

# **Food security, rural development and health equity in Southern Africa**

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## Executive Summary

Up to two-thirds of all Africans in east and southern Africa (ESA) live in rural areas, three-quarters of them living below the poverty line. Agriculture contributes 35% to the southern African regional GDP and 13% of total export earnings. In addition, about 70% of the population of the region depends on agriculture for food, income and employment. The recent widespread food crisis in the region that pushed more than sixteen million people into severe food shortage is further evidence that agriculture and food security still play a fundamental role in determining the development and health of the poorest in the region.

The Regional Network for Equity in Health in Southern Africa (EQUINET) recognising the importance of food security in health equity, commissioned a paper that explores equity concerns around food security and nutrition within the SADC and East Africa region, drawing information from available secondary data. The paper aims to analyse the current food security and nutrition situation in the region and the health and equity issues and policy concerns arising. EQUINET has commissioned this analysis of the determinants of the current situation, and the policy influences that enhance or undermine equity in food security and nutrition, to propose areas for policy and programme engagement and for research and debate by EQUINET.

This paper argues that there are at least five good reasons why food security and nutrition should be given high priority in actions to improve health equity and socio-economic development across the region:

1. Poverty, hunger and under-nutrition are getting worse in ESA, even though they are improving in almost every other region. This undermines the achievement of UN Millenium Development Goals in this region.
2. Instead of the potential virtuous cycle that could be created between improved nutrition and improved economic wellbeing, ESA is currently caught in a vicious cycle of worsening poverty, hunger and under-nutrition accentuating income and health inequalities and increasing vulnerability.
3. Proven effective interventions indicate that public policy can make a difference, that nutritional improvements can be effected, even under conditions of poverty, and that these can have positive impacts on economic wellbeing.
4. Implementing public policies that address food security provides an opportunity to deal with the demands of AIDS, the challenges of the competing signals from global trade to health and development and the challenges to equitable public policy in the current governance of the food supply system.
5. Confronting hunger and nutrition provides one further area where alternatives can be built that promote policy objectives of justice and equity. This calls for interventions that build a multi-disciplinary and integrated response to food security and nutrition, especially focused upon gender inequalities, community control over productive resources and fair trade – ie one that is shaped on food sovereignty.

This analysis suggests that equity in health will be difficult to achieve in this region unless there more explicit attention is paid to the underlying nutrition and food security determinants. These

in turn are being shaped by larger forces such as trade rules, corporatisation of the food supply chain, HIV/AIDS, gender inequalities etc. However we can start to identify areas of common action that would strengthen equity in food security, nutrition and health outcomes.

At a minimum an equity programme should focus on:

- Building civil – state alliances around a programme of action that links a food sovereignty perspective with the equitable public policy that supports this.
- Promoting further assessment of the links between trade and health in the region to feed into advocacy for trade policies and agreements that strengthen public health.
- Supporting, informing and evaluating policies and initiatives that provide safety nets to those most affected by negative effects of trade and agricultural policies and of HIV and AIDS.
- Continuing to identify how gender inequalities exacerbate the impact of globalisation and HIV and AIDS on the poorest families and decrease the efficiency of policy responses and propose programme and policy responses for these problems.

# 1. Introduction

Addressing rural poverty and agricultural failure is central to any response for addressing inequalities in eastern and southern Africa (ESA). Up to two-thirds of all Africans in this region live in rural areas, trying to make a living from often marginal land with little opportunity to earn wages. Three-quarters of those living in rural areas also live below the poverty line. Agriculture contributes 35% to the southern African regional GDP and 13% of total export earnings (SADC, 2004). In addition, about 70% of the population of the region depends on agriculture for food, income and employment. The impact of immediate factors such as drought, flooding and unseasonal weather have combined with underlying factors such as continual poverty, effects of structural adjustment programmes and HIV/AIDS to undermine food security *and* the state's capacity to respond to household food insecurity. In 2003 this pushed more than sixteen million people in southern Africa into suffering from food shortages. More than half the Zimbabwean population, over a third of the populations of Malawi and Lesotho, a quarter of all Zambians and one in twenty Mozambicans needed emergency assistance up to the harvests in 2003 (Lambrechts & Barry, 2003).

This paper will argue that there are at least five good reasons why food security and nutrition should be given high priority in actions to improve health equity and economic development across the region (adapted from Devereux & Maxwell, 2001)

1. Poverty, hunger and under-nutrition are getting worse in ESA, even though they are improving in almost every other region. This undermines the achievement of UN Millenium Development Goals in this region.
2. Instead of the potential virtuous cycle that could be created between improved nutrition and improved economic wellbeing, ESA is currently caught in a vicious cycle of worsening poverty, hunger and under-nutrition accentuating income and health inequalities and increasing vulnerability.
3. Proven effective interventions indicate that public policy can make a difference, that nutritional improvements can be effected, even under conditions of poverty, and that these can have positive impacts on economic wellbeing.
4. Implementing public policies that address food security provides an opportunity to deal with the demands of AIDS, the challenges of the competing signals from global trade to health and development and the challenges to equitable public policy in the current governance of the food supply system.
5. Confronting hunger and nutrition provides one further area where alternatives can be built that promote policy objectives of justice and equity: This calls for interventions that build a multi-disciplinary and integrated response to food security and nutrition, especially focused upon gender inequalities, community control over productive resources and fair trade – ie one that is shaped on food sovereignty.

Each of these five reasons will be analysed, backed up by empirical evidence, to illustrate the changes in policies, institutions, relationships and actors involved in food security at different levels from global to household and their impact on the general and equity issues and dimensions. It will then go onto outline the implications for policy, advocacy and research. In particular to assess broadly, and in relation to pro-equity aspects:

- public sector policy and programmes – for example to broaden from a focus on household food security towards an emphasis on food policy that recognises the

broader changes taking place in production, distribution and marketing of agricultural products and how this impacts upon public health and health equity

- civic education and civil society advocacy around food security and the public policies that support it
- knowledge and evidence gaps in support of these policies and programmes and the research agenda that this implies.

## **2. Worsening undernutrition and poverty in ESA**

### **2.1. Poverty**

There is a great deal of controversy surrounding the changes in global poverty levels during the last two decades. It is generally accepted, however, that many millions in countries such as China and East Asia have been lifted out of poverty (FAO 2003). The picture is more mixed in South Asia and Central and South America but there is consensus that poverty levels in Sub-Saharan Africa, and especially in the ESA region, has worsened considerably. Roberts (2004) recent appraisal of the progress towards achieving the Millennium Development Goals in ESA makes for somber reading in this respect. Whilst nearly all countries in the region have achieved economic growth during the 1990s, this was at a much lower rate than the decade before and not high enough to reduce the absolute numbers of people slipping into poverty. The distribution of the fruits of this growth are more skewed than ever, with the region hosting five countries (Namibia, Lesotho, Botswana, South Africa and Zimbabwe) that have amongst the most unequal distribution of wealth in the world. Not surprisingly, in light of the HIV epidemic, the Human Development Index was lower in 2002 than 1990 in all ESA countries apart from Mauritius and Mozambique (Roberts 2004).

A few statistics illustrate the challenges that many Africans face:

- ≈ Africa has the lowest density of paved roads of any of the world's regions, due to relatively sparse population, low investment in roads, and high costs of maintenance. One-third of Africa's people live in landlocked countries without river access to a seaport and thus face high costs of access to international markets.
- ≈ Walking is the principal means of transport for 87 percent of rural households in Burkina Faso, Uganda and Zambia, according to a recent study.
- ≈ Less than half the people in Africa have access to safe drinking water.
- ≈ Only about 5 percent of Africa's rural residents have access to modern electricity; the remainder depends on traditional fuels, mainly wood and cow dung, for cooking, warmth and light, increasing deforestation and thus increasing the severity of seasonal weather systems.
- ≈ Very few African villages have a single telephone. The disparity of "teledensity" (number of lines per person) between urban and rural areas in Africa is estimated to be as high as 25:1. (World Bank, 2002:10)

While some commentators, especially from the North, point the finger at the lack of good governance and accountability as the major reason for the perpetual poverty many African nations seem to be mired in, the evidence points to deeper structural and economic factors. For example the backlog of poor infrastructure even in African countries with good governance structures is enormous (See Table 1).

**Table 1: Backlog of infrastructure development in Africa**

Comparison of infrastructure in six African countries lauded for vastly improving governance compared with other developing countries outside of Africa		
	Average for 6 African countries	Average for non-African developing countries
Paved roads, per person/km	0.01	4.49
Electricity consumption, per person/KwH	118.5	1,227.9
Public health expenditure, per person/\$	6.2	87.5
Primary education, pupil-teacher ratio	44.7	27.6

*Source: Sachs (2004)*

## 2.2 Hunger and under-nutrition

*“FAO’S latest estimates signal a setback in the war against hunger. The number of chronically hungry people in developing countries declined by only 19 million between the World Food Summit (WFS) baseline period of 1990– 1992 and 1999–2001.”*

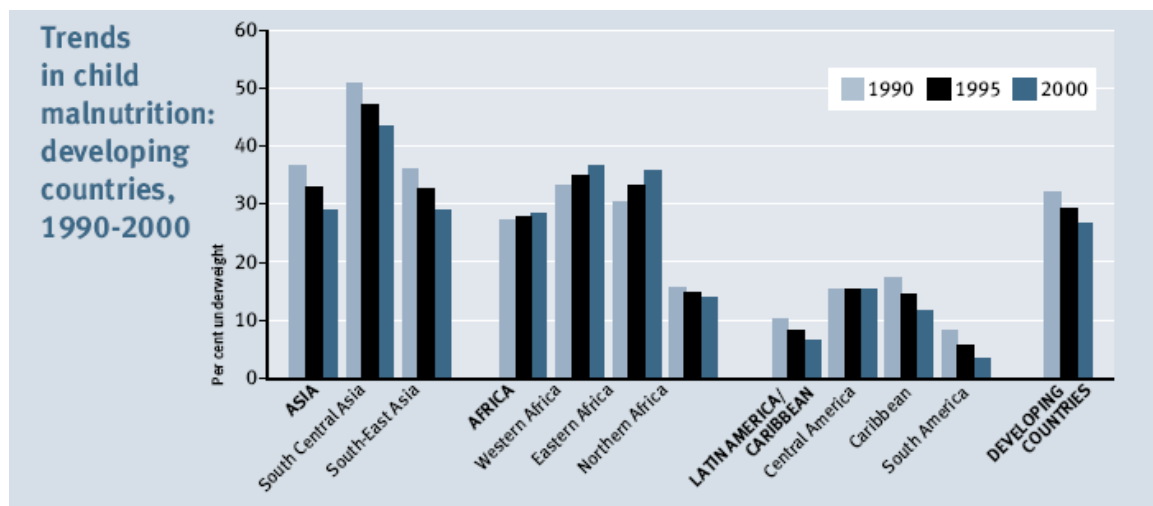
The opening lines of the 2003 FAO Food Insecurity Report (FAO, 2003) illustrates the global failure to fulfil a basic right for millions of people. The reality is even worse than this. Whilst there were reductions in the number of chronically hungry people in the first half of the 1990s, between 1995 and 1997 the number increased by over 18 million. Every day 799 million people in developing countries, about 18% of the world’s population, do not consume enough calories to be able to perform everyday tasks. In South Asia one person in four goes hungry, and in Sub-Saharan Africa it is as high as one in three. About 180 million under five children were underweight in 2000, 30% of children in Sub-Saharan Africa and 48% of those in South and Central Asia (ACC/SCN, 2000). This results in mental impairment, poor school performance, increased vulnerability to disease and death and reduced work capacity in adulthood.

Whilst hunger is difficult to measure, the situation regarding the proportion and numbers of people who are under-nourished is even more bleak. The number of undernourished people actually increased by 4.5 million per year during the second half of the last decade. Twenty six countries experienced increases in the number of undernourished. Furthermore these countries were predominantly those that already had a large proportion of their population undernourished (greater than 20 percent). According to FAO, the number of hungry people in these countries rose steadily for nine years (from 1992) increasing by almost 60 million (FAO, 2003). The Millenium Development Goal of halving the percentage of hungry people by 2015 is further away than ever. The tragedy persists that every seven seconds a child under the age of 10 dies directly or indirectly due to hunger somewhere in the world. More than 2 billion people worldwide suffer from “hidden hunger”, or micronutrient malnutrition. This leaves children and

adults mentally and physically stunted, deformed or blind, condemning them to a marginal existence.

When we focus more closely on childhood undernutrition, as measured for instance by low weight for age (the reduction of which is another official Millenium Development Goal) it appears that the situation in Sub-Saharan Africa is particularly dire. Whilst the goal of halving the proportion of underweight children has been achieved in South America, in Asia the drop in child malnutrition rates has been relatively small, from 36 per cent to 29 per cent (with China contribute a large proportion of this), in sub-Saharan Africa the proportion and absolute number of malnourished children has actually increased (See Figure 1). Eastern Africa is the subregion experiencing the largest increases in prevalence and numbers of underweight children—the number is projected to increase by 36% from 1990 to 2005. Findings for stunting, or extreme shortness of stature – which reflects long-term under-nutrition – and extreme thinness, or wasting, are similar (ACC/SCN, 2004).

**Figure 1: Trends in child malnutrition in developing countries 1990-2000**



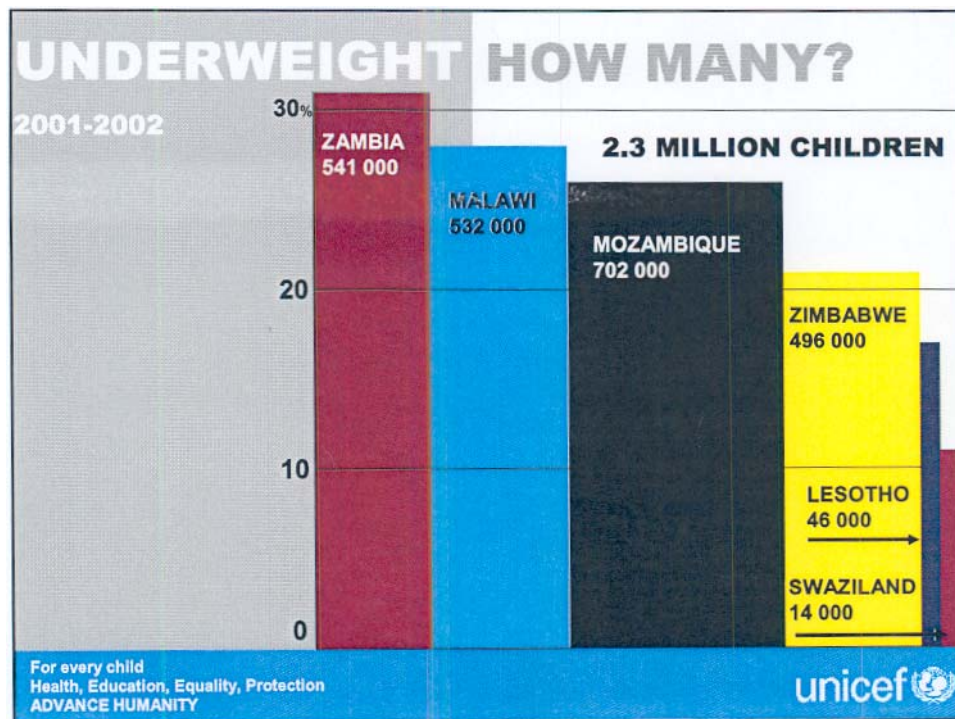
Source ACC/SCN, 2004

Even more depressing is the lack of progress for women. According to the 5th Report on the World Nutrition Situation, out of the ten African countries with maternal nutrition data only three showed a decline in the prevalence of severe maternal undernutrition (BMI<16) in the last decade (ACC/SCN, 2004).

A recent UNICEF study provides some important insights into the present nutritional situation in the southern African region and its relation to HIV and AIDS (UNICEF, 2003a). The study examined all available large scale nutrition survey data over the last ten years in Lesotho, Malawi, Mozambique, Swaziland, Zambia and Zimbabwe. The study found that the slow national trend for improvement in nutrition the 1990s ceased by the end of the decade. Latest data from Zimbabwe and Zambia shows deterioration in 2001–03. The levels of malnutrition remained shockingly high in Malawi and Mozambique with more than 30% of children exhibiting stunted growth. Overall 2.3 million children are underweight in the six countries (Figure 2). Importantly, these national figures hide important sub-national variations with some districts showing distinct improvements whilst others have deteriorated sharply.



Figure 2: Underweight children in Southern Africa



Source: UNICEF 2003a

### 3. Undernutrition and inequality

The Commission for Macroeconomics and Health (2001) summarised the results of a range of studies examining the role of population health and economic growth:

*'The difference in annual growth, therefore, accounted for by LEB (life expectancy at birth) between a typical high income country (LEB=77 years) and typical least developed country (LEB=49 years) is about 1.6 percentage points per year, which cumulates to enormous effects over time. In short, health status seems to explain an important part of the difference in economic growth rates, even after controlling for standard macroeconomic variables.'* (ibid:24)

Much of the difference in the impact of life expectancy at birth on economic development is due to childhood nutrition and health outcomes. Box 1 is taken from 5th Report on the World Nutrition Situation (ACC/SCN, 2004) and details two studies, among many, that illustrate the long-term impacts of both positive and negative nutritional interventions on individual development. Iron deficiency in the 6–14 month age group impairs the intellectual development of 40–60 per cent of the developing world's children (Grantham-McGregor and Ani, 2001). Iodine deficiency in pregnancy causes as many as 20 million babies a year to be born intellectually impaired. It is estimated that this lowers the average IQ of those born in iodine-deficient areas by 10–15 IQ points (Caulfield et al, 1998).

There is now a plethora of rigorous studies documenting the critical role of macro- and micronutrients on brain and cognitive development (Black, 2003; Mendez and Adair, 1999). Economists have started to translate this nutritional deficit into actual losses at a macro-economic level. For example, Horton and Ross, using a tight econometric model, estimate that just three types of malnutrition – protein-energy malnutrition, iron deficiency, and iodine deficiency – are responsible for three to four per cent of GDP loss in Pakistan in any given year and two to three per cent of GDP loss in Vietnam (Horton and Ross, 2003). Even if we take a conservative estimate of one per cent of GDP, then the annual cost for countries of South Asia is US\$5.9 billion, and for countries in Africa US\$9.2 billion. The Nobel Laureate economist Robert Fogel has even suggested that approximately half of the economic growth achieved by the UK and a number of western European countries by 1980 could be attributed to better nutrition and improved health and sanitation conditions – social investments made as much as a century earlier (Fogel, 1994).

### **Box 2: Impact of early nutrition on development**

#### **Zimbabwe**

A study in rural Zimbabwe isolated the impacts, in 2000, of exposure to the 1982–84 drought on 665 children. The drought resulted in an average deficit in height of 2.3cm and 0.4 grades of schooling. Had the median pre-school child in this sample had the height of a median child in a developed country, by adolescence, he/she would have been 4.6cm taller, would have completed an additional 0.7 grades of schooling and would have started school seven months earlier. The authors estimate that this height deficit and related loss of schooling and potential work experience results in a loss of lifetime earnings of 7–12 per cent, and note that this is likely to be an underestimate of the true losses.

#### **Guatemala**

This study considers the impact of a 1970s community-level experimental nutritional intervention in rural Guatemala on several different education measures over the life cycle. These measures are used to estimate the functional benefits of a nutritional intervention (a high protein-energy drink, *atole*) during the critical period when individuals were six months (roughly when complementary feeding was introduced) through to 24 months of age. The preliminary results indicate significantly positive and fairly substantial effects of the *atole* nutritional intervention on many educational and cognitive outcomes:

- ≈ probability of attending school and of passing the first grade
- ≈ grade attained by age 13 (through a combination of increasing the probability of ever enrolling and reducing the age of enrolling)
- ≈ grade completion rate per year in schooling
- ≈ highest grade completed
- ≈ adult cognitive achievement scores.

Thus, there are important education-related effects that appear to persist well into adulthood. These education effects will result in lifetime income losses, the magnitude of which depends on how the Guatemalan and migrant labour markets reward these attributes.

*Source: ACC/SCN, 2004*

Reducing hunger and malnutrition is critical if the MDGs are to be attained. Box 2 highlights some of the ways in which good nutrition underpins six of the MDGs.

## Box 2: Nutrition and the MDG Goals

*Goal 1: Eradicate extreme poverty and hunger*

Malnutrition erodes human capital, reduces resilience to shocks and reduces productivity (impaired physical and mental capacity).

*Goal 2: Achieve universal primary education*

Malnutrition reduces mental capacity. Malnourished children are less likely to enroll in school, or more likely to enroll later. Current hunger and malnutrition reduces school performance.

*Goal 3: Promote gender equality and empower women*

Better-nourished girls are more likely to stay in school and to have more control over future choices.

*Goal 4: Reduce child mortality*

Malnutrition is directly or indirectly associated with more than 60% of all child mortality. Malnutrition is the main contributor to the burden of disease in the developing world.

*Goal 5: Improve maternal health*

Maternal health is compromised by an anti-female bias in allocations of food, health and care. Malnutrition is associated with most major risk factors for maternal mortality.

*Goal 6: Combat HIV/AIDS, malaria, and other diseases*

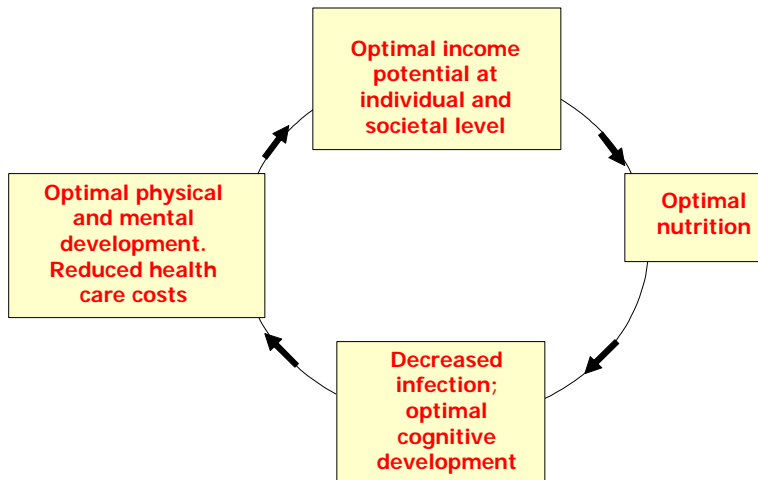
Malnutrition hastens onset of AIDS among those who are HIV-positive. Malnutrition weakens immunity to certain infectious diseases and contributes to their increased severity.

*Source: ACC/SCN, 2004*

The evidence presented above suggests that there is potentially a 'virtuous cycle' between good nutrition, health and economic growth (See Figure 3)

However instead of enjoying this 'virtuous cycle' of improvements in nutrition leading to improvements in health and ultimately in economic development many in the region are trapped in a negative 'vicious cycle' of early malnutrition, poor health and poverty. Importantly, unlike short-term economic shocks, early insults to the growth and development of children are partially irreversible, even with intensive interventions later in life. In many cases, the damage is done even before the child is born. Being born with a low birth weight (below 2.5kg) increases the risk of becoming underweight and of suffering the subsequent negative consequences (Gillespie et al, 2003). Undernourishment among mothers is a major reason why babies are born with a low birth weight. One estimate is that about 50 per cent of all growth retardation during gestation in rural developing countries is attributable to small maternal size at conception and low gestational weight gain (or inadequate food and energy intake during pregnancy) (Kramer, 1987). Malnutrition among infant girls is therefore one of the main routes for the inter-generational transmission of poverty.

**Figure 3: The virtuous cycle of improved nutrition and economic wellbeing**



Poorer people spend much more of their time and income trying to secure food. It is the loss of access to food that normally drives people to leave their homes either to become economic migrants or refugees. Increasing lack of food security is also responsible for the increasing vulnerability of millions of families and individuals across the region especially women. With increasing landlessness and diminishing returns on agricultural produce increasing numbers of people across the region are looking at other means to secure food rather than through agricultural production. In this context under-nutrition can play a critical role in limiting the capacity of individuals to work their way out of poverty.

There are also the direct costs to households of seeking care and treating the increased episodes of illness due to malnutrition. For many of the poorest populations, living in the poorest countries, the rise in user fees and out-of-pocket expenses as a result of recent health service reform has significantly increased the direct costs of ill health (McPake, 1993). Finally, there is the lost income due to incapacity to work due to either to the direct effects of malnutrition or the associated morbidity (Goudge & Govender, 2001).

#### **4. Effective Public Policies**

The UN Millenium Development Goal task team for Hunger (2004) reports malnutrition rates by farming system. They find that forest-based (7%), Highland-perennial (8%), Pastoral (8%), Root crops (10%), Agro-pastoral millet/sorghum (10%), Highland temperate mixed (10%), Maize mixed (13%) and Cereal-root crops mixed (15%) account for 81% of the underweight in sub-Saharan Africa, with all but the first three of these thought to be of medium to high potential in terms of reducing poverty and hunger. They suggest that this finding indicates that there is a significant potential to reduce hunger and malnutrition, and that this is dependent upon effective public policies that are sensitive to the local terrain. This section supports this position, and

argues that will public policy can make a difference to improving nutrition even under conditions of poverty.

It is important to remember that malnutrition is not just caused by hunger or starvation. Indeed in many settings there is enough food but still many are malnourished. UNICEF has developed an elegant conceptual framework capturing the major causes and possible relationships between the various causes of malnutrition (Figure 4). For each part of the framework the poor are worse off. They are more likely to be born with low birth weight (Gillespie *et al*, 2003) to mothers who are undernourished (Kramer, 1987), and are less likely to receive energy-rich complementary food (Brown *et al*, 1998) or iodised salt (UNICEF, 1998). The only advantage they have, and this is only in poorer countries, is that they are more likely to be breastfed, and for longer, than their richer counterparts (Butz *et al*, 1984) (although the link between transmission of HIV through breast milk is now eroding this in some regions). Poorer children also live in environments that predispose them to illness and death (Esrey, 1996). They are less likely to live in households with safe water or sanitation (Huttly *et al*, 1997) and more likely to be exposed to indoor air pollution – a result of the greater reliance on burning coal and biomass fuel (wood, animal dung) for cooking and heating, coupled with inadequate ventilation (Bruce *et al*, 2000).

Effective public policies can address these inequalities. There is evidence that significant improvements can occur across populations when suitable policies are in place. This is signalled for example by the significant differences between countries in the rates of change in child health and nutritional status. For example, a comparison between Sri Lanka, Indonesia, the Philippines, and Thailand. Sri Lanka and Thailand shows variation across these countries in the rapid improvement in nutrition in the 1980s to 1990s. Indonesia showed slower but consistent improvement, and the Philippines little progress (Mason, 2001).

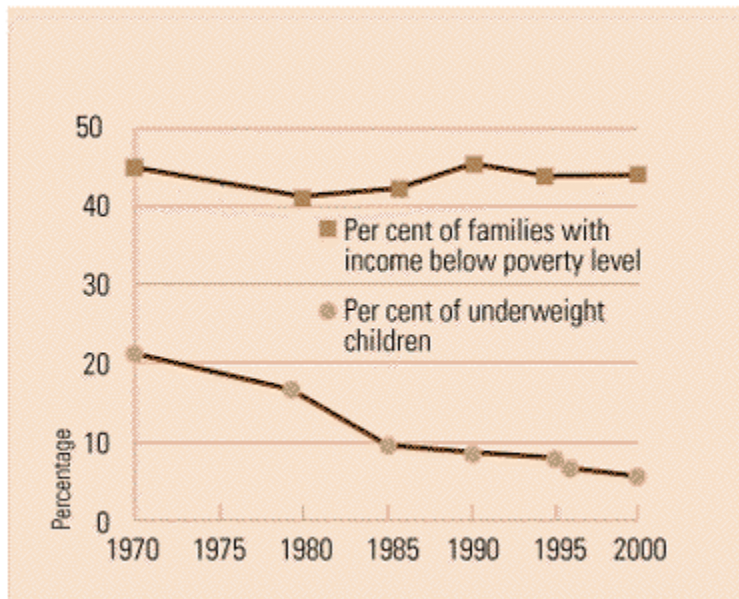
Policies providing for female education, social safety nets, affordable food and public health services are identified to have contributed to this difference. The impact on child nutrition and survival of widespread female education in Sri Lanka is well documented, with 77 per cent of ever married women in Sri Lanka now having above primary schooling. Drèze and Sen (1989) also highlight the establishment of social safety nets, especially the free or heavily subsidised distribution of rice, providing a minimum consumption floor for the poor, as important reasons for the impressive performance of Sri Lanka. In a more recent review, Save the Children UK (2004) emphasises the provision of a universal, equitable and efficient public health system as an important reason for the low levels of maternal and child mortality in this country.

An interesting feature of the success in Thailand was the incorporation of nutrition as an important part of the National Economic and Social Development Plan (NESDP). This led to the establishment of an extensive community-based network of village health communicators and volunteers with existing village committees and leaders. The focus of these groups was the fulfilment of basic needs such as optimal nutrition (as measured by community-based growth monitoring and promotion), education, etc (Tontisirin and Winichagoon, 1997).

At a regional level, malnutrition in Latin America decreased from an estimated 21 per cent in 1970 to 7.2 per cent in 1997, while the rate of poverty (measured by income level) decreased only slightly over the last three decades, from 45 per cent in 1970 to 44 per cent in 1997 (See Figure 5). These trends show that the reduction of malnutrition is not solely dependent on increases in income. In Latin America, the gains in reducing malnutrition are attributed, at the underlying level, to good care practices (such as improved complementary feeding) and access

to basic health services, including family planning, and water/sanitation services; and, at the basic level, to women's empowerment in terms of their education and the cash resources they control (UNICEF, 1998).

**Figure 5: Changes in malnutrition and poverty in Latin America 1970–2000**



Source: UNICEF (1998)

Wagstaff and Watanabe (2001) have calculated the level of inequality in the distribution of stunting and plotted it against the general inequities in income for twenty countries. Not surprisingly, countries with unequal income distributions also tend to have unequal distributions of malnutrition. Unequal distribution of purchasing power, prima facie, leads to an unequal distribution of food spending (intake), health spending and utilisation of health services, and consequently unequal health outcomes. But the authors go on to point out that

*“What is more interesting, perhaps, is the fact that the fit of the bivariate regressions is fairly bad – there are, in other words, many countries that buck the trend. Nepal and Peru, for example, have roughly the same level of income inequality, and yet Nepal has far lower levels of inequality in stunting and underweight than Peru. This implies that there must be some form of mechanism in these countries that breaks the link between poverty and malnutrition. For example, in the case of Egypt, which tends to positively deviate from the mainstream trend, it would be of interest to explore what factors, given the level of consumption inequality, contribute to relatively low inequalities in malnutrition.”* (Wagstaff and Watanabe, 2001:12)

Public policies and interventions therefore have the potential to significantly improve equity. The ability of Southern African states to implement such policies is however becoming increasingly constrained. The factors affecting this are outlined in the next sections.

## 5. Key Differences with the Past

### 5.1 HIV and AIDS

There have been a number of comprehensive reviews of the impacts of the HIV/AIDS epidemic on the agricultural sector and on food security (Hadaad & Gillespie, 2002; de Waal & Whiteside, 2003). The evidence from these reviews indicate that:

- increased rural inequality is caused by disproportionately severe effects of AIDS on relatively poor households;
- a reduction in household assets and wealth due to AIDS leads to less capital-intensive cropping systems for severely affected communities and households;
- AIDS losses undermine the transfer of knowledge of crop husbandry and marketing to the succeeding generation of African farmers.
- AIDS further undermines nutritional status and health as diets worsen because of decreased food security and also because of shifts to less nutritious but easier to cultivate crops such as cassava

The more insidious role that HIV/AIDS is playing in undermining development in the region is shown by the experience of the recent droughts compared to the earlier droughts in 1991–92. The 1991–92 drought was far more severe and yet there were far fewer starvation deaths reported. Some commentators are now arguing that just as HIV destroys the immune system it has now disabled the body politic – ‘a new variant famine’ (de Waal & Whiteside, 2003). Through its devastating impact on economically active members of society the epidemic is eroding the capacity of many communities to cope with the usual challenges that poverty brings. Young people are inheriting debts and having to increase cultivation to feed more dependents without the luxury of having gone through an apprenticeship in agricultural techniques and with less opportunity for accessing credit and knowledge through community and state institutions. In Zimbabwe, a study found that output on smallholder farms shrank by 29% for cattle, 49% for vegetables and 61% for maize if the household had suffered an AIDS-related death (UNAIDS, 2002). Overall, in maize production, there was a decline of 54% of the harvested quantity. The amount of land planted to cotton decreased by about 34% and marketed output by 47%; while groundnut and sunflower production experienced an average decline of 40% (Kwaramba, 1997).

Perhaps what is less appreciated is the way in which worsening livelihoods and food security can directly or indirectly affect transmission of HIV:

*Malnutrition affects immune systems:* The impact of malnutrition on infectious diseases is well established. There is a vast body of literature from Africa showing the crucial role macro- and micronutrients play in the immune response to infectious diseases and ultimately in survival (see Tomkins and Watson, 1993 for review). It has been estimated that malnutrition underlies over half of all infant deaths. Substantial reductions in childhood mortality have also been achieved with vitamin A supplementation (Beaton et al., 1993). The impact of HIV is particularly important as the virus directly attacks the immune system. Malnutrition and HIV work in tandem. HIV compromises nutritional status and this in turn increases susceptibility to opportunistic infections. Malnutrition, on the other hand, exacerbates the effects of HIV by further weakening the immune system. Clinical studies show that HIV disease progression is more rapid in individuals with compromised nutrition.

Malnutrition in HIV/AIDS presents as weight loss and muscle wasting, altered metabolism and increased use and excretion of nutrients. Deficiencies of vitamins and minerals such as vitamins A and E, B vitamins, selenium and zinc, needed by the immune system to fight infection, are commonly observed. Wasting has been long recognised as an important risk factor for mortality in HIV. For example, one study (Semba R et al., 1995) found that HIV-positive intravenous drug users with wasting (more than 10% loss of weight from baseline to last visit before death) had an approximately eightfold higher risk of mortality compared with controls, after adjusting for CD4 cell counts. The exact direction of causation (i.e. the degree to which malnutrition causes, as opposed to being the result of, the progression to AIDS) is difficult to ascertain. Unfortunately there have only been a few nutrition intervention trials in HIV in both developed and developing countries.

*High-risk behaviour and poverty/ hunger.* various “coping strategies” in times of food insecurity can put people at higher risk of HIV infection. There is a widespread evidence of migration of men and women and sexual exploitation of women as being two of the most important factors facilitating the rapid spread of HIV across the region. Both of these phenomena can be traced to poor food security in rural areas.

*Sexual exploitation and poverty/ hunger.* Poverty and hunger can disempower people and place them at risk of sexual exploitation by those who control access to resources, whether it is within households or in the wider community. This applies especially to young women and girls.

All this suggests that the policy response to the crisis wrought by the HIV and AIDS epidemic cannot be focused just upon the short term amelioration of the impacts. If we are to take the perspective of the ‘new variant famine’ seriously, this requires a longer term approach that attempts to strengthen livelihoods and food security. This, in turn, requires the participation of infected individuals, households and communities as well as of the state. It needs to be supported by a critical re-examination of the global contexts that shape possible regional and national responses.

## **5.2. Impact of globalisation and trade liberalisation**

There is increasing debate concerning the multitude of impacts that globalisation and trade liberalisation are having on agriculture and food security in Sub-Saharan Africa and the possible policy responses. Countries in the region have rapidly moved away from the goal of securing national food security through investing in local agriculture and rural livelihoods towards focusing upon a few key agricultural exports and relying upon food imports to feed an increasingly urbanised population.

The shift away from national food sufficiency is a global phenomenon – world cereal, wheat and rice imports have grown from 80, 46 and 6.5 million metric tonnes respectively in 1961 to 278, 120 and 27 million metric tonnes respectively in 2001. The fastest growth of food imports has occurred in Africa which accounted for 18% of world imports in 2001 (up from 8% just fifteen years previous to that) (FAO Stat, 2004). This has occurred partly because of a decline in agricultural and rural investment in Africa, leading to a decline in agricultural productivity. Agricultural productivity per worker for the region as a whole has fallen by about 12 percent from US\$424 in 1980 to an estimated US\$365 per worker (constant 1995 US\$) in the late nineties. Agricultural yields have also been level or falling for many crops in many countries in the Southern African region. Growth in agricultural output has arisen mostly from expansion in the



area under cultivation. The UN MDG Hunger Task Team (2004) interim report summarises the consequences:

*Expanding the area under food production is inherently unsustainable, as the supply of new lands in densely populated areas of Africa is largely exhausted or must be maintained as natural systems for biodiversity conservation and other ecological services. The first effect in Africa and elsewhere in the tropics has been to expand into land that was previously available for fallows. Leaving land fallow allows land under cultivation the necessary time to recover from the effects of the crops taking nutrients from the soil. As a result of the reduction or elimination of fallows, soil fertility has fallen dramatically in many places, and yields are reducing with time. As the land becomes exhausted, there develops a serious tendency to continually sub-divide land among family members, which leads to smallholdings that are too small to produce a family's food. (UN MDG, 2004:52)*

Significantly, yields of most important food grains, tubers and legumes (maize, millet, sorghum, yams, cassava, groundnuts) in most African countries are no higher today than in 1980. Cereal yields average 1,120 kilograms per hectare, compared with 2,067 kilograms per hectare for the world as a whole. The environmental impacts of deforestation and drought, floods and loss of top soil are being compounded by the lack of investment. Only about 4.2 percent of land under cultivation in Africa is irrigated. This compares with 14 percent in Latin America and the Caribbean, a region with similar population densities and resource endowments (World Bank, 2002). Fertilizer application is 15 percent lower today than in 1980. The number of tractors per worker is 25 percent lower than in 1980 and the lowest in the world. Africa's share of total world agricultural trade fell from 8 percent in 1965 to 3 percent in 1996 (ibid).

For years, public investment in agriculture has been falling, not rising. The UN reports that highly food-insecure countries spend two to three times as much on defense as on agriculture, with investments in agriculture declining further over the past decade. In countries where 20-35% of the population is defined as food insecure, agricultural spending averaged 7.6% in 1992 and 5.2% in 1998. For countries with more than 35% food insecure, agricultural spending in 1992 was 6.8% and declined to 4.9% in 1996, the last year for which data are available (IFPRI, 2004).

World Bank lending for agriculture declined dramatically between 1980 and 2000, from about 31 percent of its total lending portfolio in 1979–81 to less than 10 percent in 1999–2000. Similarly, from fiscal year 1992 to 1997, USAID reduced its funding to agriculture programs from 10 percent of its total obligations to only 5 percent. It cut agricultural investments in Sub-Saharan Africa during that period by 57 percent, to about US\$80 million. By 2000, African agriculture received less U.S. development assistance than any other sector (IFPRI 2004). In recent years America gave a negligible \$4m a year to Ethiopia to boost agricultural productivity, but then responded with around \$500m in emergency food aid in 2003 when the crops failed (much like its paltry contribution of less than \$50m a year for Africa to prevent AIDS during the 1990s but now spending \$3 billion per year to treat the disease after it has spread to more than 30m Africans) (Sachs, 2004).

The shift of resources away from rural areas and agriculture can be traced to the increasing role of food aid in the 1960s. This provided cheap cereals and encouraged national governments to focus investment on large scale industrial developments. The New Deal price support programmes began to lead to large accumulation of surplus wheat in the United States after the Second World War. Through the Public Law 480 the United States was able to export wheat to Third World countries at concessional prices. Wheat exports grew 250% between 1950-1970,

with developing country share increasing from 19% in the late 1950s to 66% in the late 1960s. In this period per capita consumption of wheat grew by 63% in developing countries whilst consumption of other cereals only rose by 20% and root crops fell by 20% in the same countries (Friedman 1994). This can explain some of the changes in diet in the developing countries. For example, in Senegal a rural worker consumes about 158kg of millet, 19kg of rice and 2kg of wheat a year whilst his urban counterpart in Dakar consumes 10kg of millet, 77kg of rice and 33kg of wheat (Delpeuch, 1994).

More recently this process has been accelerated by the undermining of the prices of agricultural commodities and products because of the massive subsidises in the developed countries. In the European Union, the average European dairy cow has a bigger annual income than half the world's people, in the United States, the 2002 Farm Bill recently authorized the spending of US\$ 180 billion to be paid out over a 10-year period as "emergency measures", mainly in support of staple cereal crops (IATP, 2004).

The Institute for Agriculture and Trade Policy have calculated that US subsidies are resulting in major crops being put on the international market at well below their production costs. Wheat by an average of 43 percent below cost of production; soyabeans 25 percent below; cotton 61 percent below and rice 35 percent below cost of production (IATP, 2004). This depression of commodity prices is having a devastating effect on farmers in developing countries. Research by the International Agriculture the International Food Policy Research Institute (IFPRI) shows that subsidies to farming in the Organization for Economic Cooperation and Development (OECD) countries, which totalled US\$ 311 billion in 2001 (or US\$ 850 million per day), displaces farming in the developing countries, costing the world's poor countries about US\$ 24 billion per year in lost agricultural and agro-industrial income (IFPRI, 2004). Box 4 gives three examples of the impact of these policies that have combined with the liberalisation of trade barriers in the region to devastate many local agricultural concerns.

**Box 4: Three examples of impact of agricultural subsidies (adapted from Madeley, 2003)**

Kenya had more than doubled production of processed milk between 1980 and 1990. But then imports of milk powder soared, increasing from 48 tonnes in 1990 to 2 500 tonnes in 1998. At the same time, domestic production of processed milk plummeted almost 70 percent. Kenya's ability to diversify into processing was undermined and small producers bore the brunt of the decline in demand for fresh local milk.

EU beef is sold in Southern Africa for 30 pence a kilo whereas it costs one pound per kilo to produce it. This has completely changed the whole economics of the Namibian meat canning industry which has now shifted from local beef towards the imported subsidized beef.

South Africa dismantled its subsidy scheme for fruit and vegetable as part of its re-entry into the international market. However the EU kept its subsidies while also placing tariffs of between 11% to 23% on South African canned fruit and vegetables. This has led to many small fruit and vegetable South African farmers having to sell or consolidate with larger farming concerns

What is less well appreciated is that these subsidies hurt many farmers in the OECD countries as well. Most of the subsidies go to the larger farms, owned or contracted to corporations. For example, from 1997 to 2002, the U.S. lost over 90,000 farms of below 2,000 acres, while farms above 2,000 acres increased by over 3,600. In the European Union 70 per cent of subsidies go to 20 per cent of Europe's largest farms (IATP, 2004).

The World Trade Organisation does allow countries to block 'dumping' of produce that is well below production price. This mechanism, which can be costly and complex, is ironically mostly used by OECD countries. About one-half of anti-dumping actions are initiated against developing country producers, who take up 8 percent of all exports. The use of anti-dumping actions by OECD producers, even when they are unlikely to win a dispute on its merits, creates onerous legal and other costs to current producers in developing countries, and chills new job-creating investment in sensitive sectors.

### 5.3 Consequences for ESA

The logic of the present international trade approach is that a country should focus on its 'comparative advantage' and put these products on the global market. The foreign exchange earnings should more than cover the cost of increased food imports. This strategy is having a particular impact in the region due to its existing rural and agricultural landscape (Box 5). At least four important consequences can be identified.

#### Box 5

According to Mousseau (2004) agriculture across many countries in ESA can be characterised by two main features, inherited from the colonial time and generally perpetuated since independence:

1. The maize 'mono-cropping': maize represents the main crop for a large majority of small scale farmers and the main staple food for consumers
2. The duality of the production system, in short shared between an estate-based commercial sector and a smallholding sector predominantly subsistence oriented

Estates and commercial farms occupying a large part of the arable land, generally the most fertile and disposing of adequate sources of water for irrigation whilst subsistence farming is concentrated on less fertile soils, more reliant on rain fed agriculture, with limited access to land: 60 to 80% of the population are smallholders, with less than 2 hectares / household.

In most countries the milling industry is playing a key role in the State controlled and supported marketing system, receiving price-controlled grain and ensuring the distribution of maize meal in a national -private or public- marketing system. The dual system is maintaining many smallholders in a situation of high dependency on labour in other farms, estates and mines to complement their income and sustain their livelihood.

A very integrated system maintaining low prices and limiting fluctuations on food and inputs markets is both a condition and a result of the above. Farmers, consumers, estates, traders, the State and the milling industry are bound in a strong interdependence. This system is costly and depends on revenues from other sectors such as mines, industries or cash crops. It relies also on the fragility of the livelihoods of the poorest who have been kept dependent on off farm labour.

Firstly, the higher quality control and infrastructure requirements for the international market requires high levels of capital investment and economies of scale. Large commercial farms are consolidating their dominance across many countries in the region. South Africa, for example, despite having an active land redistribution programme that is focused upon increasing the number of smallholdings the average size of farms has actually increased in the last five years. A minority of 45,000 farmers own 86% of land; 50% of farmers own 6% of land and just over a quarter (26%) of farmers earn 81% of agricultural income (Nieuwoudt & Groenewald, 2003). This trend is being exacerbated by the growing dominance in the local retail market of supermarkets of now sell more than 70% of retailed food but source 98% of this food from commercial farms.

Secondly, there is significant shift in the use of land (especially the most fertile) from being used for growing food for local consumption towards growing export crops or horticulture. This is well documented in Latin America: in Chile area under local food crops fell by 30% just 3 years after liberalisation; in Brazil the export crop soya beans increased from 1.4 million hectares in 1970 to >15 million in 2000 in Argentina it increased from 10,000 hectares to 5 million (quoted in Madeley, 2001). In this region there is increasing conversion of the most fertile land, for example around the Lake Victoria, being used for horticulture exports to European markets.

Thirdly, this is distorting the already small investments in rural areas towards expensive infrastructure projects designed to provide rapid road connection between the commercial farms and airports, ports etc. It is also distorting other support mechanisms for small farmers such agricultural research. The annual growth rate in funding declined from 2.0 percent in the 1970s to only 0.8 percent in the 1990s. As a consequence, average spending per scientist declined by about half between 1971 and 2000, though for many countries the decline was even more extreme (IFPRI, 2004). This is being partially replaced by private funding and overall there is increasing emphasis upon research to support commercial applications such as biotechnology.

Fourthly, increasing reliance upon exports makes countries in the region especially vulnerable to changes in agricultural policies in OECD countries, especially to those from the EU which account for 50% of agricultural exports from the region. The recent promises to reduce agricultural subsidies may be at the expense of the special treatment that many agricultural exports from this region have in the EU. For example, recent moves to reduce the price of sugar within the EU is calculated to cost over \$250 million to the African (including Mozambique, Kenya and Swaziland) and Caribbean sugar exporters.

The latest evidence seems to indicate that the strategy of relying upon food exports is actually worsening the balance of payments. A FAO study of fourteen developing countries and their experience of agricultural liberalisation found that the average annual value of food imports in 1995-98 exceeded the 1990-94 level in all 14 countries, ranging from 30% in Senegal to 168% in India. The food import bill more than doubled for two countries (India and Brazil) and increased by 50-100 per cent for another five (Bangladesh, Morocco, Pakistan, Peru and Thailand). The study also measured the ratio of food imports to agricultural exports and found it was higher in 1995-98 than in 1990-94 for 11 of the 14 countries. The worst experiences were those of Senegal (86% increase), Bangladesh (80%) and India (49%). This also seems to be the case for many of the countries in the ESA region (Stevens and Kennan, 2002).

## 5.4 Legitimation of Neo-Liberal Policies

In terms of public health and equality perhaps the most important impact, and one that is not traditionally highlighted, is the paradigm-shift with respect to food security. Food being cast increasingly as just another commodity and food security being defined in terms of the market. Such a radical departure from one of the traditional functions of states – to be in control of food production to feed its population – has required a re-conceptualisation of the meaning of national food security. Thirty years ago the concept of food security was unproblematic and was summarised by the First World Food Conference as:

*“availability at all times of adequate world supplies of basic food-stuffs...to sustain a steady expansion of food consumption...and to offset fluctuations in production and prices”*

The focus here was unequivocally upon supply of food and reflected the international concern at that time on national food self-sufficiency, national food balance sheets and with proposals for world food stocks or import stabilisation schemes. However, already experience from the field suggested that widespread hunger could co-exist with adequate food supply, either at the national or international level. This was forcefully pointed out by Amartya Sen, who showed that many widespread famines, such as the Bengal Famine of 1942, occurred at the same time as food was being exported from those very same areas (this has been repeated recently with Ethiopia exporting food during its famines in the last two decades).

Sen’s analysis led to a shift towards entitlements, and more specifically access, instead of just supply. He emphasised that availability of food had to be combined with the most vulnerable acquiring sufficient resources (financial, physical, knowledge and cultural) to be able to access and optimally utilise this food. These ideas quickly became accepted but they also gave rise to some discussion as to the unit of analysis – whether it should be the household or the individual. There are some similarities here with debates in the equity literature. The WHO method of measuring inequality through defining cut-off points in the population wide distribution of income or health has been strongly criticised for not taking into account the underlying social and economic forces that constitute different groups within society. It is only by more specifically examining the experiences of these specific groups in the context of their relations with other groups in society that we can begin to uncover the dynamics that produce and reproduce these inequalities. Similarly the household covers a multitude of different relations that occur within them. Access to food by individuals within a household is often a proxy for their wider standing in the household. Within the field of nutrition and child survival this difference can be substantial especially as to whether resources are controlled by women (see later pp. 28-30).

In the epidemiological study of the relationship between income inequality and health inequality there is an increasing recognition that income inequalities across a society is a marker and, in most cases, the result of weak public institutions and social cohesion. This manifests itself in poor health through worsening subjective feelings of ill-health and social exclusion. Food, more than any other commodity, is closely connected with perceptions of the self and form part of much wider social intercourse. As Barthes puts it:

*‘When he buys an item of food, consumes it, or serves it, modern man does not manipulate a simple object in a purely transitive fashion; this item of food sums and transmits a situation; it constitutes an information; it signifies’ (Barthes, 1979).*

If we accepted this then any definition of food security must also consider not just the quantity of food but also its quality in terms of consistency with local food habits, cultural acceptability and human dignity.

Greater appreciation of the subjective nature of food security has also led to another important insight and evolution of the concept of food security. Whereas previously it was thought that food security was a fundamental need that would be protected at all costs, closer examination of the priorities of poor people has revealed that they are quite prepared to forsake food if it means preserving more long-term livelihood assets. For example, de Waal working during the 1984-5 famine in Dafur, Sudan, found that:

*' people are quite prepared to put with considerable degrees of hunger, in order to preserve seed for planting, cultivate their own fields or avoid having to sell an animal...avoiding hunger is not a policy priority for rural people faced with famine' (quoted in Devereux & Maxwell, 2001:18)*

This insight has led to an appreciation of the broader issue of livelihood strategies and in particular the management of risk and vulnerability. Discussion of food security must be situated within a broader appreciation of political, economic and social contextual factors. Devereux & Maxwell (2001) summarise the complex nature of food security:

*' flexibility, adaptability, diversification and resilience are key words. Perceptions matter. Intra-household issues are central. Importantly...food security must be treated as multi-objective phenomenon, where the identification and weighting of objectives can only be decided by the food insecure themselves' (ibid:19)*

But as mentioned earlier national food security is now a contested terrain. Legitimation of the erosion of the capacity of communities and nations to be able to be in control of such an important commodity has required the hijacking and re-definition of basic terms such as development and food security:

*'In the aftermath of the 'era of development' in which nations were responsible for managing economic growth, including managing food security via green revolution technologies, development is now defined as a necessary global project in which international institutions and firms are increasingly responsible for managing economic growth, including managing food security as a global problem with global solutions via biotechnologies' (McMichael, 2004: 124)*

More specifically the idea of food security is reconstructed as a global market function based upon the presence of a free market and governed by corporate rather than social criteria. This position is boldly stated by a senior US official to the WTO:

*"(The) idea that developing countries should feed themselves is an anachronism from a bygone era. They could better ensure their food security by relying on US agricultural products, which are available, in most cases at much lower cost"* (quoted in McMichael, 2004:127)

This is the fundamental policy position that is driving many of the changes in the agriculture and food security sector in developing countries. However when it comes to national food security for developed countries it is a different matter. In his address to the Future Farmers of America in Washington on 27 July 2001, President George W. Bush clearly recognises the fundamental role that agriculture plays:

*“It’s important for our nation to build - to grow foodstuffs, to feed our people. Can you imagine a country that was unable to grow enough food to feed the people? It would be a nation subject to international pressure. It would be a nation at risk. And so when we’re talking about American agriculture, we’re really talking about a national security issue.”*

It has been important to differentiate between inequalities and inequities in health as a guide to actions in combating differences in health status. Similarly in the field of food security it is crucial to broaden our understanding from the dominant discourse that is emphasising the availability and consumption to one that includes the production and control of the food supply chain as well.

## **5.5 Changes in governance of the food supply system**

This global environment calls for a difference in the response to the challenge of declining livelihoods and food security. The capacity and power of national states, public agencies and communities has been seriously attenuated. Structural adjustment programmes with their explicit aim to reduce the size and influence of the state is well documented. This has perhaps most starkly manifested itself in the events leading to the most recent famines across southern Africa.

In 2000 the IMF advised the Malawian national food reserve agency to reduce its near-full capacity stocks to around 30,000-60,000 metric tonnes of maize, enough to feed the entire Malawian population for two to three months, and to use the proceeds to pay back its debts, pay salaries and cover running costs and replenish old maize. This proved to be very costly as Malawi was unable to import enough grain from the international market to prevent widespread hunger the following season (Lambrechts & Barry, 2003).

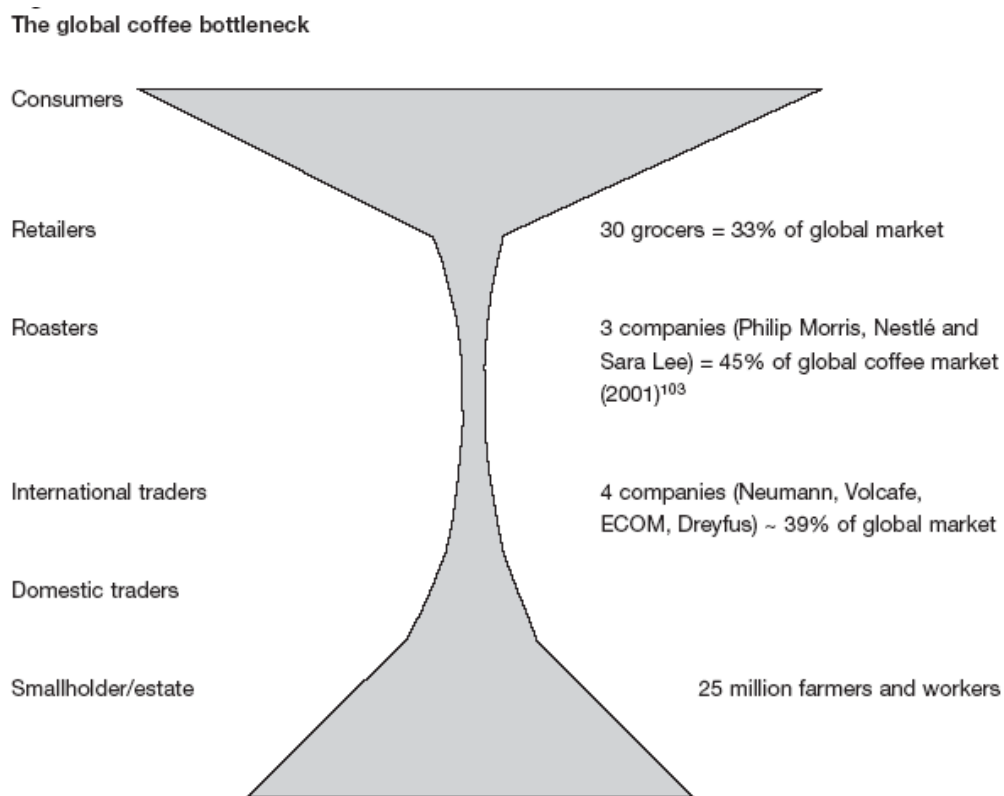
In an attempt to stimulate greater involvement of the private sector the World Bank, through its structural adjustment reforms, replaced the Zambian grain marketing authority with the much smaller Food Reserve Agency. However, a lack of infrastructure has made it uneconomical for private traders to do business in remote areas and people have been left with no access to markets to sell their produce or buy inputs. An independent IMF evaluation found that the liberalisation of the state marketing board contributed to a 30 per cent increase in rural poverty between 1991 and 1994 (Lambrechts & Barry, 2003).

It is important to widen our gaze to appreciate the increasingly narrow policy space many states in Africa have in responding to the challenges of development. This is not only because of the power of the Bretton Woods institutions but also due to the increasing domination of the food supply chain – from the seeds, farms, food processing, distribution through to marketing and retailing – by a small number of massive transnational corporations (TNCs). To give a few examples: six corporations account for 85% of world trade in grain, eight account for 60% of global coffee sales, seven for 90% of tea consumed in the West, three for 83% for world trade in coca, three for 80% of bananas (Madeley,2002). One TNC, Cargill, controls 80% of grain distribution throughout the world through its ownership of grain elevators, rail links, barges and ships (Kneen,1996). The situation is the same in the agrochemical sector where ten agrochemical companies control 81 percent of the \$29 billion global agrochemical market; in Asia, three companies (Cargill, Pioneer and CP-DeKalb) currently control almost 70% of the seed market, supplying hybrid seed for 25% of the total corn area. Four corporations now own nearly 45% of all patents for staple crops such as rice, maize, wheat and potatoes (Action Aid, 2001).

This region is not immune to such concentration. In South Africa, Monsanto completely controls the national market for genetically modified seed, 60 per cent of the hybrid maize market and 90 per cent of the wheat market. At the other end of the food supply chain three large retailers are now responsible for over 70% of total food sales. Vorley (2004) has illustrated how the growing concentration of food corporations is tightly controlling the food supply chain for many foods and cereals.

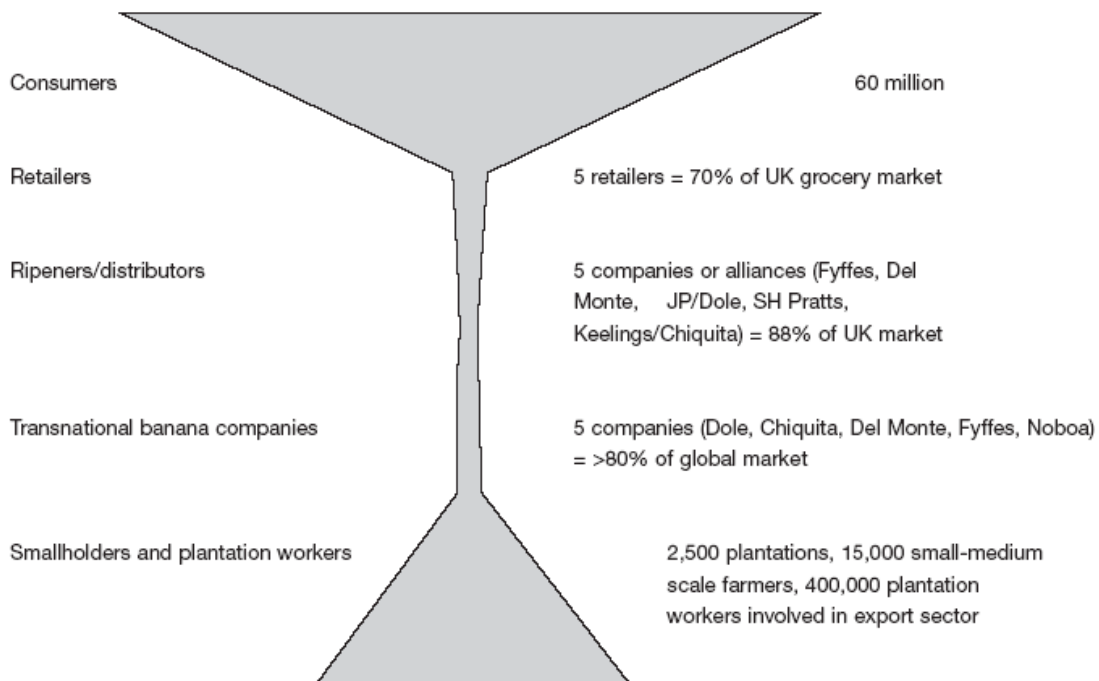
The two figures are typical example of ‘bottlenecks’ that are being built up around all agricultural commodities. In the example of coffee and bananas shown above a handful companies control the trading, processing and retailing of this commodity that is being produced all over the world. This explains the apparent anomaly of falling commodity prices and increasing retail prices. The power of the TNCs allows them to drive down producer prices and keep the added value in the processing and retailing. In the case of coffee, the roasters and retailers retain \$2.21 per kg as opposed to the \$0.10 received by the farmer and wet processor.

**Figure 6: Concentration in the coffee supply chain**





**Figure 5: Food supply bottleneck for bananas**



This concentration of power and control is accelerating with trade liberalisation. For example, the local exporters' share of the Côte d'Ivoire cocoa export market declined from 43% in 1997-1998 to less than 10% in 1999-2000 following the dramatic liberalisation in of the sector in 1999. The market is now dominated by three multi-national processors: ADM, Cargill, and Barry Callebaut (Vorley, 2004).

## 6. Policy and Actions

Examining the response of governments, international agencies and major donor agencies there is a growing convergence of views on key actions to alleviate hunger and malnutrition. There is an acceptance that those factors conducive to economic growth, particularly in rural areas, will also be conducive to reducing hunger – building human capital, fair and accountable relations between the state, civil society and the public, establishing effective market institutions and rural infrastructure, enlarging the range of economic opportunities both on and off-farm, providing the poor with secure access to their primary resources and the necessity to ensure that the safety nets are in place to provide sufficient food security to those individuals who do not have access to adequate food, whether due to a generalized food security crisis or due to individual shocks pushing vulnerable households into hunger and poverty.

One example of such a list is from the SADC Ministers themselves who highlight the following key interventions to improve food security in the region:

- Promotion of programmes to remove farm labour constraints and to facilitate the development of rural infrastructure such as roads, information and communication technology, water and sanitation services, and electricity;
- Acceleration of land policy reform initiatives and share experiences of best practices;
- Improving agro-industrial development and processing;
- Control and eradicate crop and livestock pests and diseases;
- Increasing the production of crop, livestock and fisheries resources;
- Engaging in non-traditional agriculture production such as mushrooms for food security;
- Ensuring the sustainable use and management of natural resources;
- Undertaking research, technology development and disseminating the information and findings widely;
- Involving the private sector in agriculture and rural development; and
- Enhancing market access for agricultural products.

There is, however, an interesting lacunae in many of these documents. In these strategic documents, there is a downplaying of the political economy of hunger, especially with respect to the present direction of globalization and implementation of trade rules. This is accentuated by the failure in many to integrate and relate the changes to the food system with the broader challenges of improving health and social justice in the region. The links between the corporatisation of the food supply system and privatization of basic services; the hijacking of intellectual property rights of indigenous farmers and the actions of pharmaceutical multi-nationals; the increasing dependency upon international markets for food security and limits to domestic policy etc are rarely made. This is in turn related to a very superficial analysis of the mobilization of political will and resources to fight hunger more aggressively.

In contrast a mixture of international NGOs and grassroots organisations are making important linkages between those fighting for equity and social justice and those focusing upon food security issues. An important example is the recent report '80 millions lives: Meeting the Millenium Development Goals in child and maternal survival' (Grow Up Free From Poverty Coalition, 2004) from a coalition of 18 international NGOs. This report explicitly relates child and maternal survival to the worsening food security, health care and poverty faced by the poorest linked in turn to the national and global context. Another important response has been from civil society.

Recent assessments on the food crisis across Southern Africa conducted for Oxfam-UK has emphasised the critical need for social safety nets for large numbers of rural peoples who have been hit by the multiple challenges, many of which have been outlined in this paper, affecting rural agriculture in the region (Drimie, 2004; Mosseau, 2004). Even though this has traditionally focused upon food aid, these writers have begun to highlight the limitation of such an approach, in that it contributes little towards increasing the longer term resilience of affected individuals and communities. They suggest that other forms of safety nets such as cash transfers, agricultural outreach, primary health care etc. need to complement the immediate food aid response.

Many are now also taking up the challenge of broadening the conceptualisation of food security and using this to outline a programme of action. During the World Food Summit in 2002, a NGO/CSO "Forum on Food Sovereignty", attended by representatives of over 400 civil society and farmer organizations, articulated the concept of food sovereignty:

*“Food sovereignty is the right of peoples, communities, and countries to define their own agricultural, labor, fishing, food and land policies which are ecologically, socially, economically and culturally appropriate to their unique circumstances. It includes the true right to food and to produce food, which means that all people have the right to safe, nutritious and culturally appropriate food and to food-producing resources and the ability to sustain themselves and their societies.”*

“Food sovereignty requires:

**Prioritising** food production for domestic and local markets, based on peasant and family farmer diversified and agro-ecologically based production systems;

**Ensuring fair prices** for farmers, which means the power to protect internal markets from low-priced, dumped imports;

**Access to land, water, forests, fishing areas and other productive resources** through genuine redistribution;

**Recognition and promotion of women’s role** in food production and equitable access and control over productive resources combined with decision making powers;

**Community control over productive resources**, as opposed to corporate ownership of land, water, and genetic and other resources;

**Protecting seeds**, the basis of food and life itself, for the free exchange and use of farmers, which means no patents on life and a moratorium on the genetically modified crops; and

**Public investment** in support for the productive activities of families, and communities, geared toward empowerment, local control and production of food for people and local markets.”

In contrast to the traditional definition of food security, food sovereignty focuses attention not just upon access and availability of sufficient food but also the food production process. It also embodies a call for greater access to resources by the poor, especially women, challenging what is perceived as a growing concentration of ownership of resources. This implies:

*“challenging existing relations of power and distribution, through for example, engaging in agrarian reform. It also implies challenging the increasing concentration of ownership of agricultural trade, processing and marketing by transnational agribusiness corporations through, for example, improving competition law (anti-trust law) at a transnational level and through the prohibition of the appropriation of knowledge through intellectual property-rights regimes. It calls for recognition of communities’ rights to their local, traditional resources, including plant genetic resources, and for protection of farmers’ rights to exchange and reproduce seeds”*

Parliamentarians at a meeting in 2003 on Parliamentary Alliances for Equity in Health in Eastern and Southern Africa, convened by EQUINET, the SADC Parliamentary Forum and GEGA recommended actions that would contribute to states protecting food sovereignty, ie that :

- Countries protect their government authority in all trade agreements to safeguard public health and regulate services in the interests of public health;
- Government trade negotiators consult health ministries, parliamentary health committees and civil society on positions to be taken to trade negotiations for their public health implications;
- Governments assert their rights under the Doha Declaration on Trade Related Aspects of Intellectual Property Rights (TRIPs) and Public Health to define what constitutes a public health problem;
- Governments strengthen their efforts to take full advantage of the flexibilities and policy measures allowed in TRIPs to access cheaper medicines and protect indigenous knowledge systems;
- Given the central role of nutrition and food security in public health, countries retain the right to raise tariffs and demand elimination of subsidies on exports to protect food sovereignty in agricultural production;
- Governments not make any commitments under the General Agreement on Trade in Services (GATS) in health or health related services that compromise their right to regulate according to national policy objectives;
- Countries conduct a comprehensive 'health check' on GATS commitments made or proposed so far, with the active involvement of health ministries, parliamentary health committees and civil society; (EQUINET/GEGA/SADF PF, 2003)

For this to be realised there is a need for sustained advocacy. Such advocacy needs to be supported by pertinent research documenting the impacts of current policies, and particularly from the perspective of small-holders and those presently marginalized. The focus on food sovereignty and global trade must therefore be nuanced with a gender and HIV and AIDS focus and the research provide the disaggregations and be implemented in processes that support this.

The gender dimension of food sovereignty is a central to equity, but also to addressing the overall thrust of food sovereignty. Drimie (2004) concludes a comprehensive review of the causes of the recent food crisis in Southern Africa by noting:

*"In order to understand the reality of vulnerability on the ground (in order to develop effectively targeted interventions) a disaggregated approach to rural communities is required along with an understanding of power relations within these groups, with a commitment to reaching those who are most at risk, namely women and children."* (ibid:25)

Women are responsible for 80% of food production in Africa, including the most labour-intensive work, such as planting, fertilising, irrigating, weeding, harvesting and marketing. They achieve this despite unequal access to land (less than 1% of land is owned by women), to inputs such as credit (<10% of credit provided to small farmers goes to women), improved seeds and fertilizer, and to information. Their work also extends to food preparation, as well as nurturing activities. Though there is only limited evidence it appears as though the changes wrought by globalisation in the agricultural sector are widening gender inequalities. The shift in support from small-holders towards large commercial farmers is at the expense of supporting women farmers and making them more likely to be cheap labourers for more export orientated commercial farming concerns.

This is often justified by evidence that on the surface appears to show that agricultural yields of land controlled by women is much lower than that of men. Other studies, however, show that

these lower yields are usually the result of lower use of labour and fertilizer per acre rather than managerial and technical inefficiency. Unequal rights and obligations within the household, as well as limited time and financial resources, pose a greater constraint to women. Given equal access to resources and human capital, women farmers can achieve equal or even, as some studies show, significantly higher yields than men. Saito, Mekonnen, and Spurling (1992), for example, show for Kenya that the gross value of crop output per hectare for men is 8 percent higher than that for women. However, if women had the same capital endowments and had used the same level of factor inputs as men, the value of their output would have increased by more than 20 percent.

All of this highlights the critical role of women for successful food production. An evaluation of 43 of USAID's agricultural projects indicates that:

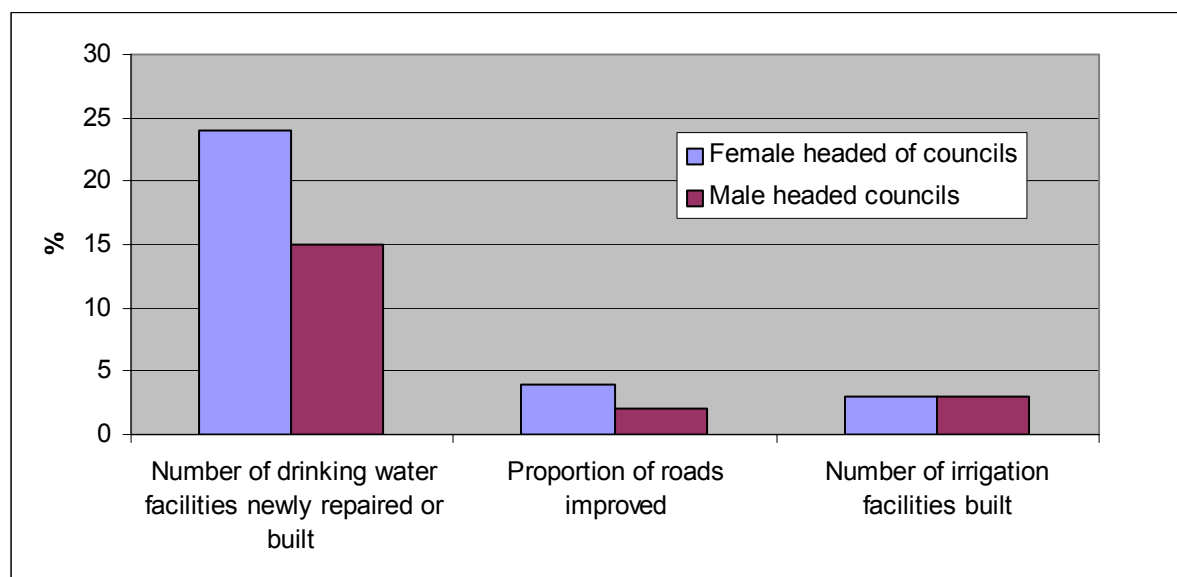
*' the strength of the interaction between female farmers' access to project resources and achievement of project goals is largely the result of the importance of women's management and labor in the targeted agricultural activities. Ignoring women's roles can lead to reduced labor inputs, increased learning time for new production techniques, and loss of producer feedback, all of which reduce project success' (Carloni, 1987:23).*

There is accumulating evidence that increasing resources targeted towards women not only increases agricultural productivity, but it is also more likely to be used to improve the well-being of children in the household. Studies from across Africa have consistently found that income controlled by women has a far greater impact on childhood nutritional status (Kennedy 1991, Haddad & Hoddentot, 1994, Jones et al., 1986). A study in Brazil found that child survival was 20 times greater in households where income from non-formal activities was in the control of women compared to households where it was in the control of men (Thomas, 1991).

There is also now some evidence that increasing the authority of women also has important development impacts. A study in two Indian states randomly assigned one in three village councils to female leadership. A few years later the impacts of this change in power were measured (Figure 6). Of the three outcomes measured, the number of drinking water facilities newly repaired and efforts to improve roads were significantly higher in the women-headed councils— reflecting the material issues they cared most about.

HIV and AIDS in particular is exacerbating existing social, economic and gender inequalities, which define women's status in society. Taking a gender perspective is therefore critical in coming to a complete understanding and hence formulating effective policy responses. For example, Beegle (2003) found that households in Tanzania experiencing a death did not shift cultivation towards subsistence food farming. She concludes that afflicted households were able to maintain their supply of labour by drawing back other family members, or that the agricultural system in this area of the Lake Victoria Basin is not highly vulnerable to labour shocks. By contrast, by explicitly comparing the response between rich/poor and male/female headed households in Kenya, Yamano and Jayne (2004) show that it was only households in the lower half of the income distribution (that were predominantly female headed) that suffered as a result of the death of either male head of- household or the spouse. These households incurred a 1.2 acre decline in cereal crop cultivation compared to non-afflicted neighbour households, and a slight but imprecisely measured increase in traditional cash crop cultivation. Households in the upper half of income, in contrast, did not show a significant difference in cereal crop cultivation compared to non-afflicted neighbour.

**Figure 6: Impact of female headed village councils**



Source: Chattopadhyay and Duflo 2003

Most resources in the response to HIV and AIDS have traditionally been channelled towards preventive and curative health and behaviour change interventions. Less attention has been paid to the social and economic determinants, impacts and context of the epidemic. There is a danger that a sole focus on a package of cost-effective preventive and treatment interventions may actually exacerbate inequities. This is not just because the wealthier tend to utilise existing health services more and are in a better position to be able to act on prevention messages, but also because the impact of HIV/AIDS is far greater on poorer households. Nutrition and food security can play a critical role in mitigating the impact of HIV and AIDS for poor households. Improved nutritional status can directly improve the strength and resistance of individuals allowing them to function productively for longer, and improved food security reduces risky behaviour. Furthermore, food and nutrition programmes can provide valuable experience around engaging communities in the sort of participatory processes that have been found to be most effective in addressing the social dimensions of health interventions.

Following multi-country assessments of successful HIV and AIDS mitigation projects Connolly (2003) outlines the following key principles for such interventions:

- The most effective and promising approaches to mitigation have been those that have focused on participatory and group problem solving approaches facilitated with and for, communities.
- Interventions that focus on holistic and systemic processes in social community development and foster ownership, initiative and resilience on the part of communities strengthen communities to take responsibility for their own livelihoods through emancipation and empowerment.
- There is need for competent facilitators – this is the area that often makes the difference between success and failure in community development processes –

which is why support and investment in the training and development of such facilitation competencies merits priority attention with development agencies/ service organisations in districts/communities and within local communities themselves.

For this to occur it is crucial to foster improved services coordination, particularly within the public sector services, and to forge strong local partnerships among organisations with complementary skills spanning agriculture, health, education, social protection, and so on. For example, an integrated approach involving home-based caregivers, orphan committees, agricultural extension agents and health workers can ensure that food, school fee relief, home gardens and health care go directly to families that most need them. This is a broad version of the AIDS 'continuum of care' (IFAD, 2002). Topouzis (2003) has outlined some of the steps required to operationalise such a vision:

- i. assess both the capacity of services to deliver and also the impact of existing sectoral policies on household and community capacity to cope with HIV and AIDS
- ii. mainstream HIV and AIDS
- iii. build gender-HIV linkages into the analysis and response of sectoral programmes
- iv. prioritise working with vulnerable groups
- v. strengthen the resilience of existing farming and livelihood systems
- vi. link relief, rehabilitation and development
- vii. build conflict prevention
- viii. build scaling up mechanisms
- ix. monitor and evaluate responses

## **7. Conclusion**

This paper has identified a number of critical policy and advocacy issues that have serious consequences for equity, health and well-being in the region:

1. Food security and nutrition are absolutely fundamental in any analysis of development in the region. Agriculture is still the dominant source of income for most people in the region and actions to secure food security dominate many lives. Poor nutrition, whether over or under, is also a major cause of ill-health and the reproduction of poverty in the region.
2. Lack of food security and poor nutrition are both a cause and a reflection of the great inequalities in the region. Experiences from other parts of the world and historically suggests that any successful intervention to reduce inequalities and inequities must start with improving the health and nutrition of the poor. Public policies have been shown to make a significant difference even in the context of poor overall economic growth.
3. The HIV/AIDS epidemic is closely related to food security and nutrition. The impact of the epidemic is worsening the food security and nutrition situation whilst at the same time lack of food security and poor nutrition is increasing the vulnerability to HIV/AIDS.
4. The present situation in the region with regards to food security and nutrition can only be understood in the context of global changes in the production and trade of agricultural products. A successful response to the huge challenges outlined in this paper requires an analysis that integrates equity, health, food security and nutrition within the major

global, regional and national trends. It must however go further- this analysis must be linked to a strong, organised demand for government responsiveness and accountability to social needs, and for government authority and action to safeguard social needs within global policy and corporate and commercial practice.

5. The formation of trade blocs such as SADC is a response to the challenges of globalisation and can be used as a platform for greater domestic investment and the development of more appropriate policies. Central to such a response are the rights of women and providing them with support both in their productive and caring capacities.

To achieve and sustain the political will to meet all people's basic needs, and to regulate the activities of transnational corporations and international agencies, a process of participatory democracy – or at least a well-informed movement of civil society – is essential. A 'strong' civil society participation with clear perspectives is important not only in securing greater government responsiveness to social needs but also in providing the active, conscious and organised population that is critical to the design, implementation and sustainability of comprehensive health and food systems (Sanders 1998).

This analysis suggests that equity in health will be difficult to achieve in this region unless there more explicit attention is paid to the underlying nutrition and food security determinants. These in turn are being shaped by larger forces, including trade rules, corporatisation of the food supply chain, HIV and AIDS and gender inequalities. These are profound and powerful forces. However we can start to identify areas of common action that would strengthen equity in food security, nutrition and health outcomes.

Based on the evidence presented, it would appear that an equity programme should focus on:

- **Strengthening and informing a food sovereignty perspective** and analysis and widening dissemination of its utility and its application within the ESA region. In particular such a perspective would need to assess at a more specific level within countries and within the region the impact of agricultural trade policies and agreements on food security, nutrition and health *from a food sovereignty perspective*, and identify those with greatest potential for and harm to nutrition and health improvements. This work would need to inform policy makers in both trade and health and communities of the distribution of nutrition and health burdens of current policy choices. It would in particular need to identify the specific gender inequalities that exacerbate the impact of globalisation and HIV and AIDS on the food security of the poorest families.
- **Providing policy options and sharing evidence of concrete examples of progressive responses** from a food sovereignty perspective, and particularly those that address the challenges outlined in this paper of globalisation; of HIV and AIDS, and of the concentration of power and control over food systems in the region. Within health for example, such options would include promoting, supporting and evaluating health sector programmes that increase the resistance and resilience of rural communities to the impact of HIV and AIDS on agriculture and livelihoods; policies and programmes that provide community or public sector safety nets to those most effected by trade and agricultural policies *and* by HIV and AIDS (and particularly to women); policies and programmes that address the specific gender inequalities that undermine food sovereignty; and policy responses that protect government authorities and flexibilities to protect and promote health, especially with respect to the most vulnerable social groups.



- **Building civil – state alliances around a programme of action and advocacy** that links a food sovereignty perspective with equitable public policy that supports this. This will need to add weight to existing programmes, strategies and campaigns within states and civil society in the region aimed at ensuring that trade policy strengthens and does not harm public health. It will need to be backed by monitoring and advocacy that raises the profile and visibility of food security, nutrition, gender and health inequity within policy platforms in the ESA region, and that draws attention to the role and types of health interventions that address the gender inequities that undermine food sovereignty and that improve the food security and livelihoods of vulnerable social groups.

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