source: State of Food Insecurity in the World, 2004, FAO.

In Table 1 we see that the percentage of the population that is undernourished is estimated to be only 4 percent in North Africa, which has not changed substantially over the past 10 years. For the affected people this is a situation that is likely to be characterized by periodic hunger rather than life-threatening malnutrition. Experience from a number of developed countries indicates that this level of persistent food insecurity, although generally not life-threatening, is hard to totally eradicate even when government food assistance of one kind or another is provided.

Figure 2: Percent of Populations of African Sub-Regions Under-Nourished, 1990/92 and 2000/02



At the other extreme across the African sub-regions is the Central Africa region. The regional average is highly influenced by the relatively large population of the Democratic Republic of the Congo (61 percent of the sub-regional population). It has been estimated that for the period 2000-2002, 71 percent of the population of the DRC was undernourished. The civil war which has disrupted life there is the major cause of hunger in that country and this explains the sub-region's very high average of 55 percent undernourished.

These extremes are represented in the last column of Table 2 which shows that the Southern Africa sub-region reduced the percent under-nourished by 8 percent, while the Central African region's total of undernourished increased by 19 percent. These statistics imply children too hungry to concentrate in school; underweight mothers who give birth to sickly children; and chronically hungry adults who lack the energy to raise their families above the subsistence level. Hunger is inextricably linked to poverty in Africa. It is thus a basic development issue impeding national economic growth and a major part of what keeps millions trapped in poverty. While Africa is the only region where these inter-linked problems are so pronounced, the situation varies markedly from one sub-region of the continent to the next.

## 2.3 Regional Food Security Trends for 2005<sup>3</sup>

#### **East Africa**

Harvesting of the 2005 main season cereal crops is underway in northern parts of the sub-region while it has been completed in southern parts. A generally better 2005 harvest compared to 2004 is expected to improve food availability in most countries of the sub-region. The overall food situation, however, remains precarious with high malnutrition rates reported in several countries arising from effects of war, displacement and past droughts.

In Somalia, below average 2005 main "gu" season harvest in the south and an upsurge in civil strife have exacerbated the already precarious food situation. Nearly one million people are in need of humanitarian assistance. The food situation in Sudan is also alarming due to continued conflict and population displacement that have resulted in serious food insecurity, especially in Darfur and southern Sudan.

#### Southern Africa

There are delays in planting of main season crops due to inadequate rainfall so far in most countries in the sub-region. Food insecurity is worsening during this lean period and nearly 12 million people, mainly in Zimbabwe and Malawi, are in need of emergency food assistance.

Shortages of key farm inputs such as seed, fertilizer and draft power are reported in Zimbabwe. High inflation coupled with fuel and transport problems are exacerbating food insecurity. In Malawi, markets continue experiencing escalating prices of maize, the main staple food. So far, commercial imports and food aid deliveries have been meagre in spite of the significant amounts pledged by international donors.

South Africa's record maize harvest of 12.4 million tonnes is estimated to result in a potential exportable surplus of about 4.66 million tonnes, more than enough to cover the sub-region's import requirements.

#### **West Africa**

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Good harvests are expected in the Sahel, following generally favourable weather conditions throughout the growing season. However, the severe food crisis that hit the sub-region in 2004/05 had serious income, livelihoods and nutrition effects and resulted in depletion of household assets including animals, as well as high levels of indebtedness, notably in Niger and parts of Burkina Faso, Mali and Mauritania. In spite of the improved food supply situation in these countries, assistance is still needed for income generating and asset reconstitution activities in order to strengthen access to food for vulnerable households.

<sup>&</sup>lt;sup>3</sup> Information in this section was compiled from the FAO GIEWS (Global Information and Early Warning System) website Africa Report No.3, of December 2005. A more current situation is presented in annex 1.

In Côte d'Ivoire, insecurity and the de facto partition of the country continue to disrupt agricultural production and marketing activities. In Guinea, Liberia and Sierra Leone, food assistance continues to be needed for internally displaced people and refugees.

#### Central Africa

Crop prospects and food security outlook are unfavourable in several countries due mainly to civil strife and insecurity. Overall crop prospects are favourable in Cameroon, but food insecurity persists in Chari and Logone Division of the Extreme North which experienced a severe food crisis in 2005.

The National Early Warning System in Burundi has warned of serious food insecurity beginning December 2005 due to a prolonged dry spell. A similar weather pattern is expected to affect the 2006 A season crops.

#### **North Africa**

In Algeria, the harvesting of the winter grain crops, mainly wheat and barley, is virtually over. Delayed plantings due to a late start of the rainy season resulted in sharply reduced output. Aggregate 2005 cereal production is estimated at about 2.5 million tonnes, some 36 percent lower than the bumper 2004 output and slightly below the average for the previous five years. In Egypt, harvesting of the 2005 irrigated wheat crop was completed in July, and output has provisionally been estimated at 8.18 million tonnes, well above the past five-year average of 6.7 million tonnes. The increase is due to the combination of an estimated 15 percent increase in wheat plantings and the favourable climatic conditions that benefited crops at planting and during growth. In Tunisia, harvesting of the 2005 winter crops has been completed. Output is estimated to drop significantly despite overall favourable weather conditions in the North, which is the main cereal producing area, due to a decrease in area planted combined with poorly distributed rainfall in the South and the Centre. Total cereal production is estimated at 2.1 million tonnes, compared to 2.3 million tonnes in 2004.

## Niger: Special Food Security Case in 2005

In mid-2005 the international media beamed images of hunger and malnutrition in Niger and bags of food aid being loaded onto C130 transport planes. This is an image that is all too familiar every few years in Africa (e.g. Malawi in 2002). Numerous early warning systems in the Sahel (AGRHYMET, FAO, FEWSNET, etc.) had been predicting the crisis since early 2005. It seems that both donors and governments were unprepared to act on the warnings until there were clear signs of distress amongst the population.

Many farmers and pastoralists in the Sahel are just on the borderline between survival and destitution. In favorable years their crops are adequate and some even have surpluses to sell (as was the case in 2003). But it doesn't require a major drought, just poorly distributed rainfall or a severe locust attack to tip them into food deficit and distress sales of animals. That is what happened last year in southern Niger. The low cereal production in 2004 also caused regional prices to increase resulting in several countries in the region restricting cereal flows into Niger. Below are some steps that can be taken to avoid such future crises.

- (i) Strengthen early warning systems to improve data collection, improve interpretation of market/price movements and the development of local interpretative and forecasting skills.
- (ii) Develop safety nets for the poorest households to prevent them from sliding into crisis leaving them poorer and more vulnerable to the next shock. Safety nets need to be tailor-made to fit local conditions and not to the convenience of donors. Some of the safety nets could include diversification of food and cash crop production including investments in perennial (tree) crops for food and timber. In most years there is enough food in the region and the successful management of crisis requires regional cooperation in managing extreme market conditions rather than panic reactions of governments to restrict outflow of food.
- (iii) Donors need to be more flexible in their emergency response. Many donors prefer using food aid or food for work only with others having complex procurement procedures so that food aid arrives 4-6 months late resulting in market disruptions for the following season thereby hampering agricultural recovery. Programmes such as cash for work are much more flexible and effective.

#### 3. SPECIAL CHALLENGES TO AFRICAN FOOD SECURITY

Although there are a multitude of challenges facing food security in Africa, their in-depth analysis is beyond the scope of this report. This section will therefore discuss a few of the significant challenges.

## 3.1 Poverty and Food Access

The majority of the African population lives below the poverty line (less than one dollar a day). Therefore, even when food is available in the market places, there are many extremely poor and vulnerable people who simply do not have adequate income (or purchasing power) to acquire the food that is available for sale. The causes of poverty are many and varied, however, one key determinant of poverty in sub-Saharan Africa is overdependence on subsistence farming with limited access to gainful off-farm employment and income-generating activities. Both the high level of poverty incidence and the uneven income distribution underline the financial constraints for the majority of the population on their ability to purchase the food they need. Household purchasing power is also undermined by higher food prices which grew at the rate of 6 percent per year over the period 1991-1999. Considering that on average, households in AFRICA spend 66 percent of their income on food, the impact of rising food prices on household food security cannot be overemphasized.

Poverty is a major component of food insecurity. National poverty lines are largely based on the cost of purchasing a bundle of basic foodstuffs deemed sufficient for adequate nutrition. Thus, factors affecting poverty as well as related policies will have a very important bearing on food security. Hunger is not just a result but a cause of income poverty: chronically hungry and undernourished people may not be able to build the neceAfricary human. physical and social capital that would help them escape poverty. Targeted measures should be put in place to ensure adequate access to food for the hungry and vulnerable groups. These will, in turn, increase the chances of success for other anti-poverty measures that come from improvements in farm and non-farm livelihoods. For many households, the opportunity to generate sufficient income to meet food requirements remains evidently limited, particularly when food insecurity, hunger and disease limit their working capacity. In this context, the establishment of efficient and transparent safety nets is paramount. Indeed, the Intergovernmental Working Group for the Voluntary Guidelines on the Right to Adequate Food has requested that states should consider -- to the maximum of available resources -- establishing and maintaining social safety and food safety nets to protect those who are unable to provide for themselves. In the long-term, raising the incomes of the poor will also be the best strategy for ensuring food security.

## 3.2 Impact of HIV-AIDS

Over the past 15 years the HIV-AIDS crisis has emerged across the world with devastating impact. It has multiple impacts on the food security situation across the African continent. In the worst affected countries of Southern Africa, HIV/AIDS has reduced life expectancy by an average of 22 years. It is estimated that if no corrective measures are taken now, Africa will be home to 20 million HIV/AIDS orphans by 2010, accounting for half the total number in the world. The link between HIV/AIDS and household food insecurity is significant. The impact of HIV/AIDS on household food security emerges immediately after the breadwinners succumb to the disease and loose their income generating capabilities. Its impact on national food security starts to emerge in the medium to longer term. The loss of adult labour in a household is detrimental to both food and nutrition security. Families who have lost a head of household often never recover fully in terms of levels of agricultural production and household incomes. For example, some recent studies report that an AIDS-related death of a breadwinner reduces his/her household's agricultural output by 61 percent and households with AIDS patients could loose between 29 and 43 percent of their labour during the year. What this means is that those who are not infected by the virus will have to increase their agricultural productivity dramatically and they must do so in a sustainable way in order to maintain agricultural production at desired levels. National policies and programmes need to begin to reflect the new environment shaped by HIV/AIDS and its impact on household, community and national food security.

#### How HIV/AIDS affects the three dimensions of food security

- Availability of food: reduction in rural labour can selectively reduce production
  within households, local communities, districts, and countries. In addition,
  production is also decreased when reduced incomes and increased medical
  expenses reduce the household's ability to acquire improved agricultural inputs,
  and through the loss of adult agricultural production knowledge;
- **Access to food:** illness, loss of strength, and loss of employment all contribute to reduced incomes and result in reduced access to food;
- **Utilization of food:** physiologically the body becomes less efficient in the processing or utilization of food when affected by AIDS or some of the opportunistic illnesses that are associated with the progression of the disease.

## 3.3 Impact of Natural and Man-made Disasters

Natural and man-made disasters have been a great challenge in the struggle for food security and agriculture-led economic growth in Africa. While many semi-arid countries have inherent soil infertility and water constraints that limit production and productivity, the biggest challenges are for those farmers who still rely on highly variable rainfall for their livelihood. As population densities have increased in the semi-arid zones covering a large part of the continent, so has vulnerability to drought. The average incidence

of serious drought has increased from around 7 serious droughts during the period 1980-1990 to 10 during the period 1991 to 2003. Agricultural encroachment into forest and marginal lands and increased frequency and intensity of droughts have exacerbated land degradation and desertification with negative consequence for agricultural production and productivity. Floods in several regions in Africa have also negatively impacted livelihood systems and food production.

Another natural condition that has reduced production is locust infestations which were resurgent in several sub-regions in 2003-2004. The African continent in 2004 experienced one of the worst desert locust upsurges in more than 15 years. Good rains fell during the summer of 2003 in the Sahel of West Africa and Sudan, causing local outbreaks in Mali, Senegal, Niger and Sudan, and Mauritania in North Africa, in October. In November, swarms moved to Northwest Africa where breeding occurred in the spring of 2004 and an upsurge subsequently developed. In view of the serious threat to food security posed by Desert Locust upsurge in some Member States, the AU Policy Committee of the Special Emergency Fund for Drought and Famine in Africa (SEAF) during its 10th Extra-ordinary meeting held on 13 August 2004, approved one million US dollars for the purpose of assisting governments and peoples of the nine countries worst affected by the locust outbreak.

Conflict situations or "man-made disasters" appear to be an even more important cause of food insecurity in Africa than natural disasters. The correlation between political stability and economic performance cannot be made more evident than by the very poor agriculture and food-security performance observed in conflict-affected countries. In countries where there is great political instability or armed conflict the economy is affected in many ways. Budgets and human resources are in large part diverted to defence and internal-security activities; private investment, both domestic and foreign, remains insignificant due to high risk; markets and other services are disrupted, making it difficult for producers to operate normally; infrastructure and private property are destroyed, and so on. Agriculture is often one of the most affected sectors. Farmers constitute a large proportion of the conscripts in armies or militias, depriving agriculture of workers. Rural populations are displaced or take refuge in urban centres, leaving their fields unattended, with drastic consequences on crop production or survival of livestock herds. Social ties and capital are dislocated. Rural infrastructure essential for any economic activity is shattered or crippled by mines. The prevalence of peace and stability is therefore an absolute prerequisite for sustainable agricultural and overall economic prosperity. Success in solving and preventing conflicts would strongly contribute to improving the food security situation in Africa.

## 4. STRATEGIC THEMES FOR AGRICULTURE-LED GROWTH AND FOOD SECURITY IN AFRICA

There is a growing consensus across the strategies which have emerged from important African and international summits and meetings that have occurred over the past five years (Millennium Development Summit, Sustainable Development Conference, World Food Summit Five Years Later, and AU Summits which led to the creation of NEPAD and the CAADP, the AU Extra-Ordinary Summit on Agriculture and Water etc.) that the interlinked problems of hunger and poverty can best be solved by using a "multi-track" approach.

In the "multi-track" concept the key tracks include but are not neceAfricarily limited to: measures for improving agricultural productivity and increasing incomes derived from rural livelihoods (farm and off-farm); targeted safety-net programmes that give the neediest and most vulnerable populations direct assistance on their basic needs (whether they be food, basic health care, or access to clean drinking water); and policies and institutions aimed at empowering farmers and their communities to enable them to climb out and stay out of poverty. This multi-pronged attack on hunger and poverty at all levels, which is consistent with all CAADP pillars for increasing food supply while at the same time reducing poverty, will require pragmatic public-private sector collaboration in ways that cross the boundaries of traditional ministerial responsibility.

Some of the key strategic themes that will lead to improved food security and to reducing overall rates of poverty through increasing incomes are discussed below:

- (i) Increasing Agricultural Productivity (CAADP Pillars 1 and 4)
- (ii) Market Infrastructure and Trade (CAADP Pillar 2)
- (iii) Improved Agricultural Financing

## 4.1 Increasing Agricultural Productivity

#### 4.1.1 Irrigation

In many parts of Africa, agricultural development is fettered by recurrent droughts, which over the years have increased both in frequency and severity in some places. In some countries, drought incidences are common and almost predictable. Thus, in these countries it should no longer be viewed as an issue of emergency but a phenomenon that countries should take into account in both their short- and long-term agricultural development strategies.

Given the region's susceptibility to drought, investment in water harvesting techniques (along with strengthening the related technical and institutional capacities) and expansion of land under irrigated agriculture is the most plausible option for stable and higher agricultural productivity. The

potential exists to increase both smallholder and large-scale irrigation, although this naturally differs from one country to another. FAO estimates show "that there is sufficient water to develop about 42.5 million hectares of land under full irrigation. In 2000, less than one third of this physical potential, 12.7 million hectares, had been brought under water control (excluding the non-equipped cultivated wetlands, water harvesting, flood recession areas). It is estimated that these 12.7 million hectares use 4.4 percent of Africa's total water resource base. This represents between 10-15 percent of the total exploitable volume of renewable freshwater in watercourses, lakes and aquifers".

However, an analysis of irrigated agriculture in 41 African countries for the period 1990-2002 reveals that the proportion of irrigated agriculture is as low as 2.8 percent. At this juncture, it is appropriate to underline that the "agricultural miracle" of Southeast Asia has been associated with the expansion of irrigated agriculture. In those countries, irrigated agriculture grew from around 20 percent in the 1960s to 40 percent today.

A number of constraints, however, hinder irrigation development in Africa. The causes include a weak institutional set-up and capacity, and very high costs of irrigation development). The estimated average investment per hectare in AFRICA ranges from US\$ 2,000 to US\$ 4,000 for small-scale and from US\$ 9,000 to U\$15,000 for large-scale irrigation. In India, the comparable cost ranges from US\$ 1,500 to U\$ 2,000. High costs are generally blamed on extensive use of foreign expertise to establish new irrigation schemes because of limited local capacity, but these can be reduced for the state by more participation of beneficiaries and the use of appropriate technologies. These costs, coupled with poor credit services, make expansion of smallholder irrigation difficult in the region. There is, however, besides the establishment of new irrigation schemes, considerable scope for rehabilitation and upgrading of existing systems, as well as new run-of-river and new storage-based schemes.

## 4.1.2 Soil Fertility Management

Agriculture in Africa is characterized by low input and low output technology. Average cereal yield varies between 1.3 and 1.4 tonnes per hectare, though this figure masks differences among countries, which range from 0.2 in Botswana to 4 tonnes per hectare in Mauritius. Fertilizer application is in AFRICA is the lowest in the world, even though soils are generally considered as poor compared to those in Latin America or Asia. Average fertilizer application was around 35 Kg/ha during the 1980s, but it declined to around 26 Kg/ha in the 1990s and the beginning of the current decade. Explanations of this decline generally include increased price of fertilizer and reduced access to credit for working capital. In contrast, there has been a marked increase during the period in Southeast Asia and Latin America, from around 50Kg and 100Kg to 150 and 200 Kg, respectively increases of 300 and 200 percent. Improved fertility management such as

improved use of organic fertilizer and agroforestry are rare because of weak extension, thus resulting in soil degradation.

## 4.1.3 Research, Technology and Extension

A host of constraints explain the lack of availability of appropriate productive technologies in Africa. One of them is the weakness of agricultural research and development (RD) programmes in developing appropriate production technologies: these programmes have generally been ineffective and are getting weaker for lack of funding and shortage of experts. Lack of access to and availability of improved agricultural technologies and inputs, combined with inadequate agricultural support services, are reflected in the generally low yields observed in Africa. A comparative cereal-yield analysis of the different subregions of Africa with those in Latin America and the Caribbean and in developing Asia shows that yields in Africa generally are lagging further and further behind those in the other regions. The difference was already significant in the 1960s, but in recent years the difference has been 3 to 4 times higher than the average yields in Africa.

### Agricultural and Food Security Success Story: Improved Cassava Productivity

Cassava is a staple food for 200 million Africans, second only to maize in calorie contribution across the continent. Nigeria has recently replaced Brazil as the world's leading cassava producer. This has been possible due to pan-African collaboration among international, regional, and national research and extension programs which have led a series of high-yielding (average yield increase of 40 %), disease-resistant Tropical Manioc Selection (TMS) varieties. The new varieties have been complemented by private sector-led development of simple mechanical processing technologies that have greatly reduced processing labour. The productivity gains of the new biological and processing technologies have resulted in returns to land for farmers that are up to 20 times greater than those achieved with traditional varieties and manual processing. In an equally import contribution to food security, these sustained production gains have led to falling consumer prices for processed cassava, especially evident in Nigeria and Ghana. Critical research contributions have been coordinated by the International Institute for Tropical Agriculture (IITA) in Nigeria and long-term funding by IFAD over the past decade was essential in accelerating the dissemination and adoption of the new technology across West Africa.

Benefiting small farmers as well as poor urban consumers, *Africa's cassava transformation has proven to be its most important poverty fighter to date.* Extending this success to additional African countries is the objective of the NEPAD/CAADP Pan Africa Cassava Initiative.

Sources: IFPRI and NEPAD Secretariat

## Agricultural and Food Security Success Story: NERICA Rice

After years of breeding work by scientists from WARDA (the West African Rice Development Agency in Cote d'Ivoire), assisted by IRRI (the International Rice Research Institute in the Philippines), a very important breakthrough was made in crossing a very hardy old African rice variety (*oryza glaberrima*) with more frail, but higher yielding, Asian rice (*oryza sativa*). The resulting new varieties, referred to under the name of "NERICA" (New Rice for Africa) rice, combine the best features of both "parents": resistance to drought and pests; higher yields, even with little irrigation or fertilizer; and more protein content than other types of rice. About 10 varieties of NERICA rice are being used by farmers, mostly in West African uplands or rain-fed production areas. Even without fertilizer Nerica varieties can yield 1.5 to 2.5 tons of rice per hectare, compared with an average of 1 ton or less for traditional varieties. With even modest doses of fertilizer, yields increase to 3.5 tons per hectare. In addition NERICA has characteristics which make it very popular with women farmers since variety characteristics result in freeing up substantial amounts of the labour required by traditional varieties.

Source: WARDA

## 4.2 Market Infrastructure and Trade

Africa is characterized by weak market infrastructure. Transport costs are very high due to inadequate infrastructure and monopolistic behaviour by economic agents. While the cost of transporting a ton of maize over 11,000 km from the United States to Mombasa ranges from US\$45 to US\$48, the transport cost from MombaAfrica to Mbarara in Uganda (only 1,500Km) ranges from US\$125 to US\$140. Comparative studies have also shown that rural transport costs in Ghana and Zimbabwe are two to three times higher than in Thailand, Pakistan and Sri Lanka for distances up to 30 kilometres. The poor state of road infrastructure in AFRICA is often attributed to governments putting priority on infrastructure in urban areas, ports and links among cities or between cities and ports, rather than between producing areas and main markets.

"Soft" market infrastructure is also wanting. This includes regulatory framework and information for markets to operate competitively, and standards and norms to ensure proper quality and safety of products, protect consumers and open up opportunities for export. Other marketing constraints affecting both domestic and international trading include lack of grading and standardization, and inadequate appropriate information systems. Good market information systems can encourage more transparency and competition in markets, provide information to those (private or public) who store food and help predict future scarcities, help assess import needs, track forthcoming crises and contribute to stabilzing markets.

In recent years, however, there has been some change in the mode of operation and structure of markets. Contract farming has developed as a potentially beneficial business arrangement aimed at guaranteeing market access and support services to farmers, on the one hand, and provision of timely and quality supplies to downstream agents<sup>4</sup> on the other. Nevertheless, sometimes contract farming in AFRICA has developed in a way that is unfavourable to producers, and in a manner that was slowed down by the frail legal framework.

Post-harvest losses are very high in most African countries because of poor storage technology and facilities. Although there is no reliable information on the exact extent of post-harvest losses in Africa, the average waste for cereals is estimated to be between 10 and 15 percent, but losses can be as high as 30 percent of the total grain output in some cases.

## Deteriorating Terms of trade

Farmers in Africa in general face low farm gate output and high input prices. While obtaining reliable price data is difficult, it is generally maintained that prices of inputs have escalated quicker than output prices in the aftermath of currency realignments, subsidy removal, tax reform and other changes prompted by structural adjustment programmes. In theory, most agricultural products are tradable and should have benefited from the foreign exchange adjustments. However, input price increases were immediate, while adjustments in output prices lagged behind.

In Africa, exports are dominated by primary commodities – mainly tropical agricultural products and minerals while food items, oil, and manufactured goods are the major imports. Changes in relative world prices have implied that African countries have to export more units of agricultural commodities in order to be able to maintain a certain volume of imports of chemicals, farm machinery and other important inputs for production.

Prices of agricultural commodities are also depressed because of subsidies paid to the farming sector by developed countries. For example, the United States Department of Agriculture (USDA) estimates that a full removal of farm subsidies in OECD countries would raise the price of wheat 18 percent, 15 percent for other grains, 22 percent for butter and 12 percent for beef with considerable welfare and development implications in developing countries. Research estimates also that removal of U.S. subsidies on cotton would raise world cotton prices by 26 percent. Furthermore, several OECD countries have been transferring their food surplus to developing countries through food aid or dumping at prices lower than the cost of production and distribution, with, in some cases, dramatic effects on local food producers who are no longer competitive on local markets.

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<sup>&</sup>lt;sup>4</sup> Farmers are often provided with specialized services, input credit, training and extension by partners who strive to achieve some control and assurance over the quality and timeliness of delivered goods.

### 4.3 Financing Agricultural Development

Addressing the above challenges requires increased direct public sector support to agriculture. Although the scope for African countries to dramatically increase their budgetary allocation to agriculture is limited, they could certainly do more than at present. Food security and agriculture have, until recently, been given a relatively low importance on the political agenda of most African countries. Anectodal evidence shows that for the majority of African countries, budgetary allocation to agriculture is about 5 percent. Within agriculture, specific sub-sectors such as animal production often benefit from allocations that are ridiculously low compared to their economic weight.

In trying to address this situation, African Heads of State and Government endorsed the "Maputo Declaration on Agriculture and Food Security in Africa" in July 2003 at the AU Summit in Maputo, Mozambique. The Heads of State and Government committed themselves to increase government budget allocation to the agriculture sector to at least 10 percent of the annual budgets.

Development aid – and particularly development aid in favour of agriculture, rural development and food security - has followed a declining trend. According to OECD, total aid to Africa increased from around US\$1 billion in 1960 to more than US\$30 billion in 1991, before decreasing to less than US\$20 billion at the turn of the century. Donor fatigue, awareness of fungibility of financial aid and poor governance are often given as the reasons behind the decline in official development assistance (ODA) and the increasing share of ODA being provided through general budgetary support, of which agriculture is often a victim. After a peak of US\$4.8 billion in 1989, aid to agriculture in Africa declined to a level slightly above US\$2.5 billion after 1997. In recent years, this aid has been mainly concentrated on rural development and infrastructure and to a lesser extent on research and extension. These figures appear quite insignificant when compared to needs estimated in the Comprehensive Africa Agriculture Development Programme (CAADP), which reckons that more than US\$240 billion would be required over the 2002-2015 period - an average of US\$18 billion per vear - to achieve the World Food Summit objective of reducing hunger by half in the whole of Africa.

Irrespective of the reasons of governments or their partners, agriculture in AFRICA countries remains strapped for resources, and the sector is unable to contribute adequately to the fight against poverty and food insecurity. Decision-makers are not convinced that investing in agriculture is a good economic choice, and as a result many countries, especially in East and Southern Africa, have remained heavily dependent on food aid and commercial food imports.

## 5. RECENT INITIATIVES/ACTIONS TOWARDS REDUCING FOOD INSECURITY IN AFRICA

A number of initiatives and actions have recently been introduced to address the continent's food insecurity problems. They include, but are not necessarily limited to: a number of AU Declarations and Decisions; the preparation and adoption of the AU/NEPAD Comprehensive Africa Agriculture Development Programme (CAADP); the creation of the Department of Rural Economy and Agriculture within the AUC framework and the preparation and adoption of its strategic plan; the preparation of the Environment Action Plan of the Environmental Initiative of NEPAD; a range of initiatives by the Regional Economic Communities (RECs); and a number of international initiatives including the World Summit on Sustainable Development, the United Nations Secretary-General's call to action for Africa's Green Revolution, the Commission for Africa's New African Development Agenda; and the FAO's Special Programme on Food Security (SPFS).

## 5.1 The Maputo Declaration

Prompted by the urgent need to revitalize the agricultural sector in African countries the Maputo Declaration called on Member States to: adopt sound policies on agricultural and rural development; prepare collaborative bankable projects under CAADP for the mobilization of resources: and allocate at least 10 percent of their national budgetary resources to the agricultural sector within five years. The Declaration also called for: the active participation of all the key stakeholders at the national and regional levels in all aspects of Africa's food and agricultural production; the establishment of food reserve systems that are based on regional and subregional food self-sufficiency to fight hunger and poverty; increased cooperation with Africa's development partners aimed at addressing the effects of their subsidies on the development of African agriculture and providing better access for Africa's exports; and the acceleration of the process of establishing the African Investment bank as provided for in the Constitutive Act of the AU.

## 5.2 The AU/NEPAD Comprehensive Africa Agriculture Development Programme (CAADP)

The Comprehensive Africa Agriculture Development Programme (CAADP) was designed to serve as an integrated framework of development priorities aimed at halting and reversing the decline of the agricultural sector in Africa. CAADP focuses investments into four mutually reinforcing pillars. Pillar 1 emphasizes the need for expansion of the area under sustainable land management and reliable water control systems. Pillar 2 underlines the need for improvement of rural infrastructure and trade-related capacities and market access; Pillar 3 focuses on increasing food supply and reducing hunger, by accessing improved technology so as to enable small farmers to play a major role in increasing food availability close to where it is most

needed. Pillar 4 is a long-term pillar which focuses on agricultural research, technological dissemination and adoption to sustain long-term productivity growth. A Companion Document on livestock, fisheries and forestry subsectors has also been prepared and been endorsed.

## 5.3 AU/NEPAD Environmental Action Plan

NEPAD has prepared an Environmental Action Plan as part of its natural resources management and environment initiatives as called for in the Maputo Declaration. The plan provides for activities for: combating land degradation and desertification; conserving Africa's wetlands; preventing, controlling and managing invasive alien species; conservation and sustainable use and management of marine, coastal and freshwater ecosystems; combating climate change; and transboundary conservation and management of natural resources. The first generation implementation activities of the plan focus on strengthening the environmental portfolios of the Regional Economic Communities and the strengthening of river basin organizations.

# 5.4 The Creation of the Department of Rural Economy and Agriculture within the AU Framework

The Maputo Summit institutionalized the Commission's mechanism for initiating and promoting policies and strategies for developing Africa's rural economy and improving livelihoods by approving the creation of the Department of Rural Economy and Agriculture (DREA) within the new structure of the African Union Commission. The department was thus charged with the responsibility of promoting measures to reverse the continent's low agricultural productivity, achieve overall agricultural growth in its broadest sense (i.e., including crop and livestock sub-systems, forestry and fisheries), and enhance environmental sustainability and sustainable use of natural resources. In preparing its Strategic Plan, DREA has worked in close collaboration with the NEPAD Secretariat, the Regional Economic Communities (RECs). Member States, regional and institutions, Civil Society Organizations and a number of the continent's development partners.

## 5.5 The Sirte Declaration on Agriculture and Water

The Sirte Declaration focused on the challenges of implementing integrated and sustainable development in agriculture and water in Africa. Cognizant of the urgent need to respond adequately to Africa's critical problems of hunger, poverty and disease by employing innovative, complementary and comprehensive approaches, the Second Extraordinary Summit of African Heads of State and Government which was held in Sirte, Libya in February 2004, called on Member States to commit themselves to: the development of African agriculture in all its dimensions, including the promotion of the production of strategic agricultural commodities; livestock and fisheries development; the development of agricultural implements; and water and

natural resources especially the development of the continent's river basins. The Declaration also called for: the strengthening and/or establishment of Centers of Excellence for the development of African agriculture in all its ramifications; the strengthening and/or establishment of banks for genetic resources for agriculture and livestock; the provision of registration mechanisms for intellectual property rights; the enhancement and/or establishment of early warning systems at the regional level and their coordination at the continental level to avert the negative impact of drought, desertification, floods, natural disasters, and pests; and the establishment of information networks for agricultural production and food security and input and output marketing.

## 5.6 Initiatives of the Regional Economic Communities

In the framework of the African Union, the Regional Economic Communities (RECs) are the building blocks for Africa's economic integration. The decisions and initiatives of the RECs, therefore, play a critical role in the implementation and coordination of AU/NEPAD programmes. Given the importance of food security in all the sub-regions of the continent, many of the RECs have now either prepared or are in the process of preparing their strategic plans and priority intervention programmes.

#### 6. CONCLUSIONS AND RECOMMENDATIONS

This report has attempted to present a brief descriptive and analytical picture of the state of food security in Africa. The analysis of the food security situation in Africa contained in this report suggests that not all is gloom and doom on the continent but that, although there are formidable challenges ahead, progress is being made in addressing the food security problems of the continent and there have been some success stories. In conclusion, the AUC suggests the following recommendations.

## 6.1 Resource Mobilization

A major constraint in the implementation of Member State Declarations and Decisions concerns inadequate, unstable and delayed funding in support of the investment items called for in the Declarations and Decisions. Despite the fact that the economic incentives to justify investments in the agriculture sector are strong and evident, Member States and their development partners are still not very providing the necessary resources.

The AU therefore:

**Calls Upon** Member States to honour their commitment to the Maputo Declaration of allocating at least 10 percent of their budgets to developing the agriculture and rural sectors which provide livelihoods to the majority of the population;

**Urge** development partners to make concrete efforts towards the target of 0.7% of GNP as ODA (especially to the agriculture sector) to developing countries with an emphasis on the least developed countries.

## 6.2 High Panel on Food Security in Africa

Improved coordination of agricultural and food security issues and programmes of interest to Africa is strongly advocated in order to create synergies towards the achievement of targets that have been set by Member States. The AUC therefore recommends creating a High Panel on Food Security in Africa to help with coordinating these issues. Like the World Food Security Committee, the African Panel will be entrusted with the promotion and coordination of activities and initiatives aimed at reducing food insecurity.

Its mandate shall be to:

- i. Serve as the forum and platform for exchanges on all issues concerning food security in Africa;
- ii. Provide advice and support required to accelerate the establishment of the comprehensive and effective Early Warning

System so as to make it the Panel's preferential tool addressing food crises in Africa;

- iii. Provide advice and support required for the promotion of the leading projects of AUC/NEPAD with a focus on food security;
- iv. Provide advice and support required to promote strategies for the development of agricultural production in Africa as well as the assistance needed for fund raising and implementation of accompanying measures for eradicating poverty and food insecurity in rural and urban areas;
- v. Promote and defend Africa's interests by serving as a link between the continental and global (e.g. WFSC) levels.

It is proposed that the Committee should be composed of distinguished African personalities of international repute recognised in the field, distinguished personalities from the other continents on the basis of proven experience in reducing poverty and food insecurity, selected representatives of international organisations that are Africa's development partners, representatives of the Regional Economic Communities (RECs), representatives of civil societies, representatives research institutions in Africa focusing on agriculture, etc.

#### Annex 1.

#### Current Food Security Highlights<sup>5</sup>

#### **Summary**

An alarming situation is developing in the Horn of Africa. Current projections indicate 5.4 million people in need of direct humanitarian assistance: Kenya 2.5 million, Somali region in Ethiopia 1.5 million, southern Somalia 1.4 million.

According to recent reports, floods have affected thousands of people in southern Africa over the past few weeks. Heavy rains have saturated southern Malawi, central Mozambique and adjacent areas reportedly displacing approximately 50,000 people. Continuing heavy rainfall is foreseen in these areas which may trigger additional flooding and further hinder relief efforts. Preliminary findings indicate that those affected are in urgent need of shelter, food and seeds. The rains have caused extensive damage to crops and in some areas cultivated land has been washed away.

Although there are many countries experiencing localized food insecurity, this report will present, in summary form, the few countries that are considered critical.

#### **East Africa**

#### Kenya

Although food security in most of Kenya is good, following an above average harvest, food insecurity has reached a critical stage in the northern and eastern pastoral districts, following successive seasons of drought. In response to the worsening situation caused by failure of the Short Rains, the Kenya Food Security Steering Group (KFSSG), the national food security coordination body, sent out a donor alert in mid-December on a projected food security crisis in 2006. Populations requiring food aid are expected to increase significantly from the current 1.14 million beneficiaries to approximately 2.5 million in the first half of 2006. It is estimated that the new needs amount to some extra 236,000 tons of food valued at US\$140 million, on top of the current US\$43 million shortfall for WFP's current emergency operation. Field assessments planned in January 2006 will determine the specific areas and populations affected and the actual amount of assistance required.

Over one million livestock dependent people in Somali Region of Ethiopia face extreme food

#### **Ethiopia**

insecurity that includes emerging pre-famine conditions triggered by the failure of the deyr rains. The short rainy season (deyr) between October and December in the livestockdependent southern and southeastern lowlands of Ethiopia is critically important to the livelihoods of pastoralists. As a result of the poor rains and fast depleting of pasture and water sources, some pre-famine conditions have already emerged: early and widespread human and livestock distress migrations; tribal conflicts over scarce resources; deterioration of livestock body condition and cases of livestock deaths; slaughtering calves to save cows; a significant decrease in livestock products (e.g. milk); crop wilting in agropastoral areas; escalating malnutrition and reports of child deaths; and rising sorghum prices (a dominant staple). Such pre-famine conditions at this early stage are alarming, especially considering the onset of the dry season (January - March/April) in the seven southern zones of the region, a time when food security conditions normally deteriorate to their worst levels of the year. The preliminary results of the DPPA assessment indicate that more than one million people will face extreme food insecurity for the first half of 2006. These households are expected to face serious water, pasture and food shortages peaking from January to March. An initial estimate from the regional DPPA office indicates that there is an immediate need of more than 40 million US\$ in these sectors.

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<sup>&</sup>lt;sup>5</sup>The information contained in this annex has been compiled from FEWS NET, WFP and FAO websites.

#### Somalia

Large parts of southern Somalia received disappointing rains in the Gu rainy season of April – June 2005, resulting in failed harvest and stressed grazing areas. The Deyr rains of October – November 2005 were also in general very poor and unevenly distributed, while insecurity is on the increase in a number of districts. Field reports confirm that shortages of water and pasture in traditional grazing areas in the Juba valley and Gedo Region have resulted in unusual movement of people and livestock towards Juba River. Malnutrition rates in many parts of southern Somalia are already unacceptably high, up to 20 percent in some areas. In addition, persistent insecurity and renewed civil strife and tension in the south are reducing the coping strategies to breaking point. This population had already lost most of their assets during the early years of the civil war. They face acute food shortage and hunger until at least the next Gu harvest of July-August 2006.

As the early trend of poor rainfall of the Deyr season continued, the worst case scenario is becoming a reality and at least some 1.4 million of the 2.2 million people in Southern Somalia who are at risk of a major humanitarian emergency and hunger crisis, will need food aid starting this month. Of these some one million will be looked after by WFP and around 400,000 by CARE International. The hardest-hit regions include Gedo, Bakol, most of Bay, Hiran and Middle and Lower Juba, which are normally already chronically food insecure.

#### **West Africa**

#### Niger

The 2005 agricultural season ended in mid-October with over 3.6 million metric tons (MT) of cereals produced; a surplus of over 21,000 MT. Favorable agricultural and pastoral conditions have improved food availability and access for urban and rural households. However, high levels of food insecurity continue to prevail in localized areas that were severely affected by the 2004/05 crisis. In these areas, poor households' food access is hampered by high debt levels, losses of productive assets and limited food reserves which were estimated to last only until December 2005. In these areas, food security is likely to deteriorate in the coming months. In some of these areas, child malnutrition rates remain unacceptably high. A recent joint survey conducted by Centers for Disease Control, UNICEF and the government shows that 15.3% of children under five years suffer from acute malnutrition. The rate of malnutrition depends on the region and varies between 18% in Tahoua and 9% in Niamey. Over 250,000 children were treated for malnutrition in 2005 and the number of new admissions did not decrease dramatically with the harvest. Faced with rising food insecurity in localized areas of the country, the government and its partners are drafting a consensual and integrated plan which combines animal rehabilitation programs with cereal banks and animal feed banks. Agencies involved in nutritional programs are also formulating their response plans. These plans need to be complementary and focus on not only the short term amelioration and mitigation of malnutrition and rising food insecurity, but also on longer term interventions to address the root causes of food insecurity and malnutrition. Local communities, government technical services, NGOS and projects should be involved in every step of the plan in order to ensure its adaptability and adequate implementation.

#### Southern Africa

#### Malawi

According to the Malawi Vulnerability Assessment Committee (MVAC) assessment conducted in May 2005, between 4.2 million and 4.6 million people would be food insecure between April 2005 and March 2006 and require between 272,000 MT to 423,000 MT of food aid or its cash equivalent. According to the recent MVAC revised needs estimate, the number of people at risk has risen to about 4.9 million, with missing food entitlements of 280,400 MT for the whole year (April 2005 to March 2006). The government has intervened through food aid and/or other market-based interventions and both interventions have been applied. The food aid interventions coordinated by WFP and the DFID voucher system started around June 2005. Although adequate resources have been pledged to address

increased food aid needs and commercial requirements, of particular concern is the slow and intermittent rate maize inflows into the country, commodity flows have been delayed by transportation capacity limitation and logistical problems. There is need to address current bottle necks and logistical issues to avoid further deterioration of the situation.

During 25 to 31 December 2005, heavy rainfall in the southern highlands of Thyolo and Mulanje, as well as the surrounding hills overlooking Chikwawa and Nsanje districts, caused massive flooding. In Nsanje District, the Ruo River burst its banks and flooded areas around Makhanga and the outskirts of Bangula town. Roads in some areas have been washed away or are covered by water, leaving some communities only accessible by boat. Bridges and culverts have also been affected. The damage caused by the flooding has been enormous with crops, houses and livestock critically affected.

#### **Zimbabwe**

The levels of food insecurity continue to worsen for both urban and rural populations, due to the reduced availability of staple cereals and the ever rising cost of living. Household food stocks were running low during the hunger season (September- January) and more people were being forced to look for maize and maize meal on the market. While tremendous effort is being made by the government to import food into the country to cover the production gap, officially estimated at about 1.2 million MT of maize, in-country grain distribution problems arising from shortages of fuel and trucks are restricting the amount of grain available on the market, particularly in the remote parts of the country. At current importation rates, the government will manage to import about 80 percent of its targeted maize imports of 1.2 million MT.