
***Promoting the use of CSOs' evidence in policies for food security:***
***An Action Research Project in Southern Africa***

**Background Paper**

# *Food Security in Southern Africa:*

## *Current Status, Key Policy Processes and Key Players at Regional Level*

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# Contents

# *Executive Summary*

That there has been a food crisis in Southern Africa needs no debate. That the SADC region is facing growing food insecurity also needs no debate. What is the subject of wide ranging debate among scholars; policy makers and other stakeholders are the causes and remedies of this agrarian malaise and the ever-rising food insecurity. Various aspects of this debate have sought to answer such crucial questions as: How did Southern Africa's food situation deteriorate to such disturbing levels? What are the fundamental causes of food deficits of this magnitude in the SADC region? How have SADC governments intervened in the food and agricultural sector? What about country disparities – why do some countries seem to cope better than others? What are the key on-going policy processes, especially at regional level, to deal with the problem, and who are the key actors?

To throw light on some of these questions, this paper discusses the current status of food security at both Africa and SADC levels. It then discusses the twin concepts of food self-sufficiency and food security in the context of improved household livelihoods and nutritional status. The paper then goes on to discuss the fundamental causes both at Africa and SADC level. It then attempts to propose a cross section of strategies, mainly of a qualitative nature, to address the current causes. The qualitative strategies are discussed as a basis for further research to develop evidence-based quantitative data as a basis for policy reform. The paper takes the view that food security is a regional objective and concludes by discussing the key on-going regional policy processes and the current key regional players in the food sub-sector.

In discussing the current status the paper points out what has been described as the "lethal mix" of "HIV and AIDS, recurring drought and failing governance" (WFP, 2005) as the leading causes of social disintegration in the SADC region. The HIV/AIDS pandemic is named as a contributing factor in declaring a state of food emergency in Lesotho and Swaziland; although the disease is deeply affecting the entire sub-region. The paper discusses the declining food output per capita in Africa as a region (FAO, 1993). It observes, however, that most countries in the SADC sub-region recorded an overall production output growth over the period 1992-2002 – and that food insecurity in the sub-region was precipitated mainly by the recurrent 1991-92 and 2001-03 food crises. The declining growth rate of food production is discussed especially in the context of an average annual population growth rate of 3%.

The shift in food trade positions is discussed – declining exports and expanding food imports. The increasing dependence on food aid in the period 1992-2005 for a sub-region that was almost free of food aid in 1981(except for Mozambique) is discussed as a sign of danger (World Development Indicators, 2002). The paper takes the view that food is the most basic necessity for all human beings and providing sufficient food of adequate nutritional quality for everyone, in Africa and the world at large, should be the first development objective of every government.

In discussing the twin concepts of food security and food self-sufficiency, the paper points out that there is a basic difference between food self-sufficiency and food security regardless of which concept of food security is emphasised. While self-sufficiency emphasises domestic production and internal food sufficiency - food security accommodates other variables like livelihoods, nutritional value, coping structures, vulnerability and food imports and food aid – both sub-sets of economic interdependence. In its broader perspective, food security should address the question of poverty within the households. Mazonde, 1999, argues that the concern for food security is rooted in the uneven distribution of income and that in most African countries there is considerable disparity among the population. This is what prompts Mkandawire and Matlosa, 1999, to suggest that food insecurity in Southern African countries clearly assumes a clear-cut class character and that researchers need to move to addressing the social-political and policy-related structural changes central to the region's food insecurity

Several definitions of food security are discussed and the essential elements isolated. According to the FAO, 2003, the essential elements are identified as ensuring availability through production of adequate food supplies, maximising stability in the flow of these supplies, and access to the available supplies on the part of those who need them. Food utilisation - both the way that food is prepared and distributed between individuals within the household, and the individual capacity to absorb and utilize nutrients in the food consumed - is discussed as a very critical component as well (www.ifad.org/gender/thematic/rural/rural_2.htm). The paper observes that, food availability is no longer the key issue in many parts of the world. Access and utilisation are now the priorities but in many countries in Southern Africa, issues relating to food availability remain central. According to FFSSA, 2004,internal coping structures within a society are critical to achieving food security– especially in the face of the recent food crises. The paper points out, that food insecurity, in turn, then implies the lack of access to enough food. This, therefore, means that there are two kinds of

food insecurity - chronic and transitory – where chronic food insecurity refers to a continuously inadequate diet caused by the inability to acquire food and transitory food insecurity to a temporally decline in a household's access to enough food.

The paper then discusses the causes and drivers of food insecurity at length. The following key causes are discussed: the structural characteristics identifiable with the patterns of production, consumption and exchange of the African economy; wrong assumptions about low technology adoption levels by smallholder farmers; the politics of food; the "cash crop syndrome"; and population growth and urbanisation. Inadequate food production is also discussed as one of the major causes especially in the context of low scientific and technological application; low technology adoption levels by smallholder farmers; the unrecognised role of women producers, low research of food crops; over emphasis of cash crops; low diversification of food production capacity and low public investment in the food sub-sector. The "lethal mix" of HIV and AIDS, drought and failing governance are also discussed. The paper discusses increasing food imports and food aid, economic failures and increasing household vulnerability as the other attendant causes. The structural causes discussed include: the predominance of subsistence production and commercial activities; the narrow production base with ill-adapted technology; the neglected informal sector; the degraded environment; lopsided development due to urban bias of public policies; the fragmentation of the economy; the openness and excessive dependence of national economies on external factor inputs and influence; weak institutional capabilities; and inappropriate government agricultural policies

Many strategies for achieving food security are discussed mainly from a qualitative view that is aimed at stimulating quantitative and action research aimed at yielding evidence-based data that would lead to policy reform. The strategies discussed include: complementary Support Systems for smallholder farmers which include access to more efficient technologies and credit, intentional increased women access to factors of production, and improved domestic markets. Increasing domestic production through the development of regional natural resources, strengthening and diversifying food production capacity, increasing public investment allocations to the food sub-sector, providing simple low-cost technology packages to small farmers, increased human and capital investments, and new innovative institutional arrangements, is discussed. Agricultural and macro-economic reform, new levels of political commitment; and an improved agric-industrial sector are also discussed. Increased social and nutritional research, special attention to soil and water; resources, and a conducive economic environment are discussed as critical pre-requisites. Special public effort in increasing rural non-farm employment is discussed as a critical alternative to any efforts to improve household food security. Improved macro-economic policies accompanied by new levels of political will are discussed as the critical drivers for any meaningful gains. The rate of economic growth, the direction of growth, the institutional structure of the national economy, the distribution of income, the national trade policy regime, exchange rates, interest rates; political will for policy implementation are all discussed as critical determinants for any progress in agriculture. A new transformational ethic and philosophy, a new political transformation is discussed as the only real basis for turning the situation around. Food security must be tackled as a regional objective. International and regional food trade must take a new turn.

Selective support for food production to avoiding over production, country specialisation, Strengthening the subsistence sub-sector, changing pricing policy to favour producers, producer incentives; guaranteed minimum price for food crops through food reserves are all discussed as critical strategies. Institutional reforms for improved land tenure including land reform laws and access to sufficient land are also discussed. The paper also discusses the need for new set of supportive policies for women producers and these have been classified as: stimulative; supportive and sustaining policies. A new focus on extension services for women has been discussed including training more female extension workers; women group loans; innovative methodology to improve women's functional literacy levels; economic incentives as well as business and enterprise development skills. New public efforts to tackle the impact of HIV and AIDS on agriculture and food security have been recommended. There is urgent need for governments in the SADC region to quantify what prevalence levels ranging from 20 – 40 percent mean in terms of food security in the short, medium and longer term.

Key on-going regional policy processes by different stakeholders in the FANR sector are discussed in the paper with the view to building synergy as well as identifying gaps that could be filled by other stakeholders especially civil society and other social movements. Six regional processes have been discussed. The SADC-FANR directorate is currently involved in the following regional policy processes and programmes: The Regional Food Reserve Facility; SADC Agricultural Information and Management System (AIMS); SADC-FANR Institutional Strengthening Programme; Food Security Capacity Building Programme; Statistical Crop Forecasting Methodology Programme; Multi-Country

Agricultural Productivity Programme (MAPP); Agricultural Water Management for Food Security Programme; SADC Bio-safety Programme; Regional Land Reform Technical Facility; Agricultural Trade Platform; the SADC biofuel project - farming for energy; the SADC Seed Security Programme, and the SADC Regional Remote Sensing Unit. The four pillars of the NEPAD's Comprehensive Africa Agricultural Development Programme (CAADP) have been discussed. These include: Extending the area under sustainable land management and reliable water control systems; Improving rural infrastructure and trade related capacities for market accesses; Increasing food supply, reducing hunger, and improving responses to food emergency crises; and improving agriculture research, technology dissemination and adoption - to provide the scientific underpinning necessary for long-term productivity and competitiveness. FAO, DFID, EU and USAID regional programmes and initiatives are also discussed.

The paper finally discusses the key regional players with a special focus on civil society regional networks involved in policy programmes in the FANR sector at regional level. The main purpose of this is to explore opportunities for linkages and synergy. The policies and programmes being implemented by these actors are discussed. The following players are discussed in the paper: SADC's FANR directorate; ZERO regional organisation; IUCN Regional Office for Southern Africa (ROSA); the Food, Agriculture and Natural Resources Policy Analysis Network (FANRPAN); the Southern Africa Regional Poverty Network (SARPN), the Participatory Ecological Land-Use Management Association (PELUM); and the SADC council of NGOs

In conclusion, the thematic thrust of the paper is that food security is a regional objective beyond the confines of a single state and that collective self-reliance is the most critical strategy that will enable the region to harness it resources and ensure a food secure population. The paper is a call to other actors, especially civil society and the private sector to join hands with the main actor at regional level – the national governments – and jointly design a new scheme of things - policies based on a new transformational ethic – that will transform the food sub-sector into a real engine for economic growth and ensure food security in the long term.

*Fred Kalibwani*

# *Food Security in Southern Africa: Current status, Key Policy Processes and Key Players at Regional Level*

## I. INTRODUCTION

According to James T. Morris, Executive Director of the World Food Programme (WFP, 2005), the greatest humanitarian crisis today was not in Darfur, Afghanistan or the Democratic People's Republic of Korea, but in Southern Africa, where a "lethal mix" of HIV/AIDS, recurring drought and failing governance was eroding social and political stability. This was in his address to the Security Council this on July 1, 2005. Morris observed that AIDS was undermining the capacity of communities to produce enough food and in many rural villages the land lay fallow with nobody to till it, spurring migration to urban centres where increased unemployment fed social instability.

According to FAO's, 2005, global information and early warning system on food and agriculture report of April 2005, prolonged dry spells and reduced precipitation during the critical month of February have undermined crop prospects in several countries in Southern Africa including Namibia, Botswana, Lesotho, Swaziland and Zimbabwe. Better crop prospects are seen in much of Angola, northern Zambia, northern Malawi and northern Mozambique. In Zimbabwe, vulnerable populations are particularly at risk during this critical lean period. Household food security remains precarious due to high unemployment, low purchasing power and unaffordable food commodities. The HIV/AIDS pandemic has been named as a contributing factor in declaring a state of emergency in Lesotho and Swaziland; the disease is affecting the entire sub-region.

### *Declining Food Output per Capita*

According to FAO, 1988, Africa is the only continent in which food production per capita showed a distinct downward trend. In 1993, the per capita food production index stood at 93.36 compared with 97.55 in 1982 (Table 1) and 100 in 1979-81. In Southern Africa, however, most countries experienced a steady production output from 1992-2002 (Table 2). The food crisis in Southern Africa became pronounced because the region experienced two major food crises over a period of 10 years (1991-92 and 2001-2003). After the 1991–2 crisis, there were high hopes that new thinking on food security in the context of structural adjustment and market liberalisation to generate economic growth would make the countries and populations of the region less vulnerable to food crises in the future – but this did not yield much results as evidenced by the 2001-03 crisis (FFSSA, 2004).

### *Population Growth Outstripping Annual Growth Rate of Food Crop Production*

During the last two decades, the food sub-sector has failed to keep pace with the population growth rate (Table 6). The demand and shortages have usually been covered by massive food imports. Among the imported foods, cereal imports rose steeply from 24 million tons in 1980 to 37.6 million tons in 1992 – with wheat accounting for more than half (FAO, 1993).

### *Shift in Food Trade Position – Declining Food Exports and Expansion of Food Imports*

Between 1966-1970 and between1976-1980, there was a shift in the food trade position of sub-Saharan Africa (Table 7). Between these periods, while food exports in sub-Saharan Africa decreased by -52%, food imports increased by 140%. On an average annual basis, these changes represent a decline in exports of -7.1% per year and an expansion in imports of 9.2% per year. Compared to 1966-1970, imports of basic food staples rose 3-fold in West Africa, more than doubled in central Africa, and expanded by 82% in Eastern and Southern Africa (Table 7). Food exports (agricultural exports) from countries in Southern Africa showed a decline over the 1980s (table 8). Mozambique experienced the sharpest decline of –69.6%. This decline in food

exports is even more evident if periods 1979-81 and 1999-01 are compared (Table 7). Zimbabwe, however recorded a remarkable increase in food exports (31.5%) over the same period (1990s).

Food imports (agricultural imports) expanded exponentially in most Southern African countries over the 1980s (1979-81 to 1989-91) (table 9). Over this period, Zimbabwe imported the lowest quantities (15.8%). Over the 1990s, however, Zimbabwe's food imports seem to have taken a sharp rise (141.7%) possibly due to the 1991 - 1992 food crisis. Overall, there was an expansion of food imports for most countries in Southern Africa – especially if a comparison between the periods 1979-81 and 1999-01 is made. Paradoxically the leading food importer over the period was South Africa (180.4%).

### *Increased Dependence on Food Aid*

There was an increasing dependency of sub-Saharan Africa not only food import and food aid between 1961-1981, but also an increasing share of food aid as a percentage of total imports (table 8). Looking at these figures, there is little wonder that Africa is not self-sufficient in major food items such as cereals, wheat, rice, maize, barley, pulses, fruits, soya bean and sugar. The self-sufficiency ratio is particularly low for wheat and sugar, standing at 26% and 54% respectively in early 1990s. According to FEWSNET, 2005, food aid has not had a major impact on the food security situation in Southern Africa. However, there was an increase in food aid to Malawi, Mozambique and Zambia over the 1989-91 period. The increases in food aid to the region remained well below the average for the low-income countries. The impact of food aid on food prices in the region is still a subject of study – but food aid has been known to dump food prices.

### *Key Questions*

That there has been, and that there is, a food crisis in Southern Africa, therefore, needs no debate. What is the subject of wide ranging debate among scholars and policy makers are the causes and remedies of this agrarian malaise. Various aspects of this debate have sought to answer such crucial questions as: How did Southern Africa's food situation deteriorate to such disturbing levels? What are the fundamental causes of food deficits of this magnitude in the region? How have SADC governments intervened in the food and agricultural sector? What about country disparities – why do some countries seem to cope better than others? What policies have been adopted at both national and regional level to deal with the problem?

To throw light on some of these questions, this paper examines the key policy processes and programmes at regional level that have been designed so far, as well as, those that are being developed to improve the living standards of smallholder producers. The paper also examines the key actors in the food, agriculture and natural resources sector, at regional level, with a view to identifying opportunities for increased use of civil society evidence in the development of conducive food security policy. But before examining some of the questions and processes, it is appropriate that we arrive at a common understanding of the concepts of food security and food self-sufficiency, to which we now turn.

## *II. DEFINITIONS: WHAT IS FOOD SELF-SUFFICIENCY? WHAT IS FOOD SECURITY?*

### *Food Self-Sufficiency*

Generally food self-sufficiency can be conceived as the ability of a country to meet the aggregate food needs – the volume and quantity - of her citizens primarily from her domestic resource base. It implies that the domestic food production of a country must be adequate to meet her food demand. The definition of food self-sufficiency, thus, does not necessarily address the needs of the rural population or the security of food within individual households. According to Mazonde,

1999, food self-sufficiency only entails the physical availability or supply of food and not the economic access to it or the consumption levels of households. The purchasing power or disposable income of a household largely determines the amount and quality of food consumed. Experience has shown that it is possible for a few farmers to supply the bulk of the nations food requirements while malnutrition and poverty remain social eyesores (Mazonde, 1999). Food self-sufficiency for a given country does not automatically translate into household food security (Mkandawire and Matlosa, 1999).

## *Food Security*

On the other hand, a nation's food security is achieved when it can assure both physical and economic access to food for all citizens over both the short and long term. In its broader perspective, food security should address the question of poverty within the households. It is not meaningful, otherwise, to talk about food security as long as households lack resources to provide themselves with food, either by growing it or by purchasing it. Recognition has to be made, of course, that some households may grow food, but due to pressing financial needs, sell it and suffer from malnutrition just like people who do not grow food. In other words, although national statistics might indicate that the average family can attain food security, aggregation can mask underlying inequality, which needs to be addressed for food security to be achieved in practical terms (Mazonde, 1999).

According to the World Bank, 1988, food security is conceived as the access by all people at all times to enough food for an active, healthy life. The essential elements, according to this definition, are the availability of food and the ability to acquire it. Food insecurity, in turn, then implies the lack of access to enough food. This, therefore, means that there are two kinds of food insecurity - chronic and transitory – where chronic food insecurity refers to a continuously inadequate diet caused by the inability to acquire food and transitory food insecurity to a temporally decline in a household's access to enough food.

The FAO defines the goals and objectives of food security as ensuring that all people at all times have both physical and economic access to safe and nutritious food to meet their dietary needs and food preferences for an active and healthy lifestyle (www.fao.org/WAICENT/FAOINFO/ECONOMIC/ESA/fs_en.htm). The essential elements, according to this definition, are thus ensuring availability through production of adequate food supplies, maximising stability in the flow of these supplies, and access to the available supplies on the part of those who need them. Food utilization **-** both the way that food is prepared and distributed between individuals within the household, and the individual capacity to absorb and utilize nutrients in the food consumed is now considered a very critical component as well (www.ifad.org/gender/thematic/rural/rural_2.htm). In many regions of the world, food availability is no longer the key issue. Access and utilization are now the priorities but in many countries in Africa, issues relating to food availability remain central.

The EU defines food security as the "absence of hunger and malnutrition" and for this to be possible, households, villages or countries must have enough resources to produce or otherwise obtain food. Some other schools of thought discuss food security concerns largely in terms of increasing domestic production and creating international reserve stocks. But this "supply – oriented" concept began to change in the late 1970s - from the global and national levels to the household and individual levels; then from 'food first' to livelihoods; and then from objective indicators to subjective preference. At the Ottawa session of the world food council, 1979, food security was discussed as a "function of all factors affecting the maintenance and improvement of per capita food consumption, income generation and the capacity to earn foreign exchange". This broader definition recognised that the food problem in many developing countries can only be solved when mutual attention is given to both the demand and supply sides of food security.

According to a recent synthesis study by the Forum for Food Security in Southern Africa (FFSSA), 2004, on achieving food security in Southern Africa, internal coping structures are critical to the food security of any society – especially in the face of food crises. This component is expressed in the food security definition by Oshaug, 1985, that a society which can be said to enjoy food security is not only one which has reached a food norm, but one which has also developed the internal structures that will enable it to sustain this norm in the face of crises threatening to lower the achieved level of food consumption. This definition is useful, particularly in the context of the food crises in Southern Africa, because it emphasizes the importance of having structures in place that allow individuals and groups to withstand inevitable food shocks. It also emphasizes the importance of consumption as a component of food security.

Food security, thus, has a number of complex and overlapping issues that include agricultural production, international trade, economic interdependence, national stocking policies, food aid and a range of direct measures to enhance household nutrition and consumption levels.

### *Difference between Food Self-Sufficiency and Food Security*

There is, thus, a basic difference between food self-sufficiency and food security regardless of which concept of food security is emphasised. While self-sufficiency emphasises domestic production and internal food sufficiency – especially at regional level – food security accommodates other variables like food imports and food aid – both sub-sets of economic interdependence.

## *III. THE CAUSES OF FOOD INSECURITY IN SOUTHERN AFRICA*

### *1. Structural Characteristics in Production, Consumption and Exchange Patterns*

The most fundamental causes of Southern Africa's underdevelopment and retrogression are found in the structural characteristics identifiable with the pattern of production, consumption and exchange of the national economies. These structural characteristics include: the predominance of subsistence production and commercial activities; the narrow production base with ill-adapted technology; the neglected informal sector; the degraded environment; lopsided development due to urban bias of public policies; the fragmentation of the economy; the openness and excessive dependence of national economies on external factor inputs and influence; weak institutional capabilities; and inappropriate government policies

### *2. Wrong Sectoral Priorities and Inappropriate Agricultural Policies*

The root cause of Southern Africa's food problem lies ultimately in government policies over the years. Even though the devastating effects of natural calamities in some countries cannot be overlooked, these are not enough to explain the existence of what seems to be a "region-wide agricultural breakdown". The root cause of the food problem must be seen as the result of setting wrong sectoral priorities and inept agricultural policies. These have a powerful multiplier effect on the adversities of nature, the constraints on international trade, and the deterioration of terms of trade. National governments seem to have shown a consistently anti-agricultural bias, from the colonial period onwards, through such policies as offering low prices to farmers; reliance on food imports especially food aid, emphasising cash crops rather than food crops, and not recognising the pivotal role played by women in the food sub-sector.

As observed by Hinderink et al, 1983, although the development plans of most countries often acknowledge the overriding need to increase and diversify agricultural output, the need to achieve food security and self-sufficiency in food production, as well as the need to raise income and living standards – their approach to agriculture can best be described as exploitative. Many national governments do not see the agricultural sector as an equal partner with the other sectors of development. Rather the sector is seen as a subservient one to be exploited for "urban

industrialisation". And as Asante, 1986, rightly observes, leaders and governments throughout Africa generally view agriculture as a backward sector that should be exploited and controlled in order to provide taxes and labour to finance industrial change as well as urban development. There exists, therefore, a striking similarity between the colonial policy that exploited the resources of colonial territories to develop the metropolis and the current national agricultural policies that exploit the resources of the countryside to develop the urban cities.

Allocation of public investment to the food and agricultural sector in many countries underscores the low priority assigned to the sector over the years. According to the Economic Commission for Africa, 1984, African governments have not been backing up their avowed food security and food self-sufficiency objectives by increased allocation of public resources.

## *1. The Politics of Food*

The food problem has deeper historical roots than is usually appreciated. Colonial agricultural policies were such that food production was not given a priority at central government level. For example, Eicher, 1982, Hansen, 1981, and Dinham et al, 1984 all agree that food production was not a priority for capital investment during the entire colonial period in most African countries. Land, labour and other resources of the colonies were diverted away from the production of food into the production of industrial raw materials. The infrastructural development that took place during this period, and for decades after independence, was mainly to service the production, transportation and marketing of industrial crops like cotton, tobacco, coffee, and cocoa. As if unaware of this discriminatory policy approach by colonial governments to production, most national governments have tended to pay only "lip service" to the agricultural sector and to the production of food in particular. Even though many countries have stressed the great importance of agriculture both in their official pronouncements and their development plans, their changing priorities and limitations in developmental best practices have tended to thwart the implementation of these policies.

Recent research by IFPRI (Hazell et al, 2002) amongst others shows that if, for example, the countries of Southern Africa continue with the agricultural and food policies they have pursued up to now and continue to invest only at current levels, poverty, food insecurity and child malnutrition will worsen significantly, resources will become more degraded, land productivity will further decline in many areas and the region will become increasingly vulnerable to famine.

As observed by Sen, 1982, there is indeed no such a thing as an apolitical food problem. Thus the food problem should be seen as a political one. It is political to the extent that policies should be aimed primarily at placing a country's food and nutrition problems, along with other aspects of development, on a scale of priorities. It is also political because an effective food policy must be designed and presented to mobilise people, not only at administrative level, but also most importantly among the peasants or food producers themselves. Food policy has to define and plan the implementation of measures that give the national producers the economic and social incentives and the security they need to go beyond subsistence farming and help meet the needs of the country as a whole. Thus food policy should involve the rural world in a developmental process that will be self-sustaining in the long run.

## *2. The "Cash-Crop Syndrome"*

Among the several areas of economic vulnerability created by colonial rule, none has been more potentially damaging to food systems than the decline of peasant commodity production under the combined pressures of cash-cropping and discriminatory pricing policies. An examination of the colonial record provides ample proof of food crises originating not just from adverse climatic conditions, but also from policy decisions, that directly or indirectly, profoundly undermined the viability of indigenous food systems. The introduction of cash crops was the quickest way to meet the need to generate revenue by colonial governments. For only by subjecting stringent fiscal

obligations could the colonial governments generate enough cash to make colonisation effective. Compulsory cultivation of cash crops thus became standard policy through which peasants were forced to earn a taxable income. This policy lies at the root of what Lofchie, 1975, called Africa's "agrarian paradox". Lofchie, 1975, observed that a continent unable to produce sufficient food to provide the majority of its citizens with a barely minimum diet has been able to record sharp increases in its annual production of "cash crops" destined for external markets. This is indeed a paradox.

While the priority given to cash crops by colonial governments is still very much in evidence in many countries, so also are the discriminating effects of pricing and marketing policies. Just as the prices paid to the producers of food crops remain abysmally low compared to the prices fetched by export crops, the highly skewed distribution of marketing and storage facilities, extension services and technological inputs tend to put food producing sectors at a striking disadvantage.

## *3. Food Pricing Policy*

Bates, 1981, argues that agricultural policy in most African countries is devised to cope with political problems whose immediate origins lie outside the agricultural sector. Pricing policy finds its origins in the struggle between urban interest and their governments. In the political reconciliation of this struggle, it is the rural producers who bear the burden of policies designed to lower the price of food (Bates, 1981). In most countries, food-pricing policies are consumer-oriented. Prices are fixed at a low level that favours the consumers, mostly urban consumers, and deters producers from increasing their efforts. Thus policy motivations have been more political than economic, reflecting the expediency of responding to the urban elite who are a lot more visible, though less numerous than the rural farmers.

The vulnerability of governments to urban (or consumer) pressure has also led to subsidized food imports through government controlled marketing institutions and the manipulation of trade policies, all aimed at lowering of food prices. But the mirror image of urban pressure for cheap food is production stagnation or unsatisfactory performance of the agricultural sector and hence, the non-attainment of food security and food self-sufficiency. These features of pricing policy coupled with overvalued currencies have set in motion a whole set powerful disincentives to agricultural growth and have further lessened the hope of food security in most countries.

## *4. Population Growth and Urbanisation*

More important to the issue of food security is the growth rate of the population and the degree of urbanisation. According to the World Bank, 1989, the population in Africa grew at the rate of 2.7% between 1965-80 and at the rate of 3.2% between 1980-87. During the same periods agricultural output production grew at an average annual rate of 1.7% (1965-80) and 1.2% (1980-87) respectively. The resultant effect of these figures is a decrease in per capita food production. Thus as observed by Guthrie, 1986, the dramatic decline in per capita food production over the years "is largely a function of population growth rate".

Although sub-Saharan Africa is said to have remained the least urbanised region of the world (Guthrie, 1986), it urban growth rate was the highest in 1985 (UN, 1985 and WB, 1985). According to the World Bank, 1989, the urban population of Africa grew at an annual rate of 6.9% from 1986-87 – up from 5.5% during the 1965-80 period. Whereas only 15% of all Africans lived in urban areas in 1950, by 2025 it is estimated that this will have risen to 59% (Guthie, 1986). Increased urbanisation leads to increase in the proportion of the population that does not produce its own food – because urban dwellers consume food but rarely produce it.

Population pressures and rapidly expanding urbanisation constitute one of the biggest barriers to the achieving food security in Southern Africa. Both should be a major focus in policy prescription

for food security. The attainment of food security calls for a population growth that is sustainable at all levels.

## *5. Inadequate Food Production*

Inadequate domestic food production in Africa can be traced to several factors that include: low level of scientific and technological application in the agricultural sector especially in the food sub-sector; low technology adoption levels by smallholder farmers; the unrecognised role of women as food producers; low research on food crops; over-emphasis on the cash crop sub-sector; limited diversification of food production capacity; low public investment in the food sub-sector; low linkage of the agricultural sector with other sectors of the economy, and weak infrastructures.

Most smallholder agriculture in Southern Africa is characterised by traditional production techniques with low levels of productivity. This is more so in the food sub-sector, which has been particularly discriminated against in favour of the export sub-sector (cash crops). Attempts at agricultural transformation have been concentrated mainly on the export sub-sector (cash crops) while the development of the food sub-sector has been generally neglected. The relative neglect of agriculture has resulted in little research on food crops, weakly staffed extension services for food farming, and inadequate investments in farm-to-market transportation. Many areas of potential surplus remain cut off from urban consumers and, hence, producers have no incentive to produce in surplus of what the family needs. The cash crop syndrome inherited from the colonial model of agriculture has meant that the little public investment allocated to agriculture goes into the export sub-sector. The overwhelming emphasis on this sector thus adversely affects food production. In order to increase domestic production and therefore assume the ultimate goal of food security, there is need for strengthening and diversifying the food production capacity.

In order to, significantly, improve rural infrastructures and thereby increase agricultural production generally and food production specifically, the recommendation that at least 20-25% of the total public investment be devoted to agriculture should be accepted and implemented by all governments (E/ECA/CM. 15/6/R3.3.9). To reflect the recommended increase in public investment devoted to agriculture in the food sub-sector, there is need for sectoral allocation of credit, using credit guidelines that would favour the sector. Given the natural ecological endowment of the region, there are certain food types (e.g. wheat and barley) that cannot be produced widely and efficiently. But because the consumption patterns, especially those of the urban areas, are distorted the demand for such food items like bread and rice is very high and this has led to the rise in imports. Fortunately the region can produce many traditional staple foods quite efficiently and extensively. What is needed is a re-alignment of the consumption patterns with production capacity. If the consumption habits of the southern Africans remain principally based on food commodities that cannot be produced within the region, then the region's food security objective will forever remain unfeasible.

## *8. Food Aid*

Despite the humanitarian role of food aid in "filling the empty stomachs" and "saving dying children", it has been observed to have adverse effects on domestic food production. According to Hopper, 1976, food aid has not only dulled the political will to develop agriculture but has also been sighted as contributing the keeping local food prices at such low levels that de-motivate indigenous farmers. Several scholars have echoed the argument about the impact of price policies on domestic food production. They argue that such policies have discouraged farmers from expanding their production and have thus aggravated the food deficits. The rationale for such arguments derives from basic economic theory, which suggests that food prices affect both demand and supply. If prices are low the farmer generally gets little for his produce and if too low, there is no incentive to produce for sale. On the other hand, however, lower prices represent a decrease in purchasing power of the consumer. And since price policies by governments have tended to lower what would otherwise be the market price, such price policies would have

adverse effects on food domestic production. It is on the basis if this argument that food aid could be regarded as an obstacle to food security.

### *9. Unrecognised Role of Women as Producers*

While women play a crucial role in agricultural production, particularly in food production, their role as producers and agents of transformation especially in the rural areas has been severely constrained by their lack of access to factors of production – land, capital, credit, technology – and by their marginalisation in production relations. Since modern technology must be purchased, it is not really accessible to women, majority of whom are poor. What is required is a technology, which embodies similar principles as advanced technology, but which is simple, low-cost and locally produced.

### *10. Economic failures*

In Southern Africa, the decline of mining and the slow growth of formal employment in manufacturing industry and services in urban areas have led to unemployment, less work for migrants from rural areas, an increasing fraction of the workforce employed informally, falling real wages, and reduced remittances. This has not only meant wider and deeper incidence of urban poverty, but also reduced support to rural communities providing migrants. Government revenues have stagnated making it more difficult for them to provide services. From the 1960s to mid-1980s there was some success in promoting smallholder farming through state action to supply inputs, technical assistance and credit, to buy output, and to set (pan-territorial and pan-seasonal) prices. This was abandoned as too costly, inefficient, and inflexible. Hence from the mid-1980s onwards the agricultural economy was liberalised. Private firms were expected to take the place of parastatals, but this has not always happened. Farm output grew more slowly in 1990s than in previous decades (FFSSA, 2004)

### *11. The "lethal mix" – HIV and AIDS, Drought, and Failing Governance*

HIV prevalence in Southern Africa ranges from a low of 12 per cent in Mozambique to 42 per cent in Swaziland. In 2003 alone, Lesotho lost a third of its health workers and 15 per cent of its teachers. In Zambia, AIDS killed teachers twice as fast as replacements could be trained. The disease had killed nearly 8 million African farmers -- more than the number of farmers in North America and the European Union combined. If every American living in a city from Boston to Washington suddenly vanished, they could all be replaced with Africa's orphans. The prevalence of HIV and AIDS is not only taking a toll in lost lives and reduced life expectancy, but also directly undermining the capacity of communities to produce enough food. The impact of that catastrophe on food production was enormous. An estimate earlier this year that 3.5 million people would need emergency food aid had more than doubled to 8.3 million with the return of drought conditions to some areas. More than 4 million people were at risk in Zimbabwe, 1.6 million in Malawi, 1.2 million in Zambia and 900,000 in Mozambique. Most governments in the region, as well as regional bodies such as SADC, are less well equipped to deal with the crisis than before. By 2002 they faced pressure on public budgets and loss of staff to HIV/AIDS.

### *12. Vulnerability and Net Food Buyers*

Vulnerability is very distinct in rural areas, even though the large majority has access to land in smallholding communities. Those particularly at risk include those marginalized economically through lack of land, capital and tools, livestock; lack of literacy and other formal skills the 'working poor' and 'underemployed poor'. But there are also those marginalized socially and physically by gender (women and girls), age (children, elderly), sick and disabled conditions that often overlap with economic marginality who are often chronically poor, unable to work, and have fewer options to cope. Poor households are usually net buyers of food, even in a good farming year. They may represent from one- to two-thirds of rural population. Little is known about the

conditions of the poor in peri-urban and urban areas, other than a realisation that, given the economic problems outlined, they are increasing in number (FFSSA, 2004)

# *IV. STRATEGIES FOR ACHIEVING FOOD SECURITY*

As evidence suggests, food policies in contemporary Southern Africa, both at national and regional levels, have not been designed to deal effectively with issues of food production, rural employment generation, domestic food price formulation, efficient storage, transportation and food processing. As indicated earlier these processes are more advanced with respect to export crops – the cash crops. However it should be clear, now, that a broadly conceived food policy that takes into consideration all aspects of the food system – supply, distribution and consumption – has the best chance of meeting each individual's nutritional need (Gittinger et al, 1988).

### *1) COMPLEMENTARY SUPPORT SYSTEMS*

Traditionally price policies are thought to be at the core of food policy but it is now generally understood that although price policies that increase farmers' incentives are essential, by themselves, they may not be enough to bring about continued production increases. Other supporting policies that give farmers access to more efficient technologies (such as high yielding seed and pesticides), and credit to purchase production inputs etc are necessary to ensure sustained increases in agricultural output. A price policy without these other supportive policies may only lead to farmers producing one crop instead of another, with little on no increase in total production. At micro level it must be understood that the social and cultural contexts play a major role in determining food supply and consumption. It is now well documented that women are the main food producers, but they do not have access to factors of production like land, credit, and capital; and extension work is often directed towards men rather than women, and the dynamics of decision making, time allocation, and food distribution within the households vitally affect production of food as well as the nutritional status of women. All these components of food policy must be considered as whole in analysing any strategy for achieving the objective of food security in Southern Africa.

To actually reinitiate agricultural development, however, small farmers must have access to well-functioning and well-integrated markets. These depend to a large degree on the existence of infrastructure such as roads that serve remote areas where small farmers predominate, and storage facilities. Investment in infrastructure is essential to connect poor people to markets. Also required are supporting institutions. The lack of infrastructure is one of the main reasons for the low profitability of agriculture for poor farmers. Small farmers simply do not have the incentive to increase production if they cannot transport their goods to markets. Because of poor infrastructure in much of southern Africa, the transaction costs are extremely high. This in turn leads to wide marketing margins. Transportation costs account for a large part of the transaction expense, and these are passed on to consumers making it especially difficult for them to afford staple grains during periods of food shortage (Kherallah et al, 2000). Even if a production increase is achieved, famine can threaten a country because poor infrastructure and high transaction costs prevent the transportation of food from surplus to deficit areas (Gabre-Madhin, 2002; Gabre-Madhin, 2003). Weak infrastructure not only prevents the integration of output markets, but also constrains input availability. Investment in road construction also leads to longer-term impacts.

Important for well-functioning and integrated markets are also liberalization through the gradual reduction of the role of parastatal agencies and the development of markets regulations. In spite of agricultural marketing reforms in the region, marketing boards are still active and continue to constrain private trade. These institutions are responsible for wide marketing margins. A decrease in their intervention would also lower food prices for consumers. Over the past decade, countries in southern Africa have tried to different degrees to minimize the activity of parastatals

and liberalize their markets, but while marketing margins have decreased and staple crop prices have improved for both farmers and consumers, the reforms did not go far enough (Kherallah et al, 2000). Parastatal involvement is in the long run financially unsustainable, and these agencies leave little room for a potentially more efficient private sector. However, while low productivity threatens a country with famine, liberalization must be gradual and cautious. Past reforms that eliminated or reduced input subsidies resulted in stagnant or lower staple crop production.

Improvements in infrastructure and liberalization also need to be accompanied by other measures if markets are to be integrated. These consist of market regulations and grades and standards for crops and the improved coordination of markets. These measures would reduce the high-risk traders experience; improve their profits and lower transaction costs. They would also help to speed shipment of food from surplus to deficit areas (Gabre-Madhin, 2002). Yet market liberalization without improved access to market information on the part of producers and traders may do little to improve food production, food availability and trade. Market information systems therefore need to be developed.

### *2) POLICIES FOR INCREASING DOMESTIC PRODUCTION*

Regional schemes offer considerable potential for action to increase food production through intergovernmental organisations for land and water resources development particularly, where lakes and river basins transcend national boundaries. Priority attention is needed by regional organisations to assist national governments to strengthen and adapt their production structures. There is need for policies that would strengthen and diversify the food production capacity. Top on the list of policy instruments that can be employed to achieve a strong and diversified production capacity are measures like land reforms that will ensure better access and entitlement to land for productive use as well as enhance the role of women as agents of change and modernisation of the food sub-sector. There is also need for policy intervention in the area of public investment allocations to agriculture. In many countries, government inputs into agriculture and rural development, and therefore to the food sub-sector of agriculture, are extremely low. Rural development policies, if any, are rarely designed to assist traditional farmers. Instead they tend to favour so called modern schemes such as *state farm cooperatives and large scale mechanised farms,* which have rarely been viable or productive. There is need to allocate adequate resources to support agricultural production at all levels.

Some direct measures for small farmers would also lead to increased domestic food production (if only for the short run). Low cost, simple technology packages, emphasising improved cultivation practices could increase smallholders' food production. In the same way, improved credit arrangements can result in high returns to smallholders in the short term. The long-term actions for increasing food production especially in the food deficit countries would involve a blend of human and capital investments, institutional arrangements, agricultural and macro-economic reform and political commitment. For example, there is need for investment in technology, research and human resources development.

It is now agreed by agricultural scientists that in future most agricultural production in Africa would come from increased output per unit land area rather than from bringing new land under production (Falcon et al, 1988). However, yield-increasing agriculture is dependent on the scientific and technical capacity to invent and sustain appropriate new chemical, biological, and mechanical technology regimes. Thus agriculture, including food production, will become increasingly tied to the capacity of a nation's agro-industrial sector and the institutions that disseminate more productive inputs such as seeds, herbicides, insecticides, and farm management technology. Therefore, there is need for a long-term commitment to agricultural research and relevant research in the social and nutritional sciences. Equally as important as agronomic research will be the need for research in the social and nutritional sciences. This is because the application of new technologies may not be socially neutral but can cause significant reactions in local traditions, economic relationships and labour market conditions. Research is

needed on the societal ramifications of introducing new technology, particularly as it applies to small farmers and women farmers.

The conversion to more yield-oriented agriculture will also require careful attention to the resource-base upon which it depends. Special efforts must be made to avoid the depletion of soil and water resources. Water is a critical factor in the semi-arid regions, as well as, the regions with very heavy rainfall where flood control measures may be needed. Increasing irrigation efficiency through better control and allocation of water can often double crop yields even with existing technologies. There is, therefore, a general need for improved maintenance, better linkages to seasonal production requirements of individual crops, more responsiveness to farmers, and stepped-up management training and supervision. All these would require tremendous outlays of capital and a suitable macro-economic environment. Institutions capable of timely delivery of inputs, on which a modernising agriculture depends, are of critical importance. Arrangements for credit and marketing are the other institutional supports that will become necessary especially for small farmers. Farming is a difficult business and there is need to invest in business training for smallholders – because not everybody can be a good businessperson naturally. Extension services must be transformed to provide business training.

An adequate expansion and diversification of non-farm activities to provide employment and income generating opportunities to those at present dependent on agriculture for their livelihoods will go a long way in solving the food problem. This will be especially critical in countries where landless agricultural labourers constitute a significant segment of the rural population.

### *3) THE NEED FOR APPROPRIATE MACRO-ECONOMIC POLICIES AND POLITICAL WILL*

The institutional structure and design of the national economy, the rate of growth, the direction of growth, the distribution of income, trade policy, exchange rate, the management and supply of credit, interest rates, and many more macro-economic decisions will have an important bearing on the overall food situation in a country, however remote these factors may appear to be from agriculture and food as such. This is even more so at regional level. The effect of macro-economic policies is thus an added dimension that must be considered in prescribing policy instruments for a country's food sector. It should be clear that all necessary policies and programmes cannot come solely from the ministries of agriculture alone; important policy decisions made by the governments' central banks and finance ministries will likewise have important implications on the food sub-sector. It must be underlined, however, that formulating effective policies and programmes, and re-directing capital and human resources to the food sector, are still only initial steps. Overcoming the formidable hurdles to implementation requires policies that are accepted by entire governments, not just the food sector ministries. Thus, the policy formulation processes must be open to as much participation as possible to ensure support from various political and economic groups throughout the implementation phase. At the same time, policy makers must make a considerable effort to protect the interests of the rural poor and women because their political power is minimal.

Special cognisance must be made of the fact most of present day leaders emerge from or are associated with the generation of the liberation struggle for independence – and hence are pre-occupied with different priorities: nationalism, sovereignty, autonomy, building national armies, building political and governance systems and institutions, dealing with new forms of colonialism through international trade policies and financing institutions –such that they literary have had no chance to focus on a new set philosophies, policies and values for transforming the structural inequalities, mindsets and fabric of our societies into true modern societies. Some level of political transformation must accompany the best efforts to create a food secure society. This is a totally different kind of war from the wars that our present leaders have been acclimatised to. A new mental framework is required to put these "software issues" at the forefront of political leadership.

It is very important that the goal of food security in Southern Africa should be conceived as regional objective rather than a national objective alone. Thus certain countries with particularly

good conditions for producing large surpluses of food at a price, which is competitive with world prices, should specialise in food production for export to food deficit countries. But the question is whether any particular country will embark on such a programme of specialisation for food export to neighbouring countries without being assured of a regular outlet and of a certain amount of protection against unfair competition from food exports from other continents. There is therefore need for bilateral and multi-lateral agreements among the SADC states.

Perhaps the greatest spur for recovery and agricultural development will come from increased regional and international trade. But this trade must involve and benefit the smallholder farmer. Trade within regions in Africa has been increasing over the last two decades. However, its full potential has not yet been tapped. The creation of the Southern Africa Development Cooperation (SADC) free trade area is a step in the right direction. Yet the share of southern African trade in world trade has remained low. The greatest gains from trade will come from exporting goods to the developed countries. In developing-world agriculture today, high-value goods are earning the highest export revenues. The challenge therefore is to identify markets for non-traditional agricultural exports, diversify production accordingly, and develop and expand markets for these goods.

One alternative for the creation of higher-value goods is value-adding processing of staple crops, which would also involve the creation of agro-industrial linkages. Developing high-value goods would thus not only benefit small farmers, but also increase non-farm employment. Generating employment off the farm should be an important goal of the governments in the region. The creation of improved technologies and marketing systems, possibly with private sector investment, as well as new institutional structures for production, such as contract farming, might be required for the production of high-value goods.

Countries that pursue trade-distorting measures, such as overvalued exchange rates and taxes on exports, will lose the opportunity to benefit from the changing world economy, and bear greater costs. But diversification and the support of trade will generate few gains if the developed countries, especially the United States and European Union continue to provide trade -distorting subsidies to their own agricultural sectors, impose tariff barriers to developing-country exports and subsidize their exports. The current round of global agricultural trade negotiations within the WTO must result in a fair set of rules for poor countries. And, the nations of southern Africa being highly dependent on agriculture for livelihoods, national revenue and export earnings, must attempt to make strategic use of these negotiations.

### *4) SELECTIVE SUPPORT FOR FOOD PRODUCTION*

While there is need for increased domestic production of food in Southern Africa, the increase should not be done indiscriminately, since, for traditional products like millet, sorghum, roots, tubers and plantain demand is very inelastic. Care should be taken not to reach a stage of over-production. This is not to say, however, that governments should not promote the consumption of traditional food crops especially given their high nutritional content. Governments could greatly and intentionally increase the elasticity of these crops through awareness programmes and targeted agricultural research in order to increase the diversity of staples as well as diversified consumption patterns. On the other hand attention should be paid to boost production of food crops for which demand is rapidly increasing e.g. rice, sugar, vegetables, fruits and maize. For these crops, it is believed there is less danger of over production since the gap between the local supply and demand is quite great and may be widening. The danger comes from competition from cheap imported products. Investment decisions should favour a certain kind of specialisation according to ecological and economic advantages. For example sugarcane cultivation is known to reach higher yields in countries where solar exposure is relatively high. From a similar point of view, countries where the labour force is under-employed and where labour costs are lower should be given preference.

There urgent need to strengthen the fragile subsistence sector. The peasant farmer is, and may remain for a long time to come, the principal participant in any agricultural policy – particularly in the food sub-sector. Too often in the past, policy makers have overlooked the needs of the subsistence farmer. But because of its share in national output and total employment, the subsistence sub-sector holds the key to agricultural and overall progress. Given the right complimentary support and incentives and income generating opportunities, smallholder farmers will be the first to change and implement modernising techniques.

In the short-term, inorganic fertilizers should be made easily available to small farmers so that staple crop yields in the next harvest season will be adequate. Fertilizer use declined as a result of the withdrawal of subsidies and currency devaluation that were carried out as part of the market reforms (Kherallah et al, 2000). The use of fertilizers is important for production not only in the immediate future, but in the long-term as well. The heavy loss of soil nutrients the countries face each year and the resulting degradation threaten future yields (Scherr and Yadav, 1996). To make fertilizer more accessible to poor farmers, subsidies will need to be reinstalled on a temporary basis. When they are terminated, compensatory measures could be taken, such as the provision of increased credit, to enable farmers to continue using fertilizers (Bumb and Baanante, 1996). Better quality seed, ideally drought- and flood-resistant varieties, also needs to be made available to assure high crop output in the next agricultural season. Such seeds exist, but the means to distribute them must be found.

In the medium-term, small farmers will need to be provided with services and technologies that will enable them to achieve greater productivity with the inputs and natural resource base currently available. These services and technologies need to be provided in ways that ensure their relevance to women as well as men farmers, and to AIDS-affected households. Expanded micro-credit is a service that would permit smallholders to increase and sustain their use of purchased inputs (Zeller and Sharma, 1998). However, additional production technologies would be useful. Small-scale irrigation systems, involving water capture at the micro-watershed level and the sustainable use of some wetlands could significantly increase staple crop production and help to ensure food security year-round (Meinzen-Dick and Makome, 1999). Low -external-input methods of farming, using organic material and different farming arrangements, will also boost productivity and improve soil quality. Some of these practices consist of rotational cropping, mixed farming, using livestock, trees and crops, and planting nitrogen-fixing legumes (Hazell, 2001). Agricultural extension services that can teach smallholders the use of such techniques and how to combine the various inputs for optimal production are also necessary.

### *5) APPROPRIATE NATIONAL AND REGIONAL PRICE SUPPORT SYSTEMS*

As has already been alluded to, food-pricing policies in most Southern African countries are consumer-oriented. Food prices are “fixed” at a low at a low level that favours consumers who are mostly urban dwellers and this deters producers from increasing their efforts. In other words, policy motivations have been more political than economic reflecting the expediency of responding to urban residents who are more visible even though less numerous than rural farmers. According to Bates, 1981, pricing policy finds its origin in the struggle between urban interest and their governments; and in the political reconciliation of the struggle, it is the rural producers who bear the costs; they are the ones who bear the burden of the policies designed to lower the price of food. Thus, agricultural pricing policies have tended to have the adverse impact on incentives to produce food. As observed by Eicher et al, 1982, they also affect the ability of governments to establish and maintain food reserves, and they disturb employment opportunities in farming, processing and rural industries. There is therefore need for a policy change in this regard.

An important safeguard against the threat of famine is the establishment or augmentation, and sound management, of grain reserves. Buffer stocks can be used to stabilize prices to offset fluctuations in domestic production or world prices, and thus reduce vulnerability to famine. Because the poorest households have few resources and are primarily concerned with economic

security, price stabilization benefits them most by helping them meet their basic food needs (Islam and Thomas, 1996). Food stocks could be created immediately through imported grain and increased later with domestically produced crops once agricultural production has revived. Staple grain reserves should be located strategically, in remote areas, so that there will be food supplies to all areas of a country in the event of food shortage. Accessibility to food should not have to depend on transportation infrastructure. To ensure food production on a sustained basis, as well as income to farmers and increased access to food by the majority of the population, a guaranteed minimum price for food crops managed through national and strategic food reserves is necessary. It must be understood, however, that officially imposed food prices have meaning in so far as there is efficient public organization – which is in a position to act in such a way that a majority of producers really receive the price

### *6) INSTITUTIONAL REFORMS FOR LAND TENURE*

In many SADC countries, there is evidence to show that a large number of farmers do not have access to sufficient land to meet their food needs. In Malawi for example, more than half of all small landholders have less than one hectare of agricultural land (Kandoole et al, 1988). Land shortage follows from the concentration of land in a few holdings, which is also associated with the emergence of a single cash crop. The shortage is increased by the sub-division of farms through inheritance as well as through soil depletion. The situation of land shortage in such cases provokes intensive competition between food and cash crops on individual holdings. The FAO, 1988, points out that in Africa the patrilineal allocation of lineage land or inheritance has grave implications for rural farmers, especially women. There is, therefore, an imperative need for institutional reforms on land tenure. While it is not easy to make a hard and fast rule here, what should be aimed for, is a land reform law that would offer better access and entitlement of land to women. This would most likely make them better modernising agents of the food production sector

### *7) STIMULATIVE, SUPPORTIVE AND SUSTAINING POLICIES FOR WOMEN FOOD PRODUCERS*

Regarding women farmers, gender-sensitive extension services are needed. Women farmers are responsible for a large part of food production in the region and a concerted effort to make production-enhancing technologies and knowledge available to them, thus reversing the historical bias against them in agricultural policies, would have a significant positive impact on farm production and food security (Quisumbing et al, 1995). Women farmers who are heads of households also require legal title to the land they farm (Quisumbing and Otsuka, 2001). Where women have control over land use, the benefits to them can be greatly enhanced in many instances by their having direct access to at least three types of interventions which can be termed as stimulative, supportive and sustaining policies (Odejide, 1990).

Stimulative policies should be aimed at ensuring the emergence of informed and enlightened women food producers in the society. Stimulative services should generate the initial motivation necessary to help women perceive their potential; and should offer an opportunity to acquire skills and relevant information about land use, improved husbandry and economics of alternative production and marketing possibilities. Such services would include extension services aimed at imparting education, motivation training, business and enterprise management, and creating situations where female farmers get due recognition. Supportive policies should be aimed at helping women farmers to establish and run their farms efficiently. This set of services should include creation of group institutions such as marketing cooperatives to enable women save on costs and have adequate bargaining power when buying inputs and selling produce, arranging credit to help them meet both seasonal production and longer-term investment needs, with adequate provision for covering emergency setbacks; providing guidance for selecting and obtaining machinery; and the provision of common facilities like storage facilities. The sustaining policies are those that will help to ensure continued efficient functioning of the farms. They should

include help in modernisation, diversification and expansion, provision of diagnostic agricultural extension and consultancy services, and the creation of new avenues for marketing.

When making these services available to women, it becomes particularly important that they be attuned to the special needs of those products women are most likely to produce and they should include special components (e.g. child care) that would enable as many women as possible to participate and benefit. Thus there are some specific components of extension services that can be attuned to the special needs of women.

### *8) EXTENSION SERVICES FOR WOMEN*

Because of the identified gap between women farmers and male extension workers, some countries such as the Philippines, Thailand, Lesotho, Egypt are said to have made great strides in training female extension workers as a means of reaching out to female farmers (FAO, 1988). However, when women are trained in agriculture and placed in the field, difficulties such as transportation, housing and continuity of service have to be overcome. While increasing the supply of female extension workers may be seen as a longer-term prospect, training village women to start their own demonstration plots or channel extension through women's groups may be considered as viable alternatives. Channelling extension through women's groups is a particularly promising one as it offers a practical and low cost alternative based on development, collaboration and communication between women and the groups.

It has also been recognised that group loans have the advantage of reaching the poorest women who would otherwise be ineligible. The African Regional Credit Association (AFRACA) that is cooperating with FAO to develop and implement a series of sub-regional projects for women's agricultural credit and banking is a good example here. What women need more, however, is to form groups that qualify for credit available to all farmers rather than credit available only to women or their groups.

In many African countries the majority of rural women are still illiterate and most of them have little or no spare time. Therefore, training efforts directed towards women need to devise and use innovative methodology that takes these constraints into consideration. Teaching techniques and materials primarily on practical applications and visual aids will be relevant. While rural women's time constraints need to be taken into account in setting up training or various production-promoting projects, it is still true that economic incentives that directly benefit women can be very effective in changing intra-family priorities.

### *9. TACKLE HIV AND AIDS IMPACT ON HOUSEHOLDS*

The nature, magnitude and scope of the impact of HIV and AIDS is, in many ways, as devastating as the impact of drought or famine. Unfortunately because the impact of HIV and AIDS on agriculture and food security is gradual, widespread and not so easily visible or quantifiable – no publicly funded emergency-type programmes and aid have been instituted against the epidemic. One of the most important ways in which agricultural policy can contribute to reducing the spread and consequences of AIDS is to contribute effectively to poverty reduction. Risky sexual behaviours are, at least, partially related to limited opportunities to earn a livelihood through other means.

Moreover, raising households' and communities' living standards over the long-run -- through productivity-enhancing investments in agricultural technology generation and diffusion, improved crop marketing systems, basic education, infrastructure, and governance – will improve their ability to withstand the social and economic stresses caused by the disease. Agricultural policies and investments to promote productivity growth would have remained critically important regardless of whether HIV/AIDS had become a major development problem. But the onset of the epidemic makes agricultural productivity and rural income growth all the more critical, especially if poverty exacerbates the spread of the disease, as is increasingly believed.

Therefore, greater focus on productivity-enhancing investments is likely to be a critical part of an effective response to the HIV/AIDS pandemic, and the extent to which progress is made in these areas over the next 20 years is likely to greatly influence living standards in these hardest-hit countries of eastern and southern Africa. Governments and international organizations need solid guidance on the cost-effectiveness of alternative kinds of investments to simultaneously defeat the AIDS pandemic and the chronic poverty that characterized the region even before the onset of the disease but has been further exacerbated by it.

# *V. KEY REGIONAL POLICY PROCESSES*

## *I. SADC FOOD, AGRICULTURE AND NATURAL RESOURCES DIRECTORATE*

The SADC Regional Secretariat has been in the process of restructuring to enhance the effectiveness of the organisation as well as developing several planning tools to implement the various agreed upon policies and programmes. The most relevant planning processes are listed below:

### *1) The Restructuring Process*

While SADC has recorded some remarkable achievements, many difficulties and constraints have also been encountered. These include lack of institutional reforms and lack of appropriate mechanisms capable of translating the high degree of political commitment to concrete programmes of community building and integration. In order to address these and other institutional problems, the Heads of States and Governments approved the restructuring of SADC institutions at their extraordinary Summit held in March 2001,in Windhoek, Namibia. Under restructuring the 21 SADC sectors have been grouped into clusters under 4 Directorates at the SADC Secretariat: Directorate of Trade, Industry, Finance and Investment; Directorate of Infrastructure and Services; Directorate of Food, Agriculture and Natural Resources; Directorate of Social and Human Development. At the national level, SADC national committees will coordinate their respective individual Member States' interests relating to SADC. At the regional level, an Integrated Committee of Ministers (ICM) has been created to coordinate the work of different clusters. The new structure also includes the Troika system and the Organ on Politics, defence and Security. The main objective of restructuring was to increase the efficiency and effectiveness of SADC policies and programmes and implement a more coherent and better coordinated strategy to eliminate poverty in the region.

### *2) The Regional Indicative Strategic Development Plan (RISDP)*

To underpin the restructuring of SADC institutions and provide clear orientation for policies and programmes of the organisation over the medium term, the Heads of State Extraordinary Summit also requested the Secretariat to prepare a Regional Indicative Strategic Development Plan (RISDP) – guided by the SADC vision. The overall purpose of RISDP is to provide strategic direction with respect to SADC programmes and activities. It is indicative in nature as it provides guidelines for achieving SADC's long-term goals. It sets targets and timeframes for these goals. It provides a comprehensive view of the SADC economic and social development policies and priorities over the next 15 years. Its ultimate objective is to deepen the integration agenda of SADC with a view to accelerating poverty eradication and attainment of other economic and non-economic development goals.

### *3) Extra-Ordinary Summit on Agriculture and Food Security – Dar el Salaam*

This was held in May 2004, in Tanzania for all SADC Heads of State. The theme of the summit was "Enhancing Agriculture and Food Security for Poverty Reduction in the SADC Region" and

one of the primary objectives of the summit was to adopt an action plan to accelerate the implementation of the RISDP. This summit considered existing SADC policies and strategies in terms of their adequacy and appropriateness as well as complementarities and synergies with continental initiatives, which include the *Maputo Declaration, the commitments made in February 2004 African Union Extraordinary Summit in Libya, the NEPAD – CAADP, and the Declaration of the 23rd FAO-Africa Conference.* Throughout the process FAO has been providing technical assistance to SADC including support for the development of the Regional Food Security Programme (TCP/RAF/2803) and support for the preparation of documents presented at the Dar el Salaam Summit.

***4) Strategic Business plan***

SADC has also developed a Strategic Business Plan to define purpose of the organisation and provide specific information on SADC's vision, services, organisational structure, operational budget and strategic framework. One of the purposes of this plan is to analyse the costs and budgets required by the various Directorates to help understand the feasibility of achieving desired results based on current resource constraints – and develop alternatives for different levels of funding. The business plan has most recently been completed with a 15-year operationalisation plan for the RISDP

***5) SADC Consultative Conference – "Partnership for the implementation of the Regional Indicative Strategic Development Plan (RISDP)" – in October 2005 (or early 2006)***

The SADC secretariat is planning to hold a consultative conference in October 2005. One of the major objectives of this conference is to present the results of the above-mentioned SADC development process that has already been approved by the SADC members states. In this case the audience will be the donor community and other partners that will crucial for financial and technical support in implementing the RISDP. This conference will be multi-sectoral and will include all aspects of SADC. All the Directorates and specialised programmes will be presenting their proposals to development partners. The SADC- FANR Directorate will be presenting the following policy documents and programmes:

*THE REGIONAL FOOD RESERVE FACILITY*

The need to establish a SADC Regional Food Reserve Facility has been debated upon for long without a convergence on the optimal format of such a reserve. Since the 1980s, SADC Member States have considered several proposals for the establishment of a Regional Strategic Food Reserve that included prevention and preparedness to deal with the growing frequency of natural disasters. Early proposals were based on considerations of enough physical maize stock for 12 months' consumption. However, this was viewed as very costly and unsustainable. Following recent food crises, SADC Ministers of Agriculture and Natural Resources in August 2001, agreed that the Food Reserve proposal should be re-visited and include both a physical reserve and a financial facility, following a shift in thinking from national self-sufficiency to a trade-based regional approach.

The SADC Disaster Preparedness Strategy is built on the following three pillars: An Early Warning and Monitoring component to alert Member States of impending disasters as well as identify and monitor pending emergencies, which should be linked to Vulnerability Monitoring systems that in the short-term, identify populations and areas most at risk, and in the long-term, monitor livelihoods, vulnerability and poverty mapping and recommend programmes and initiatives linked to poverty reduction, and A Regional Food Reserve Facility that allows SADC to respond better to foods emergencies, with optimal level stocks and their location within the region, operational rules of stocking/de-stocking and strategies to financing the facility.

*SADC AGRICULTURAL INFORMATION AND MANAGEMENT SYSTEM (AIMS)*

The Council of Ministers at its Meeting of February 2003 in Luanda, Angola directed that the Regional Food Security Information System be rationalized in-house, in order to enhance the effectiveness and efficiency of the SADC Regional Food and Agriculture Information System. This followed the restructuring process, which brought together all policy coordinating functions of the former Sector Coordinating Units (SCUs) to the SADC Secretariat in Gaborone, Botswana. This, in effect, meant incorporating and linking together the various existing information systems projects and networks within the FANR into one SADC Food Security, Agriculture and Natural Resources Information Management System, or simply called the Agricultural Information Management System (AIMS).

The FANR Directorate has several information systems originating from the former Sector Coordinating Units, which were based in various Member States before the restructuring process. Some of the main systems include: The Regional Early Warning System for Food Security (REWS); The Remote Sensing Project; The Data Management and Analytical Project; Integrated Crop Pest Surveillance Programme (Information Core in Southern Africa for Migratory Pests (ICOSAMP)); SADC Animal Disease Surveillance System; Regional Vulnerability Analytical Information System; Regional Information& Management Programme for Agricultural Research and Training; Regional Fisheries Information System; Forestry Information Management System. The proposal is not necessarily to develop one huge centralized system with all information /data in one database - but rather to develop a system which has most basic data but also linked to other agricultural information systems run by others outside and within the SADC region.

*FOOD SECURITY CAPACITY BUILDING PROGRAMME*

SADC FANR has been implementing a Regional Food Security Training Programme since 1996. The programme aims at improving food security in the region by strengthening the capacity of the organizations in the public, private and voluntary sectors that are involved in development and implementation of food security policies and programmes. Successive evaluations of the programme have shown that more than 20 Regional training institutes across the region have been strengthened with technical assistance, training equipment and soft wares, ICTs and training materials; 65 training courses developed and run, with 19 proposed for accreditation; and 2,500 people have directly benefited from the training courses; with the number benefiting through second-round training being much higher.

Noting these achievements of the programme and the persistent food crises facing the region, it has been decided that a new regional programme be developed to continue the good work. However, unlike its predecessor, the new programme is expected to be broad both in scope and in approach covering all aspects of the food security, agriculture and natural resources. The proposal is based on consultations with officials of Member States as well other stakeholders in the region. Results of these consultations showed that capacity development in the FANR cluster of sectors is urgently needed in nine priority areas, namely: Policy analysis, planning and monitoring and evaluation (policy harmonisation); Trade facilitation and promotion; Agribusiness and agro-processing; Community based natural resources development; Agricultural information systems development and communication management; HIV/AIDS and gender mainstreaming in FANR; Research and extension; Agriculture and natural resources education and training; and Regional programme coordination by FANR Directorate. Activities based on these priority areas form the basis of this programme.

*AGRICULTURAL WATER MANAGEMENT FOR FOOD SECURITY PROGRAMME*

The primary objective of the proposed SADC programme is to improve the capacity of SADC Member States to appropriately and sustainably manage existing regional water resources in such a way as to increase agricultural output and, ultimately, regional food security, while protecting water availability for human and other uses and assisting the region to adapt to changing social, economic and possibly climatic, conditions. This objective corresponds to the CAADP Pillar 1 (Sustainable Land and Water Management) of the NEPAD programme. In order

to ensure the necessary linkage between increased output and improved food security, close attention would also be paid to such aspects as improved market functioning (NEPAD Pillar 2), and food emergency and safety nets (NEPAD Pillar 3). In particular, attention would be given to supporting increased agricultural output and distribution in the face of changes brought about by high rates of HIV/AIDS infection.

The proposed regional programme is expected to consist broadly of three major elements; Regional level activities; Support to some Low-Income Food Deficit Countries (LIFDCs) within SADC, and; Support for Middle Income Countries (MICs) within SADC. Regional level activities will include: Policy and institutional reform support to LIFDCs and regional organizations (such as river basin authorities); Institutional support to the SADC Secretariat; Capacity building and human resource development with respect to the planning and implementation of sustainable agricultural water management and related post-production activities; and Technical assistance to SADC in strengthening internal and regional capacity in areas such as planning and utilization of shared water resources, including transboundary rivers, regional trade and marketing policies and infrastructure for agricultural products, support for the alleviation of the impact of HIV/AIDS on agriculture and food security, improved monitoring of, and response to, threats to regional food security, and; networking and exchanges of information on positive experiences in agricultural water management

Activities in LIFDCs will focus on investments and other activities, which permit the testing, and adoption of integrated water resource management (IWRM) approaches within one or more selected areas, as well as the strengthening of national capacity in planning and implementing efficient and sustainable water management for agriculture. These efforts will be coherent with regional policies, and responsive to the changing institutional, technological and natural environment. They would include: Investments, which supported the adoption of appropriate IWRM policies, approaches and technologies and the efficient management of water resources for agriculture. This would likely involve area resource assessment and monitoring, small-scale, low-cost irrigation, and water harvesting and conservation agriculture; Capacity building at both the institutional and personnel level and responses to service provision which recognizes; Promotion of public/private partnerships in irrigation, agricultural marketing and post-harvest investment; Improved natural resource management and conservation through expanded community participation and more appropriate policies; Improved assessment and monitoring of water requirements to support effective response to food insecurity and periodic crises; and the sharing and interchange of information on policies, approaches, technologies and capacity building with regional partners.

Activities in MICs would include: Improved management of sustainable irrigation and agricultural water management systems in an IWRM context; Promoting and facilitating public/private investments in new and rehabilitated irrigation schemes and related operations as well as agricultural marketing and processing.

*REGIONAL LAND REFORM TECHNICAL FACILITY*

After recognising the critical importance of land as an economic resource, the SADC Summit of August 2001 directed SADC Ministers of Lands to develop a regional land reform strategy. The Ministers recommended in September 2001 that a Regional Land Reform Technical Support Facility (RLRTSF) be established under the SADC FANR Directorate. A meeting of SADC senior officials responsible for lands in October 2001 further directed SADC FANR to urgently investigate and establish the Regional Facility. In April 2001 SADC FANR commissioned a consultant to consult member states on the concept of the Facility, its structure of governance and administration, human resource requirements, approval and launch as well as start-up activities. A series of country level consultations by the consultant confirmed the urgent need for a regional land reform programme to be implemented through the Facility.

The Facility will mobilise expertise mainly from the region and financial resources from donor sources and pool them to assist SADC countries to review, formulate or reform their national land and agrarian policies. The Facility will not establish a regional land reform policy but will support member countries in their land policy endeavours in line with their national priorities. Countries will access financial assistance and technical expertise from regional and national sources through the Facility.

In terms of capacity buidling, the main focus will be to build capacity in governments and civil society organisations involved in land issues. Training needs assessments, staff exchange/attachment programmes and direct training of personnel will be established at policy and technical levels, especially in land use planning, surveying, valuation, estate management and law. Short-term technical assistance and secondments of periods of up to two months will be designed for regional experts between countries. In addition, re-skilling of local level land administration (land boards, commissions, traditional authorities, land administrations, land committees and local authorities) was identified as critical in the delivery of land reforms. Capacity building opportunities will therefore be created under the programme for such purposes. Mainstreaming of gender issues in such training will be an important. Regional land training institutes will be identified and supported.

Information generation and analysis through various ways including research and studies will be a critical function of the Facility. Information gathering/acquisition will be done at regional level through national nodes. The Facility will co-ordinate the management of such information and establish regional and national database and website. In order to provide knowledge and analsis on land issues in the region, researches studies will commissioned at country and regional levels, harnessing local technical skills and minimising the use of external consultants. A set of topical land issues will be selected for research. Existing research networks such as SADC FANRPAN will be expected to play key roles in carrying out researches and studies. Possibilities of research studies at post graduate levels will be explored by the Facility for support through grants.

*PROMOTING AGRICULTURAL TRADE, HARMONIZING FOOD SAFETY AND STANDARDS*

The decline in agricultural trade has mostly been attributed to the domestic supply-side constraints. In recent years, agricultural products face an increasing risk of rejection by importing countries for non-conformity with national or international food standards and regulations. Legislation and regulations of most SADC Member States are outdated and not in conformity with the International Plant Protection Convention (IPPC) or the rules specified in the Sanitary and Phytosanitary Measures (SPS) and Technical Barriers to Trade (TBT) agreements signed by countries in the framework of the World Trade Organisation (WTO). The gap in standards between SADC and the richer countries is high, and growing and also tend to be wider on value-added, processed products where global demand is elastic.

In recognition of this problem, SADC undertook a study in eleven of its Member States to determine the degree of deviation of the SPS/food safety measures from international standards and assess measures that should adopted to facilitate trade yet not compromise consumer safety. The SADC SPS study revealed the urgent need for SADC to harmonise national food standards and regulations in line with those of Codex Alimentarius and other international bodies. Other issues that need to be addressed include: improvement of laboratories equipment and other facilities for food analysis; inspection and quality assurance; mutual recognition of food control procedures and certification systems, including accreditation of laboratories by Member States; build capacity in risk analysis, so that staff on borders and in the field are conversant with modern procedures of SPS control measures (particularly, inspection procedures; identification and diagnosis of pests and diseases; pest risk analysis and surveillance; epidemiology; quarantine procedures ); and strengthening existing information systems on food quality, prices, and markets

*SADC ADVISORY COMMITTEE FOR BIOTECHNOLOGY AND BIOSAFETY*

The SADC Council of Ministers at their meeting of October 2002 in Luanda, Angola directed the SADC Secretariat to establish an Advisory Committee on Biotechnology (SACBB). The Executive Secretary of SADC officially launched the activities of the SACBB on 16 April 2003 during an inaugural meeting in Gaborone. Its members are eminent scientists from within the region. Their field of expertise covers a range of disciplines that are of relevance to biotechnology: molecular biologists, biochemists, plant breeders, animal breeders, veterinarians, environmental specialists, legal and trade specialists. The SACBB is operated as an independent body of regional experts at the disposal of SADC and its Member States. The committee interacts with SADC Member States via the FANR Directorate and via a network of National Biotechnology Focal Points who officially represent Member States. The SACBB is one and a half year in existence and has already performed well. It has developed a set of recommendations that were approved by the SADC Integrated Committee of Ministers at their meeting in Gaborone in July 2003.

The terms of reference for this regional body include advising on all matters concerning or related to biotechnology and biosafety; preparing a draft regional policy and strategy that will guide Member States to effect the necessary legislation on biotechnology and biosafety; Developing a model legislation taking into account the Cartagena Biosafety Protocol and the AU Biosafety Model Legislation approved in Addis Ababa in May 2001 and other relevant international instruments, existing legislation in the region and related regional integration initiatives of SADC; Review regional updates on biotechnology and biosafety; Advise on the monitoring system on biotechnology and biosafety; Analyse the Zambian and the SADC Fact–Finding Mission Reports and make recommendations to the August 2003 SADC Council of Ministers (note: already implemented); Advise Member States on institutional arrangements for management of biotechnology and biosafety in the region; Develop strategies on biotechnologies and biosafety information sharing; Advise SADC and its Member States in developing capacity to deal with biotechnology and biosafety issues; Develop guidelines to safeguard Member States against potential risks in the following areas: Food safety, Animal health and welfare, Public Health, Impact on genetic resources, Ethical issues, Trade related issues; and Consumer concerns; Advise SADC on liaison with other national governments, regional and international groups or organisations concerned with biotechnology and biosafety; Advise SADC on developing strategies for resource mobilisation to support biotechnology and biosafety in the SADC region; and advise on strategies for capacity building and infrastructure development and use within the region.

*SADC BIOFUEL PROJECT - FARMING FOR ENERGY*

Biofuels have the potential of creating income to millions, thus contributing to poverty eradication. Biofuels are simple to make and to handle; the technology is within the region's capacity. Biofuels allow for equitable and sustainable use of the environment and natural resources. The development model fuelled by nature creates a new, large and level playing field for the private sector involvement in SADC activities. Bio diesel can contribute to increased trade and investment in the region, to the diversification of the economy and to industrialisation. The promotion of biofuels in the region will lead to improved balance of payment. Biofuels can assist in increasing access of modern forms of energy by rural communities. Biofuels are a reliable source of energy and can contribute to rural electrification and desenclavement. Biofuels increase the farmers' access to the market. Valued by-products of the biofuel production are organic fertilisers and animal feed, which in turn might boost crop and livestock production. Biofuels do not pollute and their use will yield Kyoto – 'carbon bonuses'.

The biofuel project will promote the concept 'Farming for Energy' in the SADC region. More specifically, it will organise national and regional awareness meetings on biofuels, produce promotion material and facilitate information sharing; assist the SADC and its Member States in drafting biofuel policies; convince research institutions to focus on biofuel research; identify one or more suitable training centres in the region and support them to become reference centres of biofuel knowledge; create or help in the creation of national and regional platforms for discussions on biofuels, uniting experts from the energy and agricultural sector with stakeholders from all

layers of the society; identify industrial and agricultural projects that can spearhead the introduction of biofuels in the region.

*STATISTICAL CROP FORECASTING METHODOLOGY PROGRAMME*

One of the challenges facing regional and national institutions is how best to collect and analyse agricultural production data so as to provide more timely and accurate national and regional food security assessments and early warning which would facilitate the design/ planning of appropriate interventions. Accurate and timely crop statistics are critical in the provision of early warning information on the impending food security situation both nationally and regionally. Currently, each SADC Member State has its own approach to crop production forecasting/estimation. The various methods currently in use can be grouped into the following four groups: Crop reporting methods; Agro-meteorological monitoring of crop condition; Crop yield models (crop weather and biometric regression types); and Statistical Surveys for assessing area and yields. The first two methods are usually subjective assessments using such methods as eye estimates by extension staff or farmers.

Crop models and statistical surveys normally involve objective assessments through models and statistical surveys and these are the type of methods that SADC has recommended to member states. Most SADC countries have conducted statistical surveys in the past in order to collect crop production data. For yield estimates, methods like Tape and Compass, crop cutting and weighing, cob measurement and others are known and, in some cases, have been used in the region. For example crop cutting and tape and compass methods have been used in the past in Malawi, Zimbabwe and Zambia while cob measurement method has been used in Lesotho.

As the region becomes more and more integrated, there is also need to have crop production statistics, which are collected using similar basic method(s) so that they can be properly compared, aggregated and analysed to help in the decision making processes at regional level. The use of comparable methods of surface estimation and crop forecasting would also help in developing a sustainable technical know how in the region. The activities of the statistical crop forecasting project will be geared towards development of statistical method of data collection which incorporates the use of geographical information system (GIS) supplemented by ground surveys. Much of the initial emphasis will be to build up capacity at the national as well as regional level through training.

*SADC PLANT PROTECTION ACTION PLAN*

It is generally accepted that three agricultural factors are determinant for crop productivity: the genetic quality of the crops (~ seed), the quality of the environment in which these crop grow (~ soil & water), and the protection that the crops enjoy before, during and after the growing cycle (~ plant protection). Therefore, the FANR has developed action plans that cover these different technical areas. The SADC Plant Protection Action Plan (SPPAP) is one of them.

The SPPAP has been developed by the Senior National Plant Protection Officers from the SADC Member States. The SPPAP is reviewed on a regular basis. The Plan covers the following: Overview of the phytosanitary legislation in the SADC Countries; Action Plan on Trade Related Phytosanitary Issues; Action Plan for Integrated Production and Pest Management; and a Plan of Action for Communication, Information Exchange, Policy Harmonization and Capacity Building.

*SPECIALIZED PROGRAMMES:*

The directorate is implementing several other specialised programmes including: SADC Seed Security Programme, SADC Regional Remote Sensing Unit; SADC-FANR institutional strengthening programme; Multi-country Agricultural Productivity Programme (MAPP) and a study on the yield gap.

## *II. NEPAD – COMPREHENSIVE AFRICA AGRICULTURAL DEVELOPMENT PROGRAMME (CAADP)*

NEPAD's overall vision for agriculture seeks to maximize the contribution of Africa's largest economic sector to achieve self-reliant and productive economies. In essence, NEPAD aims for agriculture to deliver broad-based economic advancement, to which other economic sectors, such as manufacturing, petroleum, minerals and tourism, may also contribute in significant ways, but not at the same level as agriculture. The NEPAD goal for the sector is agriculture – led development that eliminates hunger, reduces poverty and food insecurity, opening the way for export expansion. The vision for agriculture is that the continent should, by the year 2015: Improve the productivity of agriculture to attain an average annual growth rate of 6 percent, with particular attention to small-scale farmers, especially focusing on women; Have dynamic agricultural markets within countries and between regions; Have integrated farmers into the market economy and have improved access to markets to become a net exporter of agriculture products; Achieved a more equitable distribution of wealth; Be a strategic player in agricultural science and technology development; and Practice environmentally sound production methods and have a culture of sustainable management of the natural resource base.

African Heads of State and Government endorsed NEPAD's Comprehensive Africa Agriculture development Programme (CAADP) as a framework for the restoration of agriculture growth, food security, and rural development in Africa. The CAADP document draws the attention of member governments to a wide range of actions to revitalize African agriculture and provides a framework for harmonized and collaborative responsive action. Four specific thrusts for improving Africa's agriculture that are outlined by NEPAD are:

***1. Extend the area under sustainable land management and reliable water control systems***

Reliance on irregular and unreliable rainfall for agricultural production is a major constraint on crop productivity; rain-fed agriculture is moreover often unable to permit high-yield crop varieties to achieve their full production potential. Accordingly, it is of concern that for Africa the percentage of arable land that is irrigated is 7 percent (barely 3.7 percent in Sub-Saharan Africa) while the corresponding percentages for South America, East and South-East Asia and South Asia are 10 percent, 29 percent and 41 percent respectively. Furthermore, in Africa 16 percent of all soils are classified as having low nutrient reserves while in Asia the equivalent figure is only 4 percent; moreover, fertiliser productivity (expressed in terms of maize yield response) in Africa is estimated at some 36 percent lower than in Asia and 92 percent lower than in developed countries. Building up soil fertility and the moisture holding capacity of agricultural soils and rapidly increasing the area equipped with irrigation, especially small-scale water control, will not only provide farmers with opportunities to raise output on a sustainable basis but also will contribute to the reliability of food supplies.

***2. Improve rural infrastructure and trade related capacities for market accesses;***

Improvements in roads, storage, markets, packaging and handling systems, and input supply networks, are vital to raising the competitiveness of local production vis-à-vis imports and in export markets. Investment in these areas will stimulate the volume of production and trade, thereby assisting to generate an appropriate rate of return on needed investments in ports and airport facilities. In general, Africa urgently needs infrastructure improvements for development, given that it faces the longest distances to the nearest large markets and that a fifth of its population is landlocked. Its rail freight is under 2 percent of the world total, the marine freight capacity is 11 percent (much being foreign owned but registered for convenience in Africa), and airfreight is less than 1 percent; similarly, its power generation capacity per capita is less than half of that in either Asia or Latin America. In parallel with improvements in infrastructure within Africa, adjustments are needed in the promotion and support (including subsidy) policies of developed

countries. Exporting countries within the region need to raise their capacity to participate in trade negotiations and to meet the increasingly stringent quality requirements of world trade.

***3. Increase food supply, reduce hunger, and improve responses to food emergency crises;***

Africa currently lags behind all other regions in terms of farm productivity levels, with depressed crop and livestock yields and limited use of irrigation and other inputs. By accessing improved technology – much of which is simple and relatively low in cost – small farmers can play a major role in increasing food availability close to where it is most needed, raising rural incomes and expanding employment opportunities, as well as in contributing to a growth in exports. This requires improved farm support services, pilot projects targeted at poor communities and a supportive policy environment. A sub-component of this pillar is for investment to respond to the growing frequency and severity of disasters and emergencies; it calls for some attention to the fact that rapid humanitarian interventions followed by rehabilitation are required before normal development can resume. IFAD recently observed that in addition to natural disasters, over 50 countries were facing or had recently undergone civil or cross-border conflicts, including some 20 of the poorest countries. As a result, more aid is being diverted to emergency relief than to necessary long-term development; IFAD also noted a troubling gap in the transition from relief to development[1]. There is need for action to ensure that short-term interventions are followed up by long-term development. Furthermore, achieving an immediate impact on hunger also requires that the production-related investments be complemented by targeted safety nets. Failure to attend to unpredictable needs and to providing safety nets can easily derail long-term development. However, the actuarial basis for dimensioning investment is too weak. For lack of better information, therefore, Africa at this stage needs to provide at least some US$3 billion annually (proposed until 2015).

***4. Improve agriculture research, technology dissemination and adoption - to provide the scientific underpinning necessary for long-term productivity and competitiveness***

This long-term pillar, which aims at achieving accelerated gains in productivity, will require: An enhanced rate of adoption for the most promising available technologies, to support the immediate expansion of African production through the more efficient linking of research and extension systems to producers; Technology delivery systems that rapidly bring innovations to farmers and agribusinesses, thereby making increased adoption possible, notably through the appropriate use of new information and communication technologies; Renewing the ability of agricultural research systems to efficiently and effectively generate and adapt new knowledge and technologies, including biotechnology, to Africa, which are needed to increase output and productivity while conserving the environment; and Mechanisms that reduce the costs and risks of adopting new technologies.

The CAADP document has now been firmly validated and internalized in most countries' national agriculture development plans. The emerging enthusiasm in embracing the CAADP process and framework is particularly evident in the numbers of countries that are reporting to achieving or are working towards achieving the goal of allocating at least 10 percent of national budgetary resources to agriculture within at most five years, as agreed in Maputo by the AU assembly in July 2003.

## *III. FAO REGIONAL PROGRAMME (AFRICA)*

FAO's Programme of Work in the Africa region is presented in a "unified" manner. Within this unified approach, there are clearly activities, which are of direct benefit to each region. The constituent entities under the established programme structure are designed to address the problems and issues faced by Members and hence contributing to the corporate objectives reflected in the Strategic Framework. Substantive programmes are in most cases jointly executed by headquarter departments and the corresponding out-posted teams in regional or

sub-regional offices. The FAO programme of work across the Africa region is based on 6 pillars:

*1. Agricultural Production and Support Systems*

Priority was given to water control and increasing fertilizer use in Africa, within the context of the New Partnership for Africa's Development (NEPAD) and the associated Comprehensive Africa Agriculture Development Programme (CAADP), and arresting land degradation while sustaining soil productivity. TCP projects have addressed related water policy and irrigation strategies as well as capacity building in several countries in the region. Prominence was given to information and data on irrigation in the continent as part of FAO's contribution to NEPAD. A regional workshop on Integrated Water Resources Management and Food Security was held in Ethiopia during the Pan-African Conference on Water.

A process was started to harmonize seed rules and regulations to expand seed access, exchange and trade (also at the international level) within Southern Africa Development Community (SADC) countries. In the context of the Technical Consultations of Regional Plant Protection Organizations supported by the IPPC Secretariat, a regional workshop was convened to facilitate the review of draft standards and the preparation of country comments by national Plant Protection Organizations during the country consultation period.

*2. Food and Agriculture Policy and Development*

As regards nutrition support was provided for the development and implementation of national plans of action for nutrition in many countries. Workshops were held in southern and eastern Africa to test assessment tools and to ensure their use locally to address acute nutritional problems. Many initiatives aimed at promoting community-based programmes to improve household food security and nutrition, alongside the support to the field programme. Advocacy was carried out to improve the nutritional care of people living with HIV/AIDS, in collaboration with UN development partners and regional and subregional bodies. A three-week training course was organized in South Africa in connection with the AFROFOODS regional network, part of the global INFOODS initiative. Direct assistance was provided to compile national food composition tables and databases and their harmonization at regional levels as means of improving food safety and quality.

One entity was fully dedicated to the Africa Region, providing direct support to statistical capacity building as well as project supervision. Draft guiding principles for the sustainable development of agricultural and rural statistics in Africa were developed and will be presented to subregional groupings for adoption. Support to statistical development in the region has benefited from two trust fund projects, funded by the World Bank and the Government of France. Several workshops and expert group meetings were organized, covering a number of key statistical issues of direct interest to the region, in addition to national demonstration centres, which help build capacity in food security measurement and analysis at the country level. Another important initiative was the launching of CountryStat, to contribute to statistical capacity building at the country level and to improve exchanges of information between the national and the international levels.

Under the assessment of the importance and potential of basic food commodities in enhancing food security within the context of intra-trade in Africa was carried out. Improved collaboration was achieved with national governments and regional organizations (CILSS, SADC) in the context of crop and food supply assessments in countries of Sub-Saharan Africa. Country specific studies were undertaken on natural resources management in the context of general economic analysis and policy research work.

*3. Fisheries*

It may be noted that a vast majority of FAO supported projects dealing with fisheries information were implemented in African countries. Activities on traditional use of fish and other aquatic life in rice-based production systems, both wild and cultured, have raised awareness and promoted rice-cum-fish farming systems. Aquaculture-related assistance to countries was principally through field programme interventions to reinforce the sub-sector and enhance output. Regional aquaculture development programmes evolved from the strategic approach elaborated in connection with the 1999 *Africa Regional Aquaculture Review*, which was based on lessons learnt over the past 30 years. A workshop to demonstrate by-catch reduction technologies was held for the East African sub-region and a number of case studies on support to small scale fishers were carried out. Vessel Monitoring Systems workshops were organized in West Africa. Entity 234A4 *Promotion of Coastal Fisheries Management* was particularly active in some counties of the region: e.g. in Senegal where there is much enhanced awareness that access control needs to be developed for all fishers, while Tanzania has developed a strategy for common management of industrial and artisanal fisheries of marine shrimps. Further efforts were made to strengthen FAO regional fishery bodies (RFBs) and increase their efficiency, as well as to improve and stimulate cooperation between all FAO and non-FAO RFBs and regional fisheries management organizations (RFMOs) on specific issues and joint activities.

*4. Forestry*

Important documents include cases of successful forest management in Central Africa based on broad partnerships and policy development for the sustainable use of wildlife resources and bush meat issues. A strategy for future action in support to Central African forests was designed. Demonstration and training activities in forest resources assessment took place, as well as regional workshops to define the new generation of watershed management projects. The FAO-supported regional project in the Fouta Djallon area is significantly contributing to cooperation on watershed management and sustainable mountain development. Several studies on the impact of acacia and prosopis species as invasives were carried out. The Forestry Outlook Study for Africa emphasized the importance of supporting the informal sector that is critical to the provision of rural employment and income while underpinning the need for strengthening public sector institutions. Case studies highlighted the potential for increasing revenues from forests through regular revision of royalties. Reviews were undertaken to update assessments of needs and capacities in forestry education and research. The African Forestry and Wildlife Commission was able to develop intersessional activities making substantial contributions to the bushmeat crisis in West and Central Africa and to bushfire prevention and control in dry zone Africa. Support was also provided to arid, low forest cover countries of Sub-Saharan Africa, to validate national criteria and indicators of sustainable forest management.

*5. Sustainable Development*

Assistance was provided to the formulation of NEPAD's CAADP “fourth pillar” on agricultural research, technology dissemination and adoption. The Forum for Agricultural Research in Africa (FARA) was established and an important development was the decision of FARA to expand its outreach to cover all of Africa including North Africa, and not just Sub-Saharan Africa as originally conceived. Direct assistance was provided in order to optimize the dissemination of agricultural knowledge and technologies through national agricultural research and extension systems in several countries, notably in the CEMAC region. Assistance was also provided to selected countries (e.g. Benin, Côte d'Ivoire, Swaziland) in the area of bio-safety regulations. Land cover datasets from the SADC region have been incorporated to enhance FAO's environment and natural resources services (i.e. the provision of comprehensive data and information to countries on land cover and geo-spatial data). Under the aegis of the interim Science Council of the CGIAR, a number of seminal reports on the problems of agricultural research in the region and possible solutions have been issued.

As regards gender and population, primary attention was given to the impacts of HIV/AIDS and rural ageing, including increased urban-rural inequalities, reduced rural households'

assets and wealth, and problems in the intergenerational transfer of knowledge and skills, consequently leading to less productive farming systems and higher levels of food insecurity. Most of the underlying research work and related field testing was carried out in the Africa region. Training workshops were organized for lusophone countries (with IPGRI) on indigenous knowledge, gender and seed management. Training activities and workshops were carried out on the well established Socio-economic and Gender Analysis Programme (SEAGA) and other materials. Progress was made in West Africa in the assembly of gender-disaggregated data in national agricultural data collection exercises, while re-tabulation of existing agricultural databases was carried out, notably in southern Africa.

*6. Policy Assistance*

The adoption of NEPAD and associated CAADP has allowed orientation of policy assistance and field programme development work towards meeting more concrete objectives for rapid recovery of the agricultural sector. Assistance was provided not only for the formulation of the CAADP, but also for the subsequent action plan and identification of CAADP flagship projects. At the national level, assistance was also provided for the updating of National Strategies for Agricultural and Rural Development - Horizon 2015. Regional Economic Communities were assisted in the design and pursuit of regional strategies for food security and mechanisms for better harmonisation of agricultural policies. Draft Regional Programmes for Food Security (RPFS) were prepared for 8 regional economic organizations. The major programme also covered reviews of needs for and effectiveness of agricultural financing. High-level meetings were held with regional development banks to discuss the RPFS and facilitate the mobilization of resources for their implementation. For instance, funding was obtained from the West African Economic and Monetary Union (UEMOA). On legal aspects, assistance was provided, for example, on water law in the Sahara aquifer, and seed law in West Africa. Moreover, some publications addressed regional issues, such as forestry law in the whole of Africa, and pastoral law in West Africa.

## *IV.DFID HUNGER AND VULNERABILITY PROGRAMME*

The humanitarian crisis that became acute in Southern Africa at the end of 2001, when up to 14 million people were estimated to be in need of immediate food aid was the result of a complex mix of factors. Drought triggered but did not cause the crisis. The scene had been set by declines in remittances, the devastating effects of the HIV/AIDS pandemic in the region, the effect of poor and inappropriate economic and social policies, the deterioration in rural infrastructure, and the decline in governments' capacity to deliver basic services. The crisis highlighted the need for greater national government commitment to improve sustainable access to food. It also exposed weaknesses in national and regional strategies in preparing for and responding to food shortages, and underlined the extreme vulnerability of increasing numbers of people in Southern Africa.

The Hunger and vulnerability strategy is part of DFID's response to these issues and to the Report of the International Development Select Committee (IDSC) on the crisis. That Report made 67 recommendations on improving the food security situation in Southern Africa based on a wide range of consultations with DFID, NGOs and academics. The report highlighted the fact that as vulnerability to shocks has increased, coping strategies have progressively weakened. It stressed the need for more effective action to tackle food security, both in emergency and development programmes. The strategy sets out our assessment of the main factors contributing to food insecurity in the region, building on the analysis in "Eliminating Hunger", DFID's food security position paper. It will serve as a framework to guide DFID policy at regional level around these issues, and will provide a basis for our engagement with national Governments, UN Agencies, NGOs, and other donors on regional food security issues.

The strategy outlines four areas where DFID will deliver support through a three-year programme to improve regional food security. It will provide a better understanding of vulnerability, access to food, and broader issues affecting the ability of the poor to provide for themselves. This will feed

into DFID programming in the region around pro-poor growth policy, including through Poverty Reduction Strategy Paper discussions. But it is important that governments in the region also give a higher priority to food issues and understand the impact of their policies on access to food for poor people. The four pillars of the strategy are: Strengthening vulnerability monitoring and assessment systems; More effective safety nets; Promoting the role of the private sector and enhancing regional trade; and Strengthening regional policy discussions. (DFID, 2004)

## *V. EU REGIONAL INDICATIVE PROGRAMME*

The overall aim of EU Regional Indicative Programme (2002-2007) is to increase economic growth and reduce poverty in the SADC region through higher levels of regional economic integration. The specific objective is that all countries in the region will become members of a regional Free Trade Area and/or a Customs Union; will improve implementation of WTO provisions; will have started negotiations on Economic Partnership Agreements (EPA); and will use the resources of the EU Regional Indicative Programme (RIP) to reduce poverty through economic development and regional integration.

The main strategy being followed to achieve poverty reduction through higher levels of export-led economic growth is macro-economic liberalisation as well as promotion of investment and supply-side measures to assist the region to increase production. The specific challenge is the full implementation of the SADC Free Trade Area by 2008. Two main focal areas were selected: Regional Integration and Trade and Transport and Communications. The non-focal areas include, *inter alia,* programmes in peace, security and capacity building. The involvement of non-state actors is encouraged in all areas while crosscutting issues such as gender and environment are mainstreamed in all programmes.

In May 2004 the European Union and 7 countries of the SADC EPA negotiating configuration (Botswana, Lesotho, Namibia, Swaziland, Mozambique, Angola and Tanzania) met in Windhoek to begin negotiations on a new trade arrangement to replace the current non-reciprocal Cotonou trade preferences which will lapse on December 31st 2007. South Africa, which concluded a separate bilateral Trade, Development and Cooperation Agreement (TDCA) with the EU in 1999, participated in the negotiations as an observer. The European Union favours the negotiation of what are called “economic partnership agreements”(EPAs). What precisely these arrangements will entail is as yet unclear. The European Commission claims that EPAs, which will introduce reciprocal preferential trade arrangements (in which each party grants trade preferences to each other), are primarily geared towards promoting economic development in African countries. Considerable emphasis is also placed on ensuring the compatibility of any future trade arrangements with WTO rules and on ensuring that any future arrangements contribute to sustainable forms of poverty focussed development. However, at times it is very difficult to pin down how EPAs are in any way different from standard WTO compatible free trade area arrangements, which would require least developed countries to give up their rights to non-reciprocal trade preferences and which would abandon concepts of special and differential treatment for developing countries.

The negotiations with the EU on tariff reductions on EU exports to the SADC EPA configuration should, perhaps surprisingly, be rather straightforward. South Africa has already concluded a free trade area agreement with the EU (as part of the TDCA), which sets out a programme of phased tariff removals and reductions on EU goods entering the SACU market. Because of the Customs Union between South Africa and the four other SACU countries (Botswana, Lesotho, Namibia and Swaziland) these tariff cuts on EU imports will apply de facto to the BLNS countries as well as South Africa. Mozambique, Angola and Tanzania for their part are classified as least developed countries and are thus entitled under the EU’s “Everything but Arms” (EBA) initiative, which is fully compatible with WTO rules, to non-reciprocal duty free access to the EU market. There is no reason why these countries should not be allowed to continue with this arrangement,

leaving any reform of their tariff policy as a matter of national policy and multi-lateral, WTO obligations.

The issue of "opening up" the SADC EPA configuration to EU imports has thus largely been settled, and there should thus be nothing more of any real significance to negotiate in terms of further access to EU imports to this region. Acknowledgement of this should clear the way for negotiations on this aspect to focus on the all important development dimension of reciprocity. In this context there are a number of issues, which should be addressed. These are: the negotiation of swift and simple pre-emptive safeguards for products deemed sensitive - this is an issue of particular importance given the impact the reform of the EU's common agricultural policy (CAP) is having on the price competitiveness of EU exports (e.g. average EU cereals prices have fallen 46% since 1992 while durum wheat prices have fallen 57%); the establishment of targeted programmes of restructuring assistance to BLNS enterprises and sectors facing increased competition from EU exports, as tariffs are reduced and eliminated; the establishment of targeted programmes of assistance to fiscal restructuring designed in the light of the revenue losses, which will result from an elimination of duties on substantially all imports from what is the region's major trading partner. Addressing these three issues would constitute a strong development dimension to the negotiations on reciprocity in the specific context of the SADC EPA configuration.

## *VI: USAID's INITIATIVE TO END HUNGER IN AFRICA (IEHA)*

The Regional Centre for Southern Africa's (RCSA) Rural Livelihood Diversified Strategic Objective underpins the Initiative to End Hunger in Africa (IEHA) – a Presidential Initiative to cut hunger in half by year 2015. IEHA has six pillars (principles) providing guidelines to address this important Initiative. The six pillars are: scientific research and technology transfer; environmental management and conservation; trade and market development; HIV/AIDS and vulnerable populations; Capacity Building; Farmer and rural business association Development

USAID will improve rural incomes, increase food security, and stimulate agricultural growth by increasing production and trade of high-value agricultural commodities by emerging commercial farmers; diversifying crop-livestock systems in vulnerable communities; and improving regional coordination on agricultural and rural livelihoods research and policy. USAID will promote regional synergies and complementarities for effective coordination and monitoring of Initiative to End Hunger in Africa (IEHA) programs in southern Africa.

In 2005 USAID assistance will help deliver competitive agricultural products and services to local, regional, and global markets by focusing on targeted market-led approaches to agricultural development. USAID will help emerging commercial farmers to access technologies (such as irrigation, appropriate seeds and equipment), and markets and regulatory guidelines to deliver competitive agricultural products and services to local, regional and global markets. While about a third of all activities will be implemented through private and public-private alliances, USAID's Southern Africa Global Competitiveness Hub (also known as the Trade Hub) will assist in promoting southern Africa agriculture products in global markets.

In 2006 IEHA beneficiaries will supply fresh horticultural products to regional supermarkets and regional hotels and catering companies. Partnering organizations will provide technical packages and training in quality control systems, and will identify and strengthen regional seed companies who target small-scale commercial farmer associations. To increase the competitiveness of crop and livestock products in regional and extra-regional markets, USAID will address gaps in horticultural and meat products supply chains. Work already begun on plant and vegetable products certification for the U.S. market will continue.

Diversification activities will begin in one-third of target communities. USAID will work with farmer associations, NGOs, international public organizations, national governments, and for-profit firms

to reduce marketing, extension, and credit costs. In addition, USAID will introduce processing and storage technologies, and low capital and low labor technologies for staple food production. USAID will partner with health and nutrition institutes to develop food-based, low labor yet nutritious solutions for meeting daily caloric intake required for persons living with HIV/AIDS.

# *VI.KEY REIONAL PLAYERS*

## *1. THE SADC-FANR DIRECTORATE*

| KEY ACTIVITIES/ PROGRAMMES | AREA/COUNTRIES OF OPERATION | STRATEGY/ FORA FOR POLICY INFLUENCE | CONTACTS |
|---|---|---|---|
| SADC Regional Secretariat currently has 4 directorates: Trade, Industry, Finance and Investment; Infrastructure and Services; Food, Agriculture and Natural Resources (FANR); and Social and Human Development. The SADC FANR directorate is currently involved in the following programmes and activities:<br>▪ The regional food reserve facility<br>▪ SADC agricultural information and management system (AIMS)<br>▪ Food Security Capacity Building programme<br>▪ Agricultural Water Management for Food Security programme<br>▪ Regional Land Reform Facility<br>▪ Agricultural Trade, harmonising Food safety and Standards<br>▪ SADC Advisory committee for Biotechnology and Biosafety<br>▪ SADC Biofuel project – Farming for Energy<br>▪ Statistical Crop Forecasting Programme<br>▪ SADC Plant protection Action Plan<br>▪ SADC Seed security Programme<br>▪ SADC Regional Remote Sensing Unit<br>▪ Yield gap project | Based in Gaborone, Botswana and operates in all SADC Countries through SADC National Committees | Is the technical arm for preparing FANR sector policy documents for SADC Heads of State Summits; SADC council of Ministers; SADC National Committees; SADC special committees; SADC Secretariat.<br><br>A SADC Donor Consultative conference will be held in October 2005 or early 2006 | *www.sadc.int*<br>*Margaret Nyirenda, SADC Secretariat,*<br>*Mnyirenda@sadc.int* |

## *2. ZERO REGIONAL ENVIRONMENT ORGANISATION*

| KEY ACTIVITIES/ PROGRAMMES | AREA/COUNTRIES OF OPERATION | STRATEGY/ FORA FOR POLICY INFLUENCE | CONTACTS |
|---|---|---|---|
| ZERO's vision is a global paradigm shift, changing minds, promoting prosperity for all. Its mission is to work with rural and urban communities fostering balanced, healthy growth and self-reliance within a rapidly changing world.<br>▪ ZERO coordinates, catalyses, facilitates and evaluates all types and levels of development projects in the region.<br>▪ Carries out policy advocacy evolving out of research conducted and programs implemented across the SADC region.<br>▪ Implements projects involving agricultural productivity and land resources issues e.g. wind pattern studies have been carried out leading to the development and erection of wind turbine electrical generation plants.<br>▪ ZERO also develops other renewable energy sources, appropriate technology and stimulates income generation models in rural areas<br>▪ Zero serves as a regional trade and employment catalyst and facilitator.<br>▪ Other areas of focus include agricultural and climate change research, gender and HIV and AIDS<br>▪ In Collaboration with United Nations, IUCN World Conservation Union and other international agencies and public institutions, ZERO works on the implementation of sustainable development initiatives.<br>▪ ZERO is the lead agency in Zimbabwe for the implementation of the United Nations sponsored Millennium Development Goals (MDGs) and functions as the Regional Secretariat for the Community Organisations Regional Network (CORN), a SADC country member network. | Operating across the SADC region since 1987. | Zero organises and holds national and regional development seminars and workshops, and undertakes and publishes research and reports<br><br>Specific Strategies ZERO uses include:<br>• Applied Research<br>• Advocacy<br>• Capacity building<br>• Collaboration and Partnerships<br>• Information Documentation and Dissemination | www.zeroregional.org<br>ZERO Regional Environment Organisation Offices, 158 Fife Avenue, Greenwood Park, P.O Box 5338, Harare, Zimbabwe, Tel/Fax: 263-4-706998/700030/720405<br>E-mail: dorothy@zeroregional.com or info@zeroregional.com<br>*http://www.zeroregional.com* |

## *3. IUCN-REGIONAL OFFICE FOR SOUTHERN AFRICA*

| KEY ACTIVITIES/ PROGRAMMES | AREA/COUNTRIES OF OPERATION | STRATEGY/ FORA FOR POLICY INFLUENCE | CONTACTS |
|---|---|---|---|
| IUCN - The World Conservation Union was founded in 1948 and brings together almost 1000 members globally (states, government agencies, NGOs and affiliates), and some 10,000 scientists and experts in a unique worldwide partnership. "IUCN provides strategic direction for conservation and development, through the wise use of natural resources" IUCN's core business in southern Africa is to support conservation and sustainable use of natural resources in the region. IUCN-ROSA mission is to facilitate and strengthen an integrated approach for the sustainable and equitable use of natural resources and conservation of biological diversity"<br>▪ IUCN–ROSA, in partnership with its 69 member organisations - is developing, testing and demonstrating appropriate environmental and natural resources management systems.<br>▪ IUCN-ROSA is also influencing and supporting the development and implementation of environmental and natural resources management policies at national, regional and global levels.<br>▪ IUCN-ROSA ensures availability and understanding of environmental and natural resources management information and advocates for its increased use in decision-making.<br>▪ IUCN assists communities and governments to create their own processes towards the development of wildlife, environment management and land policies and strategies.<br>▪ IUCN develops linkages between science and policy, economics and the environment, social equity and access to natural resources, and protection and sustainable use.<br>▪ Thematic programme areas include Fresh water dominated ecosystems and water utilization; Marine and coastal ecosystems; Forests; Dry-lands ecosystem; Biodiversity; Wildlife; Urban Environment; Community Based Natural Resources Management; Trans-boundary Natural Resources Management; Environmental Economics; and Land and natural resource tenure. | Established in Zimbabwe in 1987 to serve the SADC region in the development of skills in conservation and natural resource management. | ▪ IUCN Values include Scientific Leadership, Partnership, Innovation, and Learning.<br>▪ Generation, transformation and dissemination of scientific knowledge and tools to stakeholders and advocating for their use. | www.iucnrosa.org.zw |

## *4. FOOD, AGRICULTURE AND NATURAL RESOURCES POLICY ANALYSIS NETWORK (FANRPAN)*

| KEY ACTIVITIES/ PROGRAMMES | AREA/COUNTRIES OF OPERATION | STRATEGY/ FORA FOR POLICY INFLUENCE | CONTACTS |
|---|---|---|---|
| *The origins of the Food, Agriculture and Natural Resources Policy Analysis Network (FANRPAN) can be traced to the first Conference of Ministers in Agriculture of Eastern and Southern Africa, which was held in Harare in April 1994. At the meeting, the Ministers agreed to support the establishment of a regional agricultural policy network to "enhance the capacity for FANR policy formulation and analysis in the region". This historic meeting resulted from their concern for the desperate state of the food, agriculture and natural resources sector of the region. FANRPAN builds on a long-term investment and commitment already made in establishing universities, national agricultural research institutes, and policy analysis units in Southern Africa.* The main policy areas are food security, trade, land policy reform, natural resource management and more recently the impact of HIV and AIDS on agriculture. The FANRPAN mission is to provide a forum to coordinate, influence and facilitate independent policy research, analysis and dialogue at national and regional level so to ensure food security in the SADC region. FARNPAN portfolio of on-going projects include:<br>▪ The Impact of HIV and AIDS on agriculture and food security in the SADC region funded by the EU<br>▪ Rural livelihoods Project in Southern Africa – harmonisation of seed policies in the region and strengthening the FANRPAN institutional capacity – funded by USAID – RCSA<br>▪ Strengthening policy analysis and representation of Farmer-based organisation in the SADC – funded by CTA<br>▪ Addressing agricultural biotechnology and bio-safety issues to improve food security in the SADC region – funded by the US Grains Council and the IFPRI program for Bio-safety (PBS)<br>▪ Maize marketing in the SADC region – a study in collaboration with Michigan State University – funded by the Rockefeller Foundation<br>▪ Contract farming as a mechanism for commercialisation of smallholder agriculture in the SAD region – funded by the French government<br>▪ Annual regional level multi-stakeholder policy dialogues and publications – funded by the CTA | Operates in 11 SADC countries through country nodes. The FANRPAN node is housed in the following institutions in the region:<br>▪ Botswana: Directorate of Research and Development, University of Botswana<br>▪ Malawi: Agriculture Policy Research Unit, University of Malawi<br>▪ Mozambique: Department of Agricultural Economics, Eduardo Mondlane University<br>▪ Namibia: Namibia Economic Policy Research Unit<br>▪ Tanzania: Economic and Social Research Foundation<br>▪ South Africa: Department of Agricultural Economics, Extension and Rural Development, University of Pretoria<br>▪ Zambia: Department of Agricultural Economics, University of Zambia<br>▪ *Zimbabwe: Southern African Political Economy Series Trust and University of Zimbabwe* | FANRPAN works through an intersectoral platform designated as a country node. The country nodes implement in-country stakeholders consultation meetings to define agenda, policy research and analysis, advocacy and training.<br><br>Main strategies include:<br>▪ Networking,<br>▪ Capacity building<br>▪ Generation of credible analyses through policy research<br>▪ Commissioned studies<br>▪ Multi-stakeholder public policy dialogues | www.fanrpan.org<br>Contact person:<br>Dr Lindiwe Sibanda:<br>*lmsibanda@mweb.co.za*<br>*policy@farnpan.org*<br>Physical address:<br>141 Cresswell Street, Silverton, Pretoria, 0127, South Africa<br><br>Tel: +27 12 845 9100<br>Fax: +27 12 845 9110 |

## *5. THE SOUTHERN AFRICAN REGIONAL POVERTY NETWORK (SARPN)*

| KEY ACTIVITIES/ PROGRAMMES | AREA/COUNTRIES OF OPERATION | STRATEGY/ FORA FOR POLICY INFLUENCE | CONTACTS |
|---|---|---|---|
| SARPN is a "virtual" poverty analysis network based mainly on the web at www.sarpn.org.za. SARPN is a "knowledge bank" of sorts – based on information developed in the region. SAPRN was formed with the basic objective of moving knowledge and information from research to the policy domain. Many stakeholders have developed confidence in SARPN because it gets things on the web very quickly and most partners do not feel threatened to pass information to SARPN. The SARPN website hosts information across all topics. It promotes distribution and debate. It advertises conferences and other major events. *SARPN's ultimate goal is to contribute to the sustainable reduction of poverty in the SADC region.*<br>▪ Most the information hosted is strategic in nature based contextual issues of the day – through literature scanning, requests by CSOs and through attending conferences.<br>▪ In its new thematic thrust SARPN has designed three programme dimensions: economic, social and political all headed by programme officers. Future work will be based on these three programme dimensions.<br>▪ In its new thrust SAPRN plans to strengthen the country level representation and to strike a balance between academia and civil society<br>▪ SARPN provides platforms that widen participation by bringing people together across the region to exchange ideas, and disseminates information to deepen understanding of poverty issues and improve policy and practice.<br>▪ Focus areas for its programmes over the next three years include: Land, food security, HIV/AIDS, gender and hunger; Social safety nets in the context of relief, rehabilitation and development; Economic integration and regional and international trade; | A "virtual" network based mainly on the web at www.sarpn.org.za with an information network cutting across all SADC countries<br>At country level SAPRN works through country specialists – who operate on a volunteer basis | Main strategy is through a very active web-based resource centre and information packs for regular distribution to stakeholders<br>Also holds thematic workshops and meeting for key stakeholders<br>Commissions research studies in partnership with other international partners<br>Effective pro-poor policy, strategy and practice in the SADC region. Its purpose is to deepen and widen debates on policy, strategy, practice and decision-making processes that impact on poverty in the region<br>• Good, effective and inclusive governance;<br>• Open access to information;<br>• Regional consultation;<br>• *Complementing and enhancing other initiatives* | ***www.sarpn.org.za***<br>Contact person:<br>Sue Mbaya:<br>Physical address:<br>1250 Pretorius Street, Office W2, ProEquity Court, Hatfield 0083, South Africa<br><br>Postal address:<br>PO Box 11615, Hatfield 0028, South Africa<br><br>Telephone:<br>+27 (0)12 342 9499<br><br>Fax:<br>+27 (0)12 342 5636<br><br>E-mail: info@sarpn.org |

## *6. PARTICIPATORY ECOLOGICAL LAND-USE MANAGEMENT (PELUM) ASSOCIATION*

| KEY ACTIVITIES/ PROGRAMMES | AREA/COUNTRIES OF OPERATION | STRATEGY/ FORA FOR POLICY INFLUENCE | CONTACTS |
|---|---|---|---|
| PELUM Association is a regional network of CSOs in Eastern, Central and Southern Africa, working in the area of participatory ecological land-use management (pelum). The PELUM vision is to see communities in become self-organised to make choices towards improved quality of life that is socially, economically and ecologically sustainable<br>▪ PELUM promotes networking, connecting and sharing experiences among members, partners and the communities they serve through a regional magazine – Ground-up<br>▪ Promotes development and institutional transformation through campaign, advocacy, lobbying and capacity building to address policies on agricultural trade, food security and land-use<br>▪ Enhance the culture and rate of learning and sharing in country working groups by increasing access to different knowledge and technology sites<br>▪ Seed and food security programme to see farmers secure and control appropriate seed of good quality, at the right time, in the right quantities in order to meet the production needs of small scale farmers in a sustainable manner<br>▪ A gender and development programme aimed at mainstreaming gender in the activities of PELUM | The association has a total of 160 member organisations in 9 countries of Botswana, Kenya, Lesotho, Uganda, Rwanda, south Africa, Tanzania, Zambia and Zimbabwe. | PELUM's key strategies are information sifting and dissemination, campaign, advocacy and lobbying, networking and capacity building<br>PELUM values are: People-centred development, empowerment of land-users, respect for indigenous knowledge, self-criticism, creativity and innovation, gender sensitivity, sustainability and holistic development<br>PELUM Association has a structure comprising of the regional desk, country desks, country working groups, regional board and a biennial general meeting | www.pelum.org.zm<br>Contact Person:<br>Joseph Ssuna:<br>jssuna@pelum.org.zm<br>pelumrd@coppernet.zm<br>Physical address:<br>Independence Avenue 324, Box 320362, Woodlands, Lusaka, Zambia<br><br>Telfax: +260 1 257116 |

## *7.SADC COUNCIL OF NGOs*

| KEY ACTIVITIES/ PROGRAMMES | AREA/COUNTRIES OF OPERATION | STRATEGY/ FORA FOR POLICY INFLUENCE | CONTACTS |
|---|---|---|---|
| The SADC Council of Non-Governmental Organizations (SADC-CNGO), constituted by member organizations from Angola, Botswana, Democratic Republic of Congo, Lesotho, Malawi, Mauritius, Mozambique, Namibia, South Africa, Swaziland, Tanzania, Zambia and Zimbabwe The main objectives include:<br>▪ To provide a forum for NGOs in the SADC region to develop common positions on areas of concern and to petition governments for better enabling environments for NGOs at national and regional levels; a better enabling environment will improve NGO effectiveness and efficiency across the region.<br>▪ To represent NGO interests at SADC institutions and other bilateral arrangements and meetings with international cooperating partners.<br>▪ To collect and disseminate information on the activities of NGOs throughout the region, in order to influence national and SADC policies and resource utilisation towards people-centred development; and to facilitate the process of sharing information, experiences and NGO best practice amongst civil society organisations.<br>▪ To develop civil society inputs in the formulation of policies that influence regional co-operation and integration and to represent the views and interests of NGO clients across the region. The Council will also jointly identify with SADC structures and governments sectors where development and delivery may be best tackled by NGOs, even where NGOs have to use resources raised by or through Governments.<br>▪ To organize policy discussion workshops and research papers on the basis of which the SADC-CNGO can rally NGOs across the region around key issues of concern. These can include democracy, good governance, human rights, poverty reduction and unemployment.<br>▪ To prepare position papers on issues relating to the abuse of human rights, corruption, and war and peace for consideration by SADC's Summit.<br>▪ To develop protocols and Memoranda of Understanding to advance the interests of civil society with key intergovernmental bodies and other co-operating partners across the region. This would include the access of NGO bodies to SADC institutions. | Constituted by member organizations from Angola, Botswana, Democratic Republic of Congo, Lesotho, Malawi, Mauritius, Mozambique, Namibia, South Africa, Swaziland, Tanzania, Zambia and Zimbabwe | Hold SADC CSO meetings ahead of ever SADC Heads of state summit meeting<br><br>SADC Civil Society Organisations held a Civil Society Forum Meeting from 14-16 August 2005, ahead of the SADC Heads of State and Government Summit in Gaborone, Botswana. | Contact Person<br>Abie Ditlhake, General Secretary<br>+27 (0) 72 746 6397 or +267 71 689 891<br><br>Secretariat: Private Bag 00418; Gaborone; BOTSWANA<br>[Clover House, 1st Floor; Plot 1277 Old Lobatse Road (Office situated at Bocongo)]<br>E-mail: bocongo@info.bw / bocongo@bocongo.bw<br>Website: http://www.bocongo.bw<br>SADC - CNGO |

# References:


1) Asante, S., 1986, Food as a Focus of National and Regional Policies in Contemporary Africa, in *Food in Sub-Saharan Africa*, Hansen and MacMillan edited.
2) Bates, R., 1981, *Markets and States in Tropical Africa: The Political Basis of Agricultural Policies*, University of California Press, Berkeley, California.
3) Bumb, B., and C. Baanante. 1996. *The role of fertilizer in sustaining food security and protecting the environment.* 2020 Vision Food, Agriculture, and the Environment Discussion Paper 17, Washington D.C. IFPRI.
4) Dembélé, N., J. Tefft and J. Staatz. 2000. *Mali's market information system: innovative evolution in support of a dynamic private sector*. MSU Policy Synthesis No. 56, East Lansing: Michigan State University.
5) Dinham, B., 1984, *Agribusiness in Africa,* Africa World Press, Trenton, New Jersey
6) Eicher, C., 1982, Facing up to Africa's Food Crisis, *Foreign Affairs*, Volume 61, no.1, Fall.
*7)* Eldis, 2005, *http://www.eldis.org/food/africa.htm*
8) FAO (2003) *'FAO and Food Security'*, at: www.fao.org/WAICENT/FAOINFO/ECONOMIC/ESA/fs_en.htm
9) FAO, 1988, Women in African Food Production and Food Security, in *Food Policy: Integrating Supply, Distribution and Consumption*, Gittinger, et al (eds.), John Hopkins University Press, Baltimore and London.
10) FAO, 1992, *The State of Food and Agriculture,* FAO, Rome
*11)* FAO, 2005, *http://www.fao.org*
*12)* FAO, 2005, *http://www.fao.org/waicent/faoinfo/giews/af/index.htm*
*13)* FFSSA (2004) *'Achieving Food Security in Southern Africa: Policy Issues and Options'*, *FFSSA Synthesis Paper*, Forum for Food Security in Southern Africa, http://www.odi.org.uk/food-security-forum
14) Food Policy Research Institute
15) Food, Agriculture and Natural Resources Policy Analysis Network (FANRPAN), 2005, *http://www.fanrpan.org*
16) Gabre-Madhin, E, 2002, *IFPRI response to the Ethiopian food crisis in 2002*, Presentation IFPRI Internal Performance Review, 2002
17) Gabre-Madhin, E, 2003, *Famine in Ethiopia: when markets don't work. International Herald Tribune,* Tuesday, February 18.
18) Gabre-Madhin, E., and S. Haggblade, 2001, *Successes in African agriculture: results of an expert survey*. Washington, DC: IFPRI.
19) Gillespie, S., and L. Haddad, 2002, *Food security as a response to AIDS*, Reprint from IFPRI's 2001-2002 Annual Report, Washington, DC: IFPRI.
20) Guthrie, 1986, The African Environment, in *Food in Sub-Saharan Africa*, Hansen et al (eds.), Macmillan
*21)* Hansen, E., 1981, Public Policies and the Food Question in Ghana, *African Development*, Volume 6, no.3
22) Hazell, P, 2001, Technological Change, Policy Brief 8, In E. Diaz-Bonilla and S. Robinson, (eds.)
23) Hazell, P. 2002. *Environment, production and technology division presentation, internal performance review*, 2002.
*24)* Hazell, P., and M. Johnson. 2002. *Cutting hunger in Africa through smallholder-led agricultural growth.*
25) Hazell. P and Johnson. M, (2002) *'Ending hunger in Africa: Only the small farmer can do it"*, IFPRI Issue Brief no. 10, Washington DC, IFPRI
26) Hinderlink J. et al, 1983, Agricultural Policy and Production in Africa: The Aims, the Methods, and the Means, *The Journal of Modern African Studies*, Volume 21
27) Hopper, D., 1976, The Development of Agriculture in Developing Countries, *Scientific American*, Volume 253, no.3
28) IFAD (n.d.) *Food Security: A Conceptual Framework*, at: www.ifad.org/gender/thematic/rural/rural_2.htm.
29) International Food Policy Research Institute, Washington D.C.
30) Islam, N., and S. Thomas, 1996, Food grain price stabilization in developing countries: issues and experiences in Asia, *Food Policy Review* 3, International Food Policy Research Institute.
*31)* IUCN-Regional Office for Southern Africa, *2005, http://www.iucnrosa.org.zw*
32) Jayne, T., T. Yamano, M. Weber, D. Tschirley, R. Benfica, A. Chapoto, B. Zulu, and D. Neven, Gillespie, S., 2002, *Malnutrition and HIV/AIDS: Reviewing and responding*, Mimeo,
33) Kandoole, B. et al, 1988, Market Liberalisation and Food Security in Malawi, Rekuni and Bersten (eds.) *Southern Africa: Food Security Options*, University of Zimbabwe and Michigan State University, Food Security Research in Southern Africa Project, Harare, Zimbabwe.
*34)* Kherallah, M., C. Delgado, E. Gabre-Madhin, N. Minot and M. Johnson, 2000, *the road half traveled: agricultural market reform in Sub-Saharan Afric*a, Food policy report.
35) Leanardo, A, 1986, *Food in the Third World: Past Trends and Projections to 2000*, IFPRI. Paper 52.
36) Lemarchand, R., 1986, The Political Economy of Food Issues, in Hansen A. et al (eds.), *Food in Sub-Saharan Africa*, Macmillan
*37)* Lofchie, M., 1975, Political and Economic Origins of African Hunger, *Journal of Modern African Studies, Volume 13*
38) Meinzen-Dick, R., and G. Makombe. 1999. Dambo irrigation systems: indigenous water management for food security in Zimbabw e. In A. Knox McCulloch, S. Babu and P. Hazell, Eds. Strategies for Poverty Alleviation and Sustainable Resource Management in the Fragile Lands of Sub-Saharan Africa, Proceedings of the International Conference, 25-29 May, 1998,Entebbe, Uganda, Feldafing, Germany: Deutsche Stiftung fur internationale Entwicklung.
39) Odejide, A., 1990, Mobilising Women for Hunger Productivity: A way out of the Food Crisis in Africa, in *Women, Communication and Development*, The World Association of Christian Communication and the African Council on Communication Education
*40)* ODI, 2005, *http://www.odi.org.uk/foodsecurityforum*
41) Oshaug, A. (1985) 'The Composite Concept of Food Security' in W.B. Eide et al. (eds.) 'Introducing nutritional Considerations into Rural Development programmes with Focus on Agriculture: a Theoretical Contribution', *Development of Methodology for the Evaluation of Nutritional Impact of Development Programmes Report* 1, Oslo: Institute of Nutrition Research, University of Oslo.
42) Quisumbing, A., and Otsuka, K. 2001. Land, trees, and women: evolution of land tenure institutions in Western Ghana and Sumatra. Research Report Washington, D.C.: International
43) Quisumbing, A., L. Brown, H. Feldstein, L. Haddad and C. Pena. 1995. *Women: the key to food securit*y. Food Policy Report. Washington, DC: IFPRI.
44) Rashid, S., and S. Tomori, (eds.) 1999, *The Political economy of development: An African Perspective*, ICIPE Science Press, Nairobi.
45) Reutlinger, S., 1988, Food Security and Poverty in Developing Countries, in Gittinger, J.et al (eds.), *Food Policy: Integration of Supply, Distribution and Consumption*, The John Hopkins University Press, Baltimore and London
*46)* SADC, 2005, *http://www.sadc.int*
*47)* Scherr, S., and S. Yadav, 1996, Land degradation in the developing world: implications for food, agriculture, and the environment to 2020. 2020 Vision Food, Agriculture, and the Environment Discussion Paper 14. Washington D.C.: IFPRI.
48) Sen, A. (1981) *Poverty and Famines: an Essay on Entitlement and Deprivation*, Oxford: Clarendon Press.
49) Sen, A. (1981) *Poverty and Famines: an Essay on Entitlement and Deprivatio*n, Oxford: Clarendon Press.
*50)* Sen, A., 1982, The Food Problem: Theory and Practice, *Third World Quarterly*, Volume 4, no.3
51) *Shaping globalization for poverty alleviation and food security*, 2020 Vision Focus 8,
52) The Southern African Regional Poverty Network (SARPN), 2005, *http://www.sarpn.org.za*
53) Timmer, C. et al, 1983, *Food Policy Analysis*, John Hopkins University Press, Baltimore, Maryland
54) UNECA, 1980, *Plan of Action for the Economic Development of Africa*, First Economic Summit of Heads of State and Government of the OAU, Lagos, Nigeria
55) UNECA, 1989, *African Alternative Framework to Structural Adjustment Programmes for Social-Economic Recovery and Transformation*, E/ECA/C-M.15/6/Rev.3, Addis Ababa, Ethiopia
56) US Department of Agriculture, 1974, *World Agricultural Situation*, US Government Press, Washington, D.C
57) *Washington, D.C.: International Food Policy Research Institute.*
58) Washington, DC: IFPRI.
59) World Bank (2002) World Development Indicators, at: http://www.worldbank.org/data/wdi2002/
60) World Bank, 1984, *World Development Report*, Oxford University Press, New York
61) World Bank, 1989, *World Development Report*, Oxford University Press, New York
62) World Bank. 2001. *Attacking poverty: World Development Report, 2000-01*. Oxford University Press: New York.
63) Zeller, M., and M. Sharma, 1998, Rural finance and poverty alleviation, Food Policy Report,
*64)* Zero Regional Environment Organisation, 2005, *http://www.zeroregional.com*

# ANNEX 1: TABLES

***Table 1: Food production indices for selected regions 1982-1993:***

| REGION | 1982 | 1983 | 1984 | 1985 | 1986 | 1987 | 1988 | 1989 | 1990 | 1991 | 1992 | 1993 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| World | 102.17 | 100.23 | 103.72 | 104.31 | 104.32 | 102.86 | 102.89 | 105.06 | 105.06 | 104.41 | 106.22 | 103.31 |
| Africa | 97.55 | 93.04 | 91.14 | 67.09 | 97.68 | 94.55 | 97.72 | 97.93 | 96.24 | 98.00 | 93.14 | 93.36 |
| Asia | 103.91 | 107.76 | 110.50 | 111.00 | 112.61 | 111.91 | 115.46 | 117.04 | 120.82 | 121.19 | 123.81 | 124.49 |
| Latin America | 102.91 | 98.54 | 99.52 | 103.22 | 99.42 | 102.07 | 105.88 | 106.49 | 105.22 | 105.72 | 107.86 | 105.84 |

*Source: FAO (1988) Production Year Book (adapted from tables 4 and 9). NB: The food production index covers food crops that are considered edible and that contain nutrients. Coffee and tea are excluded because, although edible, they have no nutritive value. It refers to aggregate quantities, not production per capita.*

***Table 2: Food production index for some countries in Southern Africa***

| Country | 1980 | 1990 | 2000 |
|---|---|---|---|
| *Lesotho* | *89* | *100* | *99* |
| Malawi | *93* | *100* | *153* |
| Mozambique | *101* | *100* | *131* |
| *Zambia* | *73* | *100* | *101* |
| Zimbabwe | *83* | *100* | *105* |
| Low-income average | *81* | *100* | *126* |

*Source:* World Development Indicators 2002 (adapted from FFSSA, 2004).

***Table 3: Average Annual Growth Rates of Production and Output per Ha of Major Food Crops, by Region and Sub-region: 1961-1970 and 1971-1980***

| Country Group | Period | Production | Output Per Ha (%) |
|---|---|---|---|
| Developing Countries (including China) | 1961-70 | 3.6 | 2.5 |
| | 1971-1980 | 2.9 | 2.3 |
| Asia | 1961-70 | 3.8 | 3.4 |
| | 1971-1980 | 3.3 | 2.8 |
| Sub-Saharan Africa | 1961-70 | 2.2 | -0.2 |
| | 1971-1980 | 1.6 | -0.8 |
| West Africa | 1961-70 | 1.1 | -1.1 |
| | 1971-1980 | 1.9 | 0.7 |
| Central Africa | 1961-70 | 4.4 | -0.4 |
| | 1971-1980 | 1.8 | -0.5 |
| Eastern & Southern Africa | 1961-70 | 3.0 | 0.8 |
| | 1971-1980 | 1.4 | 1.6 |
| Latin America | 1961-70 | 4.2 | 1.4 |
| | 1971-1980 | 1.8 | 1.2 |

*Source: Leonardo A Paulino (1986), Food in the Third World: Past trends and Projections to 2000, IFPRI Research Report 52, p.22*

**Table 4: Crop production output (Metric tonnes) for Cereals in Lesotho, Malawi, Mozambique, South Africa, Zambia**

| *Cereals, total production (Mt)* | *1979–81* | *1989– 91* | 1999– 01 | % Change 79/ 81 to 89/ 91 | % Change 89/ 91 to 99/ 01 | % Change 79/ 81 to 99/ *01* | *2000* | *2001* | *2002* | *2003* |
|---|---|---|---|---|---|---|---|---|---|---|
| **Low- income *Countries*** | 296,342, 691 | *413, 562, 583* | *557, 888, 909* | *39.6%* | *34.9%* | *88.3%* | | | | |
| ***Lesotho*** | *198,377* | *169, 524* | *196,083* | *-14.5%* | *15.7%* | *-1. 2%* | *254,848* | *159,550* | *247,550* | *247,550* |
| ***Malawi*** | *1,341,229* | *1,560,321* | *2,336,201* | *16.3%* | *49.7%* | *74.2%* | *2,631,034* | *1,742,051* | *1,710,577* | *2,145,027* |
| ***Mozambique*** | *649,313* | *629,216* | *1,660,449* | *-3.1%* | *163.9%* | *155.7%* | *1,472,736* | *1,686,995* | *1,767,945* | *1,777,945* |
| ***South Africa*** | *14,188,790* | *12,733,633* | *11,736,960* | *-10.3%* | *-7.8%* | *-17.3%* | *14,497,761* | *10,678,607* | *12,849,956* | *11,740,222* |
| ***Zambia*** | *990,374* | *1,467,171* | *932,523* | *48.1%* | *-36.4%* | *-5.8%* | *1,049,611* | *744,866* | *745,200* | *1,329,200* |
| ***Zimbabwe*** | *2,273,300* | *2,391,104* | *2,143,100* | *5.2%* | *-10.4%* | *-5.7%* | *2,537,429* | *1,896,241* | *1,262,498* | *1,015,950* |

***Table 5: Population and Major Food Crops by Region and Sub-region, 1980 and Average Growth Rates 1961-1980***

| | Population | | | Major Food Crop Production | | |
|---|---|---|---|---|---|---|
| Country Group | 1980 Number (Millions) | Per cent | 1961-1980 Annual Growth Rate (Per cent) | 1980 Quantity Per cent (Million Metric Tons) | | 1961-1980 Annual Growth Rate (Per Cent) |
| Developing Countries (excluding China) | 3,273 | 100 | 2.4 | 841.9 | 100 | 3.1 |
| Asia | 2,325 | 71 | 2.3 | 593.8 | 70 | 3.4 |
| Sub-Saharan Africa | 338 | 10 | 2.8 | 72.4 | 9 | 1.7 |
| West Africa | 148 | 4 | 2.9 | 32.7 | 4 | 0.8 |
| Central Africa | 59 | 2 | 2.3 | 12.1 | 2 | 2.9 |
| Eastern and Southern Africa | 131 | 4 | 3.0 | 27.6 | 3 | 2.4 |
| Latin America | 357 | 11 | 2.6 | 107.7 | 13 | 2.8 |

*Source: Leonardo A. Paulino (1986), Food in the Third World: Past trends and Projections to 2000, IFPRI, Report 52, p.15*

***Table 6: Population ('000s) in Lesotho, Malawi, Zambia, Mozambique and Zimbabwe***

| *Country* | *1980* | *1990* | *2000* | *Average annual growth rate* | |
|---|---|---|---|---|---|
| | | | | *80-90* | *90-2000* |
| *Lesotho* | *1,362* | *1,682* | *2,035* | 2.3% | 2.1% |
| *Malawi* | *6,183* | *8,507* | *10,311* | 3.76% | 2.1% |
| *Mozambique* | *12,095* | *14,151* | *17,691* | 1.7% | 2.5% |
| *Zambia* | *5,738* | *7,784* | *10,089* | 3.6% | 3.0% |
| *Zimbabwe* | *7,133* | *10,241* | *12,627* | 4.36% | 2.3% |

Source: *World Development Indicators 2002 (adapted from FFSSA, 2004)*

***Table 7: Exports, Imports, and Net trade of Major Food Staples, by Region and Sub-region, 1966-1970 and 1976-1980 averages***

| Country Group | Exports (Million Metric Tonnes) | | | Imports Million Metric Tonnes | | | Net Trade Million Metric Tonnes | | Average Annual Growth Rate 1966-70 to 1976-80 % | |
|---|---|---|---|---|---|---|---|---|---|---|
| | 1966-70 | 1976-80 | % | 1966-70 | 1976-80 | % | 1966-70 | 1976-80 | 1966-70 Exports | 1976-80 Imports |
| Developing Countries (Excluding China) | 28.83 | 37.47 | 30 | 40.99 | 75.36 | 84 | -12.16 | -37.89 | 27 | 63 |
| Asia | 9.61 | 15.98 | 66 | 23.78 | 32.24 | 36 | -14.17 | -16.26 | 5.2 | 3.1 |
| Sub-Saharan Africa | 3.89 | 1.86 | -52 | 2.60 | 6.25 | 140 | 1. 29 | -4.39 | -7.1 | 9.2 |
| West Africa | 2.51 | 1.08 | -57 | 1.11 | 3.37 | 320 | 1.40 | -2.29 | -8.1 | 11.7 |
| Central Africa | 0.26 | 0.06 | -78 | 0.39 | 0.87 | 124 | -0.13 | -0.82 | -13.9 | 8.4 |
| Eastern & Southern Africa | 1.13 | 0.72 | -36 | 1.10 | 2.00 | 82 | 0.03 | -1.28 | -4.4 | 6.2 |
| Latin America | 13.38 | 17.41 | -30 | 7.87 | 17.59 | 123 | 5.51 | -0.18 | 2.7 | 8.4 |

*Source: Leonardo A. Paulino (1986), Food in the Third World: Past trends and Projects to 2000, IFPRI Report 52, p.32*

***Table 8: Agricultural exports (index) for Lesotho, Malawi, Mozambique, South Africa, Zimbabwe***

| ***Agricult. Products, total Export quantity (index)*** | ***1979–81*** | ***1989–91*** | **1999–01** | **% Change 79/81 to 89/91** | **% Change 89/91 to 99/01** | **%Change 79/81 to *99/01*** |
|---|---|---|---|---|---|---|
| ***Lesotho*** | *165* | *100* | *59* | *-39.4%* | *-41.0%* | *-64.2%* |
| ***Malawi*** | *111* | *100* | *117* | *-10.2%* | *16.7%* | *4.8%* |
| ***Mozambique*** | *330* | *100* | *133* | *-69.6%* | *32.2%* | *-59.8%* |
| ***South Africa*** | *130* | *100* | *91* | *-23.3%* | *-8.7%* | *-29.9%* |
| ***Zimbabwe*** | *72* | *100* | *95 38* | *9%* | *-5.3%* | *31.5%* |

Source: *World Development Indicators 2002 (adapted from FFSSA, 2004)*

***Table 9: Agricultural imports (index) for Lesotho, Malawi, Mozambique, South Africa, Zimbabwe***

| **Agricult. Products, total *Import quantity (index)*** | ***1979–81*** | ***1989–91*** | **1999–01** | **% Change 79/81 to 89/91** | **% Change 89/91 to 99/01** | **%Change 79/81 to *99/01*** |
|---|---|---|---|---|---|---|
| ***Lesotho*** | *80* | *100* | *122* | *24.9%* | *21.9%* | *52.3%* |
| ***Malawi*** | *27* | *100* | *71* | *270.4%* | *-29.3%* | *161.7%* |
| ***Mozambique*** | *57* | *100* | *106* | *75.4%* | *6.3%* | *86.5%* |
| ***South Africa*** | *48* | *100* | *134* | *109.8%* | *33.7%* | *180.4%* |
| ***Zimbabwe*** | *86* | *100* | *242* | *15.8%* | *141.7%* | *179.9%* |

Source: *World Development Indicators 2002 (adapted from FFSSA, 2004)*

***Table 10: Share of Food Aid in Total imports for Selected Regions: 1961-1981***

| | Millions Of Metric Tonnes | | | | |
|---|---|---|---|---|---|
| Region | Year | Commercial Imports | Food Aid | Total Imports | Share of Aid in Total Import (%) |
| Asia | 1961-63 | 11.4 | 5.7 | 17.1 | 33 |
| | 1976-78 | 22.2 | 4.2 | 26.4 | 16 |
| | 1981 | 33.9 | 2.5 | 36.4 | 7 |
| Latin America | 1961-63 | 3.7 | 1.9 | 5.6 | 34 |
| | 1976-78 | 14.2 | 0.4 | 14.6 | 3 |
| | 1981 | 22.2 | 0.6 | 23.0 | 2 |
| Sub-Saharan Africa | 1961-63 | 1.5 | 0.1 | 1.6 | 8 |
| | 1976-78 | 4.1 | 0.9 | 4.9 | 18 |
| | 1981 | 6.7 | 2.0 | 8.8 | 23 |

*Source: Adapted from Barbara Huddleston (1988), Trends in Trade and Food Aid in* ***Food Policy, Integrating Supply, Distribution and Consumption,*** *The John Hopkins University Press, Latimore, Gittinger et al (eds)*

***Table 11: Food aid (Metric tones) in Low-income countries, Lesotho, Malawi, Mozambique, South Africa, Zambia, Zimbabwe***

| **Food aid: cereals total** | **1979–81** | **1989–91** | **1999–01** | **% Change 79/81 to 89/91** | **% Change 89/91 to 99/01** | **%Change 79/81 to 99/01** |
|---|---|---|---|---|---|---|
| **Low Income Countries** | 4,732,429 | 5,435,327 | 6,149,781 | 14.9% | 13.1% | 29.9% |
| **Lesotho** | 35,612 | 22,330 | 3,095 | -37.3% | -86.1% | -91.3% |
| **Malawi** | 7,787 | 178,818 | 29,903 | 2196.4% | -83.3% | 284.0% |
| **Mozambique** | 151,376 | 483,459 | 145,457 | 219.4% | -69.9% | -3.9% |
| **South Africa** | 0 | 2,430 | 0 | - | -100.0% | - |
| **Zambia** | 116,975 | 118,199 | 25,726 | 1.0% | -78.2% | -78.0% |
| **Zimbabwe** | 5,905 | 29,274 | 24,379 | 395.8% | -16.7% | 312.9% |

*Source: World Development Indicators 2002 (adapted from FFSSA, 2004)*