Livelihood Erosion Through Time:
Macro and Micro Factors that Influenced Livelihood Trends in Malawi Over the Last 30 Years

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FINAL

CARE Southern and Western Africa Regional Management Unit (SWARMU)

March 2003

Acknowledgements

We would like to take this opportunity to thank a number of people would made this work possible. First we want to thank Nina Bowen and Michael Drinkwater from the CARE Southern and Western Africa Regional Management Unit for funding this initiative and providing guidance and feedback for this review. Second we wish to thank Nick Osborne and Clara Hagen from CARE Malawi for helping us track down a number of the documents used in this study and for reviewing earlier drafts.

Executive Summary

Over the past thirty years, households in Malawi have been exposed to a large number of shocks that have led to an ongoing decline of rural livelihoods. More than 60% of the population is experiencing chronic poverty every year and it has some of the worst child malnutrition and mortality rates in Africa. The highest concentration of poverty is in southern region of the country where 68.1% of households are poor, compared to the central region with 62.8% and the north with 62.5%. The current level of poverty is characterized by deep inequality. The richest 20% of the population in Malawi consumes nearly half of all goods and services, whereas the poorest 20% consume only 6.3%.

Livelihood deterioration in Malawi has been due to a wide array of political, economic and social changes and population pressures that have impacted households and communities through time. Overlaying all these factors has been the HIV/AIDS pandemic, affecting more than 20% of the population and contributing to a further decline in rural livelihoods.

The Colonial Period (Prior to 1964)

During the 19th century, a number of historical processes led to the transformation of Central Africa from a prosperous region to one characterized by lack of security and disintegration of existing agricultural systems. These processes include 'fallout' from the Zulu expansion, slave, ivory and cattle raiding, disease, pests, drought (in 1903, 1922 and 1949), and interventions to increase the labor supply.

The concept of land ownership, introduced during colonial rule and perpetuated through Banda's regime, worked to erode the traditional community power structures that made decisions about land use. Although traditional power structures contained dimensions of inequality, some observers assert that the environmental degradation in Malawi is partially due to the breakdown of traditional structures that managed these resources through community-based processes.

By the 1950s, a tripartite economy developed such that:

- Estates in the central and southern region of Malawi (owned by whites) produced tea and tobacco. These estates employed wage laborers as well as 'visiting tenants'.
- A large migrant workforce that left for South Africa and Rhodesia on a yearly basis. Differentiation of smallholders developed in the 1950s since migrants returning from South Africa and Rhodesia were economically better off.
- Smallholders growing maize and other crops on small holdings.

1964-1980: Estate-Sector Biases Under the Banda Regime

By 1968, government policy favored estates with preferential access to extension services, credit and markets – primarily for the most lucrative crop, burley tobacco. Customary land holdings managed by smallholders were converted into leasehold land for estates to

expand tobacco production. This led to the emergence of a poor landless tenant class and reduction in available land for smallholder cultivation.

Although the Malawi economy performed well between the years of 1970-1977, the dual nature of the economy essentially meant that estate performance was masking the poverty and degradation of smallholders. Population was continuing to increase and land fragmentation was continuing to occur. In general, households were becoming poorer due to this bias towards the estate sector and livelihood systems were beginning to deteriorate because of agricultural and marketing policy biases.

In the late 1970s, the economy of Malawi began to decline due to rising oil prices, a war in Mozambique and unfavorable weather patterns. The war in Mozambique had two main impacts on the Malawian economy: 1) the large influx of refugees (especially in the Southern region); and 2) blockage of Malawian exports due to inaccessibility to ports on Mozambique's coast. These impacts, coupled with rising debts, meant that the Malawian government was spending nearly 23% of income earned from exports on debt reduction. Price controls and massive direct government investments in agriculture led to policy distortions and exacerbated basic structural weaknesses.

1981-1990: The First Structural Adjustments

The call for a structural adjustment program (SAP), was in response to the deterioration of the Malawi economy due to sharp increases in import prices, severe droughts and rising transportation costs from the disruption of rail lines to the sea from Mozambique due to the war. Despite these efforts, the overall the performance of the economy in terms of expansion and national income worsened during the adjustment period.

Although the SAPs placed strong emphasis upon improving producer prices for smallholders, these policies placed less emphasis on addressing production constraints and non-economic barriers to income growth. All efforts for increasing food security through the SAPs focused on promoting increased production of maize at the expense of other crops. The adoption of semi-flint maize hybrids over local varieties in the early 1990s reflected a concerted effort by the government and donors to promote the development and spread of hybrid maize through subsidies and credit.

Wages for agricultural laborers continued to decrease as a result of the Government's Wage Restraint Policy. Between 1982 and 1990, the rural minimum wage was cut in half relative to the consumer price of maize. Migration to South Africa for wage employment dropped during the late 1980s, the result of restrictions on migrant labor.

By 1987, an estimated 48% of land in Malawi was under cultivation, a percentage that exceeds the amount of available land suitable for rain-fed cultivation under traditional management practices. Nearly half of Malawi's maize is grown in the central region, however the most food insecure region in Malawi is in the southern region where two-thirds of Malawi's poor households live (Devereux 1997). By 1988, 56% of the rural households farmed less than one hectare of land and 80% farmed less than 1.5 hectares.

The combination of rising prices, reduced access to land, unfavorable terms of trade for smallholders and wage restrictions essentially made livelihood security more difficult for the poor. Between 1986 and 1990 the poorest households experienced a decrease in their income from crop sales and were required to pursue casual labor more often to compensate. Better off households increased their total income from tobacco and increased their share of maize sales. As a result, inequality among smallholder households was starting to increase.

1990-1991: A Shift to Smallholder Tobacco Production

In 1990, the bias of the World Bank and IMF towards the estate sector was reversed. During this time there was also a change in the government's burley tobacco production policy to allow for cultivation by smallholders. Burley tobacco production by smallholders was viewed as a positive step for a number of reasons, including increased income and marketing opportunities. Potential negative impacts of increased burley tobacco production included soil erosion from increased hillside cultivation and excessive reliance on a single crop in an uncertain world market.

Tobacco liberalization also resulted in greater demand for ganyu from larger smallholders. These labor demands created time constraints for poorer households to grow burley, especially for those who did not have access to credit.

Despite the attempts to identify new drivers for poverty alleviation (e.g. burley tobacco production), livelihood insecurity was increasing for many of the poor due to on-going slow onset processes, such as population increases (3.3% per year) and resulting declines in landholdings and soil fertility as well as policy biases that favored the better off rural producers.

1991-1993: The Southern Africa Drought and Its Impact

In 1992-93 a major drought hit southern Africa. Maize production was reduced by more than 46% in Malawi. This 1992 food shortage was exacerbated by the influx of one million refugees from Mozambique into Malawi. Approximately two-thirds of the entire population registered for food assistance. In addition to the food aid that was provided, free maize seed and fertilizer was distributed to 1.3 million smallholders as part of the Drought Recovery Inputs Project (DRIP).

The drought created major problems for the credit market. SACA experienced severe loan recovery problems due to the collapse of maize production. The loan defaults resulted in a number of small holders being excluded from future credit programs. For example, in 1992 there were 400,000 smallholder borrowers participating in SACA. This dropped to 34,000 in 1994 and eventually forced the closure of SACA that year.

Food expenditures as a proportion of total household expenditures increased from 40%-60% to 70-90%. The drought exacerbated and accelerated the poverty processes that were already taking place in rural communities throughout Malawi. The drought essentially

created the situation where debt became unmanageable, leading to the loss of future credit for a large number of smallholders. This was coupled with asset depletion, making households more vulnerable to future shocks. Human capital investments were also seriously jeopardized because resources were no longer available to households to retain children in school or to pay for medical care.

1994- 1998: Transition to Democracy and Smallholder Liberalization

Malawi's first multi-party elections were held in 1994, leading to the end of thirty years of authoritarian, single-party rule and inaugurating a new democratic government. However, the growing number of institutions and departments developed after the Banda regime led to increased opportunities for corruption. Government aims to mediate previous imbalances were often derailed by factionalism, ethnic rivalry and regional pressures.

Although the structural adjustments began in Malawi in the 1980s, the 1990s saw an acceleration of processes begun earlier, such as devaluation, large maize price rises and rapid input price rises. Many villagers felt that when subsidies were dropped in 1994-95, this was a major factor contributing to their food insecurity. This, coupled with the collapse of SACA in 1994, also led to limited access to credit. Thus the liberalization of tobacco production was not the solution to poverty and food insecurity as was hoped. Only the larger farmers benefited disproportionately, with poor and female headed households the least likely to participate in tobacco farming. Economic stratification of rural communities began to accelerate in 1995.

Due to market liberalization, droughts and political upheaval, most Malawian households were forced to diversify their income sources to cope with volatile conditions. Smallholders favored crop diversity niches that did not interfere with household food production, and about one-third of households in Malawi were involved in micro enterprises, with about two-thirds of these being women. Ganyu labor was one of the main strategies that the poor used to meet consumption needs. However, it created negative consequences, such as reduced yields on the laborer's own farm due to time spent searching for work and laboring for others. Low livestock ownership by Malawians (due to theft and lack of suitable grazing land) reduced the flexibility of rural livelihoods to manage risk and to accumulate assets as a path out of poverty.

During the mid-1990s, there were three broad positions taken by government, donors and NGOs and UN agencies with regards to how to tackle food insecurity. The government's use of subsidized inputs (e.g. Supplementary Inputs Project) was not sustainable and did not take into consideration the collapse of credit schemes. Market liberalization approaches favored by donors actually accelerated the processes of rural economic differentiation and threatened the food security of the poor due to higher food prices. The safety nets approach utilized by NGOs and UN only treated the symptoms of food and livelihood insecurity. Programs investing in human capital were minimal, such as training for skill enhancement and off-farm employment. Positively, programs such as the Malawi

Social Action Fund (MASAF) provided public works-based FFW programs, although participation by women and some vulnerable groups was limited.

1998- 2000: Chronic Poverty and Food Insecurity

In 1998, the Malawian government laid out a decentralization plan in the Local Government Act of 1998. Some observers felt that these decentralization processes were likely to make matters worse on the poor through increased formal and informal taxes and levies and various other hidden payments and restrictions due to institutional blockage.

The devaluation of the Kwacha by 62% in August 1998 caused a significant shock for Malawians and forced the prices of most basic commodities to double. This devaluation imposed heavy pressure on informal safety nets, with more people requesting assistance (e.g. cash, loans and food) and less people able to meet these requests. The government tried to intervene by compensating for the devaluation of the Kwacha through limiting maize price rises. Fiscal policy in Malawi has been a continuing problem in the late 1990s.

In a study that was carried out in 1998, 65% of Malawians lived below the poverty line and were considered chronically food insecure, with the majority of these poor living in the Southern and Central Regions of the country. Based on a participatory livelihood assessment that was carried out by CARE in the Central Region in 1998, the poorest households earned less that 1,000 kwacha per year, could not afford inputs, were not educated, had trouble getting access to seed, had no animals, had no dimba gardens, either were landless or functionally landless (had 0.5 to 1.0 acres of land) and relied upon ganyu labor and firewood sales.

Urbanization was increasing dramatically during the 1990s. The Malawi Population and Housing Census conducted in 1998 found that urbanization increased from 850,000 in 1987 to 1.4 million in 1998, an increase of 68%. A number of individuals are moving into urban centers because of the difficulty of securing livelihoods in rural areas.

In 1999, the National Food Reserve Agency (NFRA) was created and was charged with managing the strategic grain reserve previously managed by ADMARC. In July 2000, the IMF advised the NFRA to sell of some of the grain reserve to pay off debt.

In July 2000, there were signs that corruption was increasing. A report was produced by the Public Account Committee on the extent of government corruption and fraud. The report led to a souring of donor relationships with the government.

Starter Packs (consisting of hybrid seed and fertilizer) were initiated in 1998 by the Government of Malawi with support from DFID to compensate for higher input prices, targeting 2.5 million households in 1998-99 and 1999-2000 and were provided fertilizer and hybrid maize seed. The program was scaled back to one million beneficiaries in 2001

with the TIPS program (Targeted Inputs Program). The main problem with this scaled back program was with targeting. Many of the poorest households were excluded.

2001- Present: The Current Food Crisis

The increasing vulnerability to food shortages in Malawi that occurred throughout the 1990s left people extremely susceptible to future shocks. Two sets of factors came together in producing the food crisis of 2002: livelihood vulnerability and weak government institutions.

The shocks that hit Malawi from 2001 to the present were a combination of weather-induced shocks and socio-political shocks. Chronic poverty due to falling terms of trade, the lack of off-farm employment opportunities, diminished access to land, declining soil fertility and falling applications of agricultural inputs all created food access problems. In addition, the HIV/AIDS pandemic was decimating the labor force and raising household dependency rations. These poverty processes were combined with government policies that did not favor smallholder agriculture. These factors that influenced people's access to food, coupled with low availability of maize in the market, pushed Malawi over the edge.

The Government of Malawi had inadequate grain reserves to respond to the growing crisis because they had sold off a large portion of the reserve in 2001. Much of this stock was purchased by private traders who profiteered from the sale of the grain reserve by buying the maize cheaply and then hoarding it until the prices rose and resold it back to ADMARC. The magnitude of this food short-fall was further exacerbated by the underestimation of roots and tuber production, which the government and donors first believed would cover household maize deficits.

In October 2002, people with livestock began selling them to purchase food. In a study that was carried out by CARE and SCF-US in four districts in the Central Region of Malawi in May 2002, two-thirds of all households indicated a decline in income. Terms of trade fell to one-third of their value. Asset sales decreased dramatically, school drop out rates increased by 25%, people started to migrate and informal safety nets began to collapse.

Donors were slow to respond to the food shortage for a number of reasons. First, the donor/government relationship was strained due to questions regarding corruptions and mismanagement at exactly at the same time when resources were needed. Second, donors assumed that the initial reports were correct that there would be enough available food and that they did not need to respond with emergency resources. It was only after the media started to report food shortages and deaths that donors reversed their hard line and offered food unconditionally.

Although a number of safety nets have been implemented by the government, donors, UN agencies and NGOs, such interventions still primarily focus on addressing the symptoms of food insecurity through food aid and free or subsidized inputs for

agricultural production. Safety net programs have not been designed to address long-term food insecurity, such as investment in human capital to generate off-farm employment opportunities. The crisis presents an opportunity for donors and the government alike, to break the cycle of chronic poverty through such human capital investments.

Cross-Cutting Themes

HIV/AIDS
In 2001, CARE Malawi conducted a study in fifteen villages across the three districts of central Malawi – Lilongwe, Dowa and Dedza on the impact of HIV/AIDS on agricultural production and livelihoods in central Malawi. The study found more than 22% of households in the villages studied are affected by HIV/AIDS morbidity and mortality with the most direct impact being loss of labor. Three of the villages in the study had half or more of their households affected by chronic sicknesses in the past five years (two in Lilongwe district and one in Dowa district). In instances where landholdings are transferred to relatives temporarily, the ability to regain control of the land may be difficult and result in conflict between family members. Families will often times rely upon ganyu labor in order to meet short-term cash needs.

Forty-percent of surveyed households affected by chronic illness sold a portion of their assets in order to buy food or to pay medical or funeral expenses. Some farmers used standing crops (such as tobacco) as collateral for cash loans in order to meet immediate needs of the household. Families have also experienced decreased access to credit due to HIV/AIDS: Community-based credit groups will sometimes exclude families because they may perceive these households as high risk.

Women are especially burdened by HIV/AIDS since they often are the ones who care for sick household members. They represent 55% of all current infections, the result of increased susceptibility due to physiological factors, as well as cultural practices such as early marriage, and economic conditions that force women to engage in sexual activity in exchange for food or other essential items.

Assistance by extended family networks is a crucial source of support for households and has been instrumental in helping families cope with the impact of HIV/AIDS. However these networks are under a great deal of strain due to the number of individuals needing assistance.

Gender
Thirty percent of smallholder households in Malawi are female-headed. Forty-one percent of rural households are food insecure and 40% of these are female-headed. Female-headed households are particularly labor constrained and unable to take advantage of off-farm employment. Some of the general findings regarding women in Malawi are the following:

- Fewer female-headed households report any improvement in economic conditions compared to male-headed households.
- About 70% of all full time farm workers in the smallholder sub-sector are women.

- Gender differences in decision-making, asset ownership, and inheritance depend upon the systems of social organization of specific ethnic groups; matrilineal mainly in the central and southern portion of the country, and patrilineal in the northern and southern portion of the country. However due to increased chronic food insecurity among the poorest households and the impact of HIV/AIDS, these systems of social organization are beginning to change.

Right to Food
The current crisis in Malawi is due to the intersection between vulnerable livelihoods and weak institutions. It is apparent from the review that a number of steps have been taken by the government that favored national food security over poor people's household food security. In the more recent past, several actions were taken that had negative consequences for the chronically poor. Government mismanagement of information regarding maize marketing allowed private traders to manipulate the market such that major price increases disproportionately penalized the poor. The market short-fall created by hoarding by traders led to price increases. Maize prices were so high that many poor people were unable to afford purchasing maize. This is clearly a violation to the right to food for the majority of Malawians.

Hypothesis and Recommendations for Future Research

Over the past thirty years, households in Malawi have been exposed to a large number of shocks that have led to an ongoing decline of rural livelihoods. Based on this review, a number of hypotheses have been generated that explain why food insecurity has continued through time in Malawi. The following hypotheses are listed below:

- Market liberalization had a differential impact on smallholders, with the poorest households becoming poorer and better off households being able to capture market benefits. Rural stratification became more severe in the 1980s and has accelerated since 1994. Women have become disproportionately worse off.

- Government policy and implementation, particularly over the last decade, has increased rather than ameliorated differentiation, both because policy has tended to favors better off farmers, and because of the weak capacities and corruption entailed in the implementation of policy. Decentralization will only exacerbate these trends.

- The 1992/93 drought led to major loan defaulting, limiting credit options for many smallholders from this date forward. This led to limited access to inputs and therefore significant reductions in maize yields. Drought increased the future vulnerability of rural populations.

- Beginning in 1998, the transition from parastatal marketing structures to liberalized markets left a vacuum in terms of institutions responsible for maintaining safety nets. The capacity of institutions replacing ADMARC (the National Food Reserve Agency) was limited. The crisis that began in 2001/02 was an institutional shock combined

with livelihood vulnerability (exacerbated livelihood insecurity), rather than a weather induced shock.

- Informal safety nets are becoming weaker, under the stress of increased asset decline, and the additional pressures of the impact of HIV/AIDS. Formal safety net strategies that are more than just hand out mechanisms, have yet to be developed.

- Rural households have resorted increasingly to off-farm income sources, including ganyu, as well as to rural-urban migration for survival. Public sector investments in non-farm activities and infrastructure will benefit smallholders more than investments in agriculture. Certain regions may be more amenable to quick returns to non-farm investment.

Based on this analysis, there are still a number of issues that need to be clarified in follow-up research. These information gaps are listed below:

1. What is the relationship between rural traders, prices and differentiation of rural market infrastructure?

2. What role has cross-border trade and linkages with Mozambique had in allowing for border communities to adapt to the current crisis?

3. What has been the impact on ganyu labor prices, given that such a large number of people (both the poor and the middle level households) are seeking such employment?

4. What are examples of successful skill-building programs that have enabled households to find non-farm employment. Can these serve as a model that can be scaled-up for the country?

5. What is the impact of HIV/AIDS on the structure of labor for smallholder households?

6. Does ADMARC have a role to play as a food security institution, given the weak capacity of the National Grain Reserve Agency?

7. Are informal safety nets getting weaker, or are there variations of this in different parts of the country?

8. How significant has urbanization become as a response to the crises?

Acronyms

ADMARC	Agricultural Development and Marketing Corporation
CRIMP	Central Region Infrastructure Maintenance Project (CARE)
C-SAFE	Consortium for Southern African Food Emergency
DFID	Department for International Development
DRIP	Drought Recovery Inputs Project
EU	European Union
FEWS	Famine Early Warning System
FSRP	Fertilizer Subsidy Removal Program
GDP	Gross Domestic Product
GOM	Government of Malawi
HIV/AIDS	Human Immunodeficiency Virus/ Acquired Immune Deficiency Syndrome
IMF	International Monetary Fund
MASAF	Malawi Social Action Fund
MMF	Malawi Mudzi Fund
MRFC	Malawi Rural Finance Company
MUSSCO	Malawi Union of Savings and Credit
NEAP	National Environmental Action Plan
NFRA	National Food Reserve Agency
NGO	Non-Governmental Organization
PAP	Poverty Alleviation Program
SACA	Smallholder Credit Association
SADC	Southern Africa Development Community
SAP	Structural Adjustment Program
SCF	Save the Children
SEDOM	Small Enterprise Development Organization
SIP	Supplementary Inputs Project
UNICEF	United Nation's International Children's Education Fund
USAID	United States Agency for International Development
VAC	Vulnerability Assessment Council
WLSA	Women and Law in Southern Africa

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Annexes

I. Introduction

Malawi is a country in perpetual crisis. More than 60% of the population is experiencing chronic poverty every year and it has some of the worst child malnutrition and mortality rates in Africa. For example, more than 50% of the children are stunted and it estimated that more than one in four children will die before the age of five. Overlaying this chronic poverty and malnutrition is an HIV/AIDS infection rate of more than 20%, contributing to a further decline in rural livelihoods. There is growing concern on the part of the international community that the prospects facing Malawi in the coming decade will only get worse. This is primarily because Malawi is land-locked and land-scarce, with little economic activity or potential outside of agriculture. This livelihood deterioration is due to a bewildering array of political, economic and social changes and population pressures that have impacted households and communities through time.

A. Purpose of Study

The purpose of this paper is to document the critical factors that have brought about livelihood changes over the past thirty years. This literature review documents the major meso- and macro-level processes (e.g. structural changes, economic, political and social trends) that have impacted both positively and negatively upon livelihoods. This review also attempts to identify household and community responses to these changes, delineating the impacts on different household types and livelihood systems. This review also identifies a range of responses carried out by government, donors and NGOs to counteract the negative consequences of livelihood deterioration (e.g. food assistance strategies, service delivery shifts and safety net developments).

The paper will be structured in such a way to summarize key events that influence vulnerability at important junctures in time, beginning with the colonial period up to the present. During each time period, a discussion will be provided on community and household responses to these changes as well as government, donor and NGO interventions. Following this discussion, a number of cross-cutting themes will be identified that have strong bearing on livelihood outcomes. This is followed by a review of the more recent vulnerability studies that have been carried out and their short-falls. The paper concludes by identifying three types of outcomes. First, hypotheses will be derived that capture major trends that have influenced livelihoods through time. Second, information gaps will be identified that require further research. And finally, approaches will be proposed for addressing these information gaps.

B. Livelihood Framework

The analysis that is used in this literature review is based on the livelihood framework developed by CARE. A composite analysis is made of the context in which institutions operate (i.e. macro-economic, social, political, environmental, demographic, historical and infrastructural factors and risks) that influence livelihoods; the livelihood resources available to households and communities (i.e. economic, natural, physical, human, social and political capital); the institutional processes and organizational structures that operate

in the milieu where communities are found; the livelihood strategies that are pursued by households (i.e. productive and exchange activities as well as coping strategies) and the livelihood outcomes derived from these strategies (i.e. conditions of well-being, such as household status in terms of access to food, health, education, safety, habitat). See Annex I.

The review is structured in such a way to specify major macro- and meso-level factors and processes that are influencing livelihood outcomes, followed by how households, communities and institutions respond to the consequences of these change factors. The paper will demonstrate how the cumulative effect of these changes has increased the livelihood vulnerability of households over time.

C. Livelihood Vulnerability

Vulnerability is defined as exposure to risk and stress and the lack of ability to cope with the consequence of risk (Webb and Harinarayan 1999). The types of shocks that Malawians are exposed to can be clustered under three groups: **Weather-induced shocks** such as drought and floods; **macro-economic shocks**, such as removal of subsidies, massive currency devaluations, rapid rising of prices of food, agricultural inputs and consumer goods; and **slow-onset processes**, such as declining land-holdings and decreasing soil fertility (Devereux 1999). In addition, seasonal food shortages plague the poor every year. The ability for households to cope with shocks or risks include household access to natural, physical, financial, social and human assets and the livelihood strategies they use to diversify their sources of income and consumption.

Over the past thirty years, households in Malawi have been exposed to a large number of shocks that have led to an ongoing decline of rural livelihoods. The nature of these shocks and their impact will be discussed in the next section.

II. The Colonial Period (Prior to 1964)

A. Meso/Macro Processes Influencing Vulnerability

During the 19th century, a number of historical processes led to the transformation of Central Africa from a prosperous region to one characterized by lack of security and disintegration of existing agricultural systems. These processes include 'fallout' from the Zulu expansion, slave, ivory and cattle raiding, disease, pests, drought, and interventions to increase the labor supply (Vail and White 1989 in Whiteside 1999).

Land Tenure

As a result, the region was "unable to resist the combined introduction of capitalism, plantation agriculture and colonialism" (Whiteside 1999). One impact that this change brought about was on land tenure, where the concept of land ownership was introduced through colonial rule during the 1890's and was perpetuated during the Banda regime. This challenged traditional land allocation approaches that were based upon usufruct rights.

The concept of land ownership introduced in the 1890s worked to erode the traditional community power structures that made decisions about land use. Although traditional power structures contained dimensions of inequality, some observers assert that the environmental degradation in Malawi is partially due to the breakdown of traditional structures that managed these resources through community-based processes (Chikhwenda 2002).

During the colonial period, the average rural household farmed between three to four acres. A system of shifting cultivation was used to maintain soil fertility. Since the 1960s, the average area of cultivated land for households has halved, from 1.5 hectares to .74 hectares in 1994 (Devereux 1997).

Droughts
Malawi (then called Nyasaland) also experienced a series of famines due to drought in 1903, 1922 and 1949. The famine in 1903 saw a significant migration of individuals from Mozambique into Malawi.

Labor Markets
In the 1940's a significant labor market developed in the southern portion of Malawi. Many of these opportunities for ganyu[1] labor collapsed during the 1949 drought, except in areas where wealthy farmers had access to dambo land (Vaughan 1987).

By the 1950s, a tripartite economy developed such that:

- Estates in the central and southern region of Malawi (owned by whites) produced tea and tobacco. These estates employed wage laborers as well as 'visiting tenants'.

- A large migrant workforce that left for South Africa and Rhodesia on a yearly basis. Differentiation of smallholders developed in the 1950s as migrants returning from South Africa and Rhodesia were economically better off.

- Smallholders growing maize and other crops on small holdings (Vaughan, M. 1997 in Whiteside 1999).

B. Responses of Communities and Households to Economic, Political and Environmental Changes

During the 1949 famine, Blantyre experienced incidences of theft, primarily of food from the markets. Social networks initially worked, but began to break down as the famine

[1] Ganyu is: "any off-own farm work done by rural people on a casual basis, usually covering a period of days or weeks, remuneration may be in cash or in kind, such as food and is often, but not exclusively calculated as piecework. *Ganyu* may be done for relatives, neighbors, smallholders further afield, for estates or even in other countries. The work is often, but is not exclusively relatively unskilled and agriculturally based. Men, women and children all do *ganyu*" (Peters 1995 in Whieteside 1999: 3).

wore on. For example, there were a number of incidences where men abandoned their families[2]. In the rural areas, it first appeared that households were able to feed themselves, and a district commissioner from Zomba said that he did not believe food assistance was necessary. Rural areas showed increased migration, livestock sales and collection of wild foods. At the end of the famine, official documents indicate there was widespread destitution of women and children, the result of husbands who migrated for work, but failed to send remittances (Vaughan 1987).

C. Response of Colonial Government

The colonial government responded to the 1949 famine by implementing the following activities:

- Importation of food as early as January 1949 when it became apparent the rains were failing
- Relaxation of beer brewing prohibitions
- Increased labor recruitments (typically a ban on labor recruitments to Rhodesia and South Africa existed during the planting and harvesting season to encourage farmers to tend their crops).
- Food for Work programs that involved road construction and railway construction. Many women participated in these programs since men had migrated for work.
- Direct distribution centers for the most malnourished (Vaughan 1987)

Concern regarding land availability to maintain food security was noted also during the colonial regime. For example, the Director of Agriculture estimated that families would need approximately 11.75 acres to grow enough food for themselves (this includes two acres for cash crops). He also stated: "The rapid increase in population and the expansion of the area devoted to economic crops, combined with the steady loss of soil fertility, can only lead eventually to a failure to produce sufficient food to feed the population" This calculation was based upon maize, as the officials did not see value in root crops during this time (Vaughan 1987).

III. 1964-1980: Estate-Sector Biases Under the Banda Regime

A. Meso/Macro Processes Influencing Vulnerability

With Malawi's independence in 1964, Banda criticized the estate system and policies favoring estate agriculture. By 1968, however, government policy favored estates with preferential access to extension services, credit and markets – primarily for the most lucrative crop, burley tobacco (Whiteside 1999). This development policy aimed to increase national income by promoting industry and commercial, export-oriented estate agriculture. Customary land holdings managed by smallholders were converted into leasehold land for estates to expand tobacco production. This led to the emergence of a

[2] Devereux 1999 uses this finding to assert that informal safety nets in Malawi may not have been that strong, even in the past.

poor landless tenant class and reduction in available land for smallholder cultivation (Fozzard and Simwaka 2002:6).

The economic growth of Malawi during the 1970s was the result of this preferential policy treatment for the estate sector which did not benefit small land holders. As a result, income for smallholders declined (Christiansen and Southworth 1998 in Peters 1990).

Although the Malawi economy performed well between the years of 1970-1977, the dual nature of the economy essentially meant that estate performance was masking the poverty and degradation of smallholders. During this period, the state confiscated customary land. The government introduced highly structured, state-dominated marketing systems for smallholder outputs and inputs (Smith 1995). Private business was not encouraged and a few parastatal businesses were set up, such as the Agricultural Development and Marketing Corporation (ADMARC). Extension services focused on the estates and smallholders were not permitted to grow burley tobacco. An effort was made to create opportunities for highly educated, middle class elites that participated in running the government and the estates (Ellis et al 2002).

In response to policies favoring estates, the estate sector began to steadily grow to the point that there were 229 estates in 1970. By 1979, there were 1,200 estates cover 300,000 hectares. Smallholders lost land and suffered unfavorable terms of trade (e.g. low purchase prices for maize). As a result, smallholders often had to work ganyu labor on estates or became estate tenants, creating a cheap and plentiful supply of labor (Whiteside 1999).

Migrant labor fluctuated depending on the demand from abroad and shifts in government policy. Following from the patterns developed during the colonial regime, peasant producers returned from abroad with cash and opportunities to increase cash inputs. This led to greater differentiation among smallholders (Whiteside 1999).

Migration as a safety net for rural Malawians was more significant in the days of contract labor in South African gold mines. Thousands of Malawians migrated for such work. The government of Malawi attempted to sever this relationship in the 1970s as a result of an airplane crash (Devereux 1999).

During the colonial times, most of the immigrant trading groups were Asian, coming from the Indian sub-continent. These groups were primarily working as artisans or skilled laborers in the building trades and eventually evolved into owners of farming estates, who controlled transportation networks and the like in the central region of Malawi. A number of these Asians became citizens of Malawi after independence. In 1974, a series of discriminatory laws were introduced by the government of Malawi. These measures attempted to exclude Asian shopkeepers, traders, transporters and other businessman from the rural areas. As a result of these discriminatory measures, approximately 80% of the Asians reportedly left Malawi. Those that remained migrated into the country's urban areas. The departures of these traders and business people from the rural areas had a major impact on the availability of goods and services (Jackson 2003). The business

experience, the financial resources, the trading contracts and the communication networks that the Asians developed were not readily taken up by local people. It is commonly believed that the exodus of the Asians has not improved rural welfare. These discriminatory laws and regulations were not eliminated until the constitution of 1995.

Rural people and their production systems depended critically upon a network of efficient, low-cost traders and other intermediaries. Undermining such a network and discriminating against the people who developed and managed it turned out to be a serious disservice to rural communities (Jackson 2003). One of the main imperatives for establishing a state or parastatal marketing and trading agency in Malawi was to provide a substitute for the Asian traders. One problem with this is that the parastatal lacked the independence and flexibility of individual traders.

In 1971 the government of Malawi adopted a wage-restraint policy. As a result wages for agricultural workers fell and continued to decrease for the next two decades (Whiteside 1999).

During the 1970's, the parastatal ADMARC was set up to extract large surpluses from smallholders. A proportion of the surpluses were then used help finance investments in the estate sector. In addition to maize, ADMARC purchased some tobacco (not burley), cotton and groundnuts below export parity prices from smallholders (Devereux 1997). The low prices paid by ADMARC to smallholder producers essentially amounted to a 50% tax on smallholders (Whiteside 1999).

To summarize, the Government of Malawi's economic strategy in the 1960's and 1970's, was focused on raising export crop revenues from tobacco sales from the estate sector. A policy of food self-sufficiency in maize was implemented through providing inputs to smallholders at subsidized prices. These policies undermined smallholder agriculture to such an extent that by 1980, ADMARC had difficulty obtaining surpluses from smallholders.

Land Tenure

Malawi's Land Act (1965) recognizes three types of land tenure: customary, freehold and leasehold tenure. Approximately 70-80% of land in Malawi is customary, and predominately used by smallholder farmers. This is also where the majority of impoverished Malawians reside, especially in the southern region and areas in the north where there are smaller landholdings (Mbaya 2002). The Land Act does not mention gender.

The Land Act policy of land transfer favored estate based export production at the expense of household food production (Stambuli, 2002). During the 1980s, the number of estates expanded from 1,200 in 1979 to 13,000 covering 500,000 hectares. The supply of land to smallholders nation-wide fell from 8.2 million hectares in 1964 to 6.7 million hectares by 1994 (Devereux 1997). At the same time, the population in Malawi in 1964 was four million and grew to roughly ten million by the middle 1990s.

In the late 1980s, smallholders established new estates to secure access to credit and to burley tobacco quotas (Devereux 1997). Groups of households began registering leaseholds to estates to secure tenure of land. This was primarily a defensive response to registration and claim to land by other families. As a result, average estate sizes fell from 345 hectares in 1970 to 207 hectares in 1979 to 53 hectares in 1989. This change in the structure of estates represents a breakdown in the dual economy that was prevalent throughout the 1970s and early 1980s (Devereux 1997).

The government did not adequately address the issue of land reform, despite the poor production performance of large estates compared to smallholders (Fozzard and Simwaka 2002).

External Shocks and Structural Weaknesses in the late 1970s
In the late 1970s, the economy of Malawi began to decline due to rising oil prices, a war in Mozambique and unfavorable weather patterns (Gondwe et al 1998 in Chikhwenda 2002). The combined oil price shocks, declining terms of trade for exports, and poor management in the agricultural estate sub-sector precipitated a financial crisis in 1979-80 (Peters 1996b). The war in Mozambique in the late 1970's had two main impacts on the Malawian economy: 1) the large influx of refugees; and 2) blockage of Malawian exports due to inaccessibility to ports on Mozambique's coast. These impacts, coupled with rising debts, meant that the Malawian government was spending nearly 23% of income earned from exports on debt reduction (as compared to 18.4% in 1980). (Chikhwenda 2002). Price controls and massive direct government investments in agriculture led to policy distortions and exacerbated basic structural weaknesses (Diagne and Zeller 2001).

B. Responses of Communities and Households to Economic, Political and Environmental Changes

Population was continuing to increase and land fragmentation was continuing to occur. In some locations, smallholders lost land to estates and had to compensate for production shortfalls by working as ganyu laborers and estate tenants. In general, households were becoming poorer due to this bias towards the estate sector. The war in Mozambique put added pressure on limited resources because of the large influx of Mozambican refugees into the Southern region. Overall, livelihood systems were beginning to deteriorate because of agricultural and marketing policy biases.

C. Response of the Government and NGOs

Although President Banda reminded Malawians of the devastating famine of 1949, which he blamed on the policies of colonial government, the policies adopted by the Banda regime were not all that dissimilar. Such policies led to taxation of smallholder farmers through the development of ADMARC aimed at generating investment revenue for the growth of the estate sector (Vaughan 1987).

ADCI/VOCA reports that in the early 1970's, churches in northern Malawi developed social welfare oriented savings and credit cooperatives that were the first of their kind in

the region. They contained 20-50 members each. In 1980, the Malawi Union of Savings and Credit Cooperatives was established, which provides support to these cooperatives. Currently there are over 100 cooperatives with over 35,000 members (ADCI/VOCA 2003).

IV. 1981-1990: The First Structural Adjustments

A. Meso/Macro Processes Influencing Vulnerability

The call for a structural adjustment program (SAP), was in response to the deterioration of the Malawi economy due to sharp increases in import prices, severe droughts and rising transportation costs from the disruption of rail lines to the sea through Mozambique due to the war (Ng'ong'ola 1996). In 1981, a structural adjustment program was introduced by the World Bank, the International Monetary Fund and number of bi-lateral and multi-lateral donors (Ng'ong'ola 1996). The primary objectives of the SAP included stabilizing the economy; accelerating agricultural growth; diversifying the export base; increasing efficiency of export substituting enterprises and parastatals; and improving the mobilization and management of public resources (Chilembwe 2001). The SAPs were implemented in order to address structural weaknesses, and adjust the economy to attain sustainable growth (Jumbe 2002).

The first structural adjustment loan stipulated an increase in prices for smallholder produce. The government initiated an increase in the relative price of maize (Chilembwe 2001). The second structural adjustment loan reemphasized agricultural price incentives and improved financial and operational efficiency of AMDARC. Agricultural production and marketing became liberalized in 1986, signaling the first pressure on ADMARC. The third structural adjustment loan stipulated the elimination of subsidies on agricultural inputs and estate management reform. This market liberalization occurred from 1987 onwards, resulting in the removal of price subsidized for maize seed and fertilizer and removal of price controls for smallholder crops, with the exception of maize. As a part of Malawi's structural adjustment program in 1987, the government implemented the Fertilizer Subsidy Removal Program.

International donors were pressuring the government of Malawi to remove the obstacles to privatization. However, the donors were inconsistent in their view on the role of the state in ensuring national food security. Many donors were willing to accept that state agencies such as ADMARC had a legitimate role to play in marketing and there are certain food security functions that the private sector could not provide (Smith 1995).

With regards to the smallholders, the SAPs placed strong emphasis upon improving producer prices for them, given the centrality and importance of maize production to the economy and national food security. These policies, however, tended to concentrate on providing market and price mechanisms and less on addressing production constraints and non-economic barriers to income growth. All efforts for increasing food security through the SAPs focused on promoting increased production of maize. The other foods critical to food security were not addressed in these discussions (Chilowa 1998). Policies

that increased the price of maize led less to increases in total maize production, but rather to a dramatic shift in the crops cultivated, favoring maize at the expense of others. Price changes had little effect on total agricultural output because output was seriously constrained by access to land, labor and agricultural inputs (Peters 1996).

To give some notion of how rapidly white maize production (Malawi's staple food crop) increased, smallholder land under maize cultivation increased from 58% in 1980-81 to 70% in 1990-91. By 1990, Malawi's per capita consumption of maize was the highest in the world. Until the late 1980s, local maize varieties were the crops predominantly grown, and only 16% of the maize was of hybrid forms. In the early 1990s, the adoption of semi-flint hybrid varieties accelerated dramatically. It was this new maize variety that was touted as Malawi's delayed Green Revolution crop.

The dramatic increase in smallholder maize planting and yields was not entirely demand-driven. This increase reflects a concerted effort by the government and donors to promote the development and spread of hybrid maize through subsidies and credit (Devereux 1997).

The structural adjustments in the 1980's placed an emphasis upon estate-led growth, linked to market liberalization (Ellis et al 2002). The dualistic structure of the rural economy in Malawi was characterized by the coexistence of estate and smallholder agriculture. The share of estate land increased from independence in 1964 to about 12% of arable land area in the early 1990s. This increase is attributed to policies that favored the estate sector (Diagne and Zeller 2001). The legacy of estate sector bias continues through the early 1990s as a legacy of the Banda regime (Alwang and Siegel 1999).

In the early 1980s, the GOM began to gradually address policy distortions. However, changes that directly affect smallholders began late with the liberalization of output markets in 1987 (through 1993) (Diagne and Zeller 2001).

Overall the performance of the economy in terms of expansion and national income worsened during the adjustment period. Real Gross Domestic Product fell by 3.3% in 1988 and 7.9% by 1991. In the pre-adjustment period, the growth rate was 5.2%, but declined dramatically to 1.5% (Chilowa 1998).

Rapid agricultural liberalization policies exacerbated poverty by raising prices on food staples for food deficit households.

Despite these attempts at market liberalization, the government of Malawi was reluctant to concede control of agriculture to the private sector. Although the government agreed to abolish the fertilizer subsidies by 1988, fertilizer import prices rose dramatically after transport routes through Mozambique were closed in 1987. As a result, the government reneged on its commitment and did not complete the removal of subsidies until 1995 (Devereux 1997).

Access to Credit

As a result of market liberalization during the 1980s, smallholders had access to credit for fertilizer and hybrid maize seed through farmers' clubs or women's clubs, which steadily increased in number throughout the decade. Interest rates were subsidized at a rate of 10% in the 1980s (Gladwin et al, nd).

The poorest smallholders and women farmers were often excluded from credit clubs because membership criteria included landholding size. It was also assumed that women were receiving credit/fertilizer through their husbands. As a result, only one-quarter of farmer's clubs members were female, despite the fact that 28% of the households were female-headed and 69% of the farmers were women (Gladwin et al, nd).

USAID provided financial support for the Malawi Union of Savings and Credit (MUSCCO) in 1980/81. It provided credit and savings options to low income people not served by commercial banks by promoting and expanding the few savings and credit cooperatives that existed at that time in Malawi (Diagne and Zeller 2001; Jackson et al. 2003).

Rural smallholders did not respond to the savings programs of MUSCCO. The principle of buying shares into the society and the requirement of collateral precluded poor rural smallholders from participating (Diagne and Zeller 2001).

In 1988, the Smallholder Credit Association was established (SACA) and by 1990 over 30% of smallholders were receiving credit. During the 1980s, recovery rates were high, well over 90%. These recovery rates dropped dramatically in the early 1990s for reasons that will be discussed below.

B. Responses of Communities and Households to Economic, Political and Environmental Changes

Despite an average annual decrease in estate wages between 1981 and 1986 of nearly 3% (2.8%, reportedly), there was an increase in estate wage employment of 8% per year. Studies concluded that this indicated a "lack of economic opportunity, including on their own farms, and a lack of political voice among rural workers" (Whiteside 1999). Tobacco estates paid the lowest wages.

Mkadnawire and Ferguson (1990) identified four main problems for households doing ganyu on estates, applicable to better off smallholder ganyu as well (in Whiteside 1999):

- Remuneration is not adequate to sustain the household for a 'reasonable' time period;
- When all adult caretakers in a household are engaged in ganyu, they may leave young children unattended and with insufficient food;
- Households may be unable to cultivate their own farms and adopt new technologies; and
- Especially when payment is in cash, it may not benefit all household members – women note that income is not spent on food.

In the early 1980s, a large number of men migrated to South Africa for wage employment in the mines, leading to an increase in de facto women headed households. Migrant labor to South African mines stopped in the late 1980s, dropping from 21,000 in 1987 to under 400 in 1989 (Whiteside 1999), which was caused by restriction on migrant labor. Remittances were small or non-existent – "insufficient to maintain the family, let alone invest in sustainable agricultural intensification or income generating activities" (Whiteside 1999).

By 1987, an estimated 48% of land in Malawi was under cultivation, a percentage that exceeds the amount of available land suitable for rain-fed cultivation under traditional management practices (Nanthanbwe 1998). By 1988, 56% of the rural households farmed less than one hectare of land and 80% farmed less than 1.5 hectare (Devereux 1997). Nearly half of Malawi's maize is grown in the central region, however the most food insecure region in Malawi is in the southern region where two-thirds of Malawi's poor households live (Devereux 1997).

Wages for agricultural laborers continued to decrease as a result of the Government's Wage Restraint Policy. Between 1982 and 1990, the rural minimum wage was cut in half relative to the consumer price of maize. In reality, however, many estates and better off smallholders paid wages much lower than the minimum wage. As a result of the Wage Restraint Policy, the gap between rural and urban wages narrowed between 1970 and 1990. The estate bias in Malawi agricultural policy lasted throughout the post-independence period and into the 1980s. During the 1980s, smallholder income terms of trade declined by 25% while estate farmer's terms of trade rose by 44%. Thus, the livelihood security of poor smallholders actually got worse during the structural adjustment period in the 1980s and stratification within the rural area got more severe.

Although food production increased steadily since the 1960s, it did not increase fast enough to keep pace with population growth. Total food crop production rose by 28% from the early 1970s to the late 1980s, but per capita food production declined by 23% over the same period (Devereux 1997).

There was a mealy bug infestation in 1986 that had a negative effect in the lakeshore district of Nkhata Bay in Northern Malawi (Pelliter 1990).

In 1987, prevalence rates for HIV/AIDS were 1.7%. The affected populations were primarily migrants and sex trade workers (Ngwira, el al 2001). Community informal safety nets appeared to be functioning well in taking care of the chronically ill.

To summarize, the combination of rising prices, reduced access to land, unfavorable terms of trade for smallholders and wage restrictions essentially made livelihood security more difficult for the poor. Between 1986 and 1990 the poorest households experienced a decrease in their income from crop sales and were required to pursue casual labor more often to compensate. Better off households increased their total income from tobacco and

increased their share of maize sales. As a result, inequality among smallholder households was starting to increase (Peters 1996).

There is somewhat conflicting information on the impact of child well-being in households growing burley. A study conducted in 1989 showed that there was no significant impact on nutritional status for children. However, for smallholders with less than one hectare, there was a drop in children's consumption of maize prior to harvest, potentially because of dependence upon purchased maize during this time (Orr 2000).

C. Government and NGO Responses

From the previous discussion, it is obvious that the government was implementing a number of policy initiatives to address the economic hardships that Malawians were experiencing at the end of the 1970s. Although the focus was still on maize self-sufficiency, steps were taken to try to assist smallholders through credit and retention of some subsidies. The government also responded positively with food assistance to the mealy buy disaster that hit Northern Malawi in the late 1980s.

Despite these initiatives, the government still saw the estate sector as the primary driver for economic development throughout the 1980s. As a result, the welfare and livelihoods of the poor smallholders did not improve. In fact, the levels of poverty and inequality increased through time.

V. 1990-1991: A Shift to Smallholder Tobacco Production

A. Meso/Macro Processes Influencing Vulnerability

In 1990, the bias of the World Bank and IMF towards the estate sector was reversed in the Agricultural Sector Adjustment Credit, signed in 1990 (Ellis et al 2002). This was the first time the World Bank acknowledged and set out to redress the detrimental poverty outcomes of the previous estate-biased approach by focusing on smallholders (Ellis et al 2002; Whiteside and Carr 1997).

During this time there was also a change in the government's burley tobacco production policy to allow for cultivation by smallholders. This came about after much international pressure from donors. Burley tobacco production increased dramatically on the part of smallholders. For example, the supply response on the part of tobacco provided by smallholder was immediate and dramatic. Production tripled over the first six years (Devereux 1997). Burley tobacco production by smallholders was viewed as a positive step for a number of reasons: 1) It increased income for smallholders; 2) Soil fertility is boosted for maize following a tobacco harvest because of fertilizer use; 3) Increased smallholder purchasing power; and 4) Increased marketing opportunities (Whiteside and Carr 1997).

The production of burly tobacco was first permitted on a pilot basis during the 1990-91 growing season. At that time, a total of 7,600 growers were registered to grow burley

tobacco with a quota of 3.0 million kilograms. Smallholder tobacco was sold to ADMARC at below market prices (Diagne and Zeller 2000).

Potential negative impacts of increased burley tobacco production included soil erosion from increased hillside cultivation; the need to observe a 1:4 rotation to avoid nematodes; timber use for curing shelters; and excessive reliance on a single crop in an uncertain world market. Total forest cover has declined by 41% between 1971 and 1990 (2.3% per year, national average and 3.4% per year, non-reserve land) (Whiteside and Carr 1997).

Tobacco liberalization also resulted in greater demand for ganyu from larger smallholders (Whiteside 1999). These labor demands created time constraints for poorer households to grow burley, especially for those who did not have access to credit.

In terms of migration, opportunities to work in the mines in the early 1990s begun to dry up. This had a huge impact on household income. In a study conducted in Southern Malawi, out-migration of men created a large number of women-headed households during the 1980s (Peters 1999). The elimination of this source of livelihood was the result of the Malawian government banning this migration in order to curve HIV infections as well as policy changes towards migrants within South Africa (ibid).

Credit

The Malawi Mudzi Fund (MMF) initiated lending operations in 1990. The fund was established in 1987 as a pilot program of the World Bank funded agricultural credit program that supported SACA. The objective of this fund was to provide loans to poor rural households with less than one hectare of land for non-farm Income Generating Activities (IGAs). The majority of the borrowers of the MMF were females (95%), taking credit for the sale of produce (fish, beans and maize), and other small scale trading activities. A few borrowers took loans for crop production with a minimal number granted for hybrid maize.

Other economic changes that occurred that had significant impacts on rural livelihoods were the removal of the foreign exchange approval requirements for most imports in 1991 (Ng'ong'ola 1996). Population increases and estate expansion continued to have an effect on landholding for smallholders such that by 1990, the estimated average landholding size was 1.17 hectares.

B. Responses of Communities and Households to Economic, Political and Environmental Changes

Up to 1991, over 30% of the smallholders had access to credit for growing hybrid maize and burley tobacco. Aside from the MMF program, credit programs still discriminated against women headed households and women farmers. The distribution of poverty and food insecurity in Malawi was geographically concentrated. For example, some of the poorest households could be found as ganyu laborers on the estates in the Central Region and in the Southern Region where land sizes were extremely small. In addition, although

the Southern Region had access to one-third of the total land area, it contained half of the country's population and two-thirds of the country's poor (Devereux 1999).

Food insecurity was most prevalent and severe within the female headed households (de factor and de jure), which represented 25% of all smallholder households, but 33% in the Southern region. Two-thirds of the female headed households were unmarried; they were earning 40% less per day in ganyu labor compared to men (Devereux 1997).

The infant mortality in early 1990s was over 150 per 1000, stunting rates were higher than 50% and one in four children died before the age of five (Devereux 1997). Despite the attempts to identify new drivers for poverty alleviation (e.g. burley tobacco production), livelihood insecurity was increasing for many of the poor due to on-going slow onset processes, such as population increases (3.3% per year) and resulting declines in landholdings and soil fertility as well as policy biases that favored the better off rural producers.

C. Government and NGO Responses

The government developed a specific Food Security Policy in 1990. It differentiated between two types of food insecure households: Those farming households with less than 0.5 of a hectare (41%) would require targeted income transfers. Smallholders farming between .5 and 1.5 hectare (31%) could potentially be self-sufficient in agricultural production, if they were provided with the right inputs. It was this group that was primarily targeted for hybrid maize, burley tobacco and other export crops. The government had essentially written off the poorer smallholders (Devereux 1997).

VI. 1991-1993: The Southern Africa Drought and Its Impact

A. Meso/Macro Processes Influencing Vulnerability

In 1992-93 a major drought hit southern Africa. Maize production was reduced by more than 46% in Malawi, dropping to 650,000 metric tons from 1,400,000 metric tons (Eldridge 1997). This 1992 food shortage was exacerbated by the influx of one million refugees from Mozambique into Malawi. Approximately 6.1 million people registered as beneficiaries for food assistance, which was two-thirds of the entire population. Over 300,000 metric tons of drought-relief food was distributed through both direct distribution and food for work, however the actual per capita receipt of relief food was quite low. Food was not targeted to the most vulnerable and the distribution of maize was quite delayed (Eldridge 1997). Maize prices quadrupled within three months, from July to September (Devereux 1997). The Gross Domestic Product dropped by 7.9% (Eldridge 1997).

The drought also created major problems for the credit market. SACA experienced severe loan recovery problems due to the collapse of maize production. The loan defaults resulted in a number of smallholders being excluded from future credit programs. For example, in 1992 there were 400,000 smallholder borrowers participating in SACA. This

dropped to 34,000 in 1994 and eventually forced the closure of SACA that year (Diagne and Zeller 2001).

The low rainfall in 1992 demonstrated how vulnerable smallholders were to weather shocks, where 63% of smallholders were negatively affected by the low rainfall (Strambuli 2002).

B. Responses of Communities and Households to Economic, Political and Environmental Changes

Food expenditures as a proportion of total household expenditures increased from 40%-60% to 70-90% (Eldridge 1997). To cope with food deficits, households implemented a number of strategies. These include:

1. Dropping children out of school; girls were most severely impacted and were less likely to return.
2. Children became more involved in income-generating activities for the household
3. Households decreased their purchase of inputs, thereby lowering their production the following year
4. Households decreased their investments in health care.
5. Asset sales led to wide-spread impoverishment. Livestock sales accounted for a significant portion of household asset losses[3].
6. Remittances from urban to rural areas declined.
7. Pressure on the environment and forest resources increased; the sale of charcoal increased[4].
8. Informal safety nets are stressed and social networks begin to break down (Eldridge 1997).

In the year following the drought, the total area under cultivation decreased primarily because many poor farmers were forced into wage labor for immediate cash needs and were not able to work their own fields (Eldridge 1997). A government study in 1993 indicated that late land clearing and planting reduced crop yield by 20-30% and untimely or insufficient weeding reduced yields by a similar percentage (Alwang and Siegel 1999). Despite attempts to diversity to drought-tolerant crops, many poor farmers were unable to get access to seed from the government or NGOs (Eldridge 1997). Households also resorted in consuming local seeds, leading to a drop in biodiversity.

Many of the poorest households that did receive seed and fertilizer as part of the DRIP program (see below), sold their fertilizer to the estates and ate the seed because they were suffering from hunger (Devereux 1997).

[3] Most smallholders in Malawi owned relatively few animals, so any livestock losses during the 1992 drought were significant.

[4] Total forest cover has declined by 41% between 1971 and 1990 (2.3% per year, national average and 3.4% per year, non-reserve land) (Whiteside and Carr 1997).

The crisis increased the number of de facto female headed households as many of the men left in search for work (Eldridge 1997). Women reduced their food consumption to ensure that children had enough to eat. However, in the follow-up government Food for Work programs, women were not consulted in the designs of the activities (ibid).

One of the major coping strategies that households used was to ration food. Households began to consume green maize in early 1993, reducing crop production the following year. To compensate for the debts that were incurred during the 1992 drought, households pledged crops to debtors before they were harvested (Devereux 1997).

In 1992, it was estimated that one million Malawians were employed in informal businesses as a way to compensate for food short-falls; this does not include beer brewing and food processing (Devereux 1997). Micro enterprise was especially prevalent in the south, where demographic pressure on the land has forced smallholders to diversify their income sources (Peters 1996).

In summary, the drought exacerbated and accelerated the poverty processes that were already taking place in rural communities throughout Malawi. The drought essentially created the situation where debt became unmanageable, leading to the loss of future credit for a large number of smallholders. This was coupled with asset depletion, making households more vulnerable to future shocks. Human capital investments were also seriously jeopardized because resources were no longer available to households to retain children in school or to pay for medical care.

C. Responses by Government and NGOs

In addition to the food aid that was provided, the Government of Malawi, in conjunction with DFID and ActionAid, distributed free maize seed and fertilizer to smallholders throughout Malawi. This program was called the Drought Recovery Inputs Project (DRIP). This post-drought recovery program distributed 12,500 metric tons of local seed varieties in 10 kg packs to 1.3 million smallholders in drought-affected areas. Approximately 723,000 households were in the Southern Region, 409,000 were in the Central Region and 128,000 were in the North (Devereux 1997).

An important institution that was developed during this period is the burley club. Early studies (1993) from burley clubs indicate that better-off farmers dominated the clubs, however over time these clubs have become better managed and more representative of all the farmers belonging in the club. Many have developed internal policies on how to resolve conflicts and a group of them have benefited from a USAID-funded project to help clubs develop recordkeeping and other types of management processes (Peters 1999).

A study conducted in 1993-94 analyzed the impact of a USAID smallholder burley production program aimed at households holding between 0.8 – 1.5 hectares, with 0.2 ha per year dedication to burley cultivation. The results show:

- Despite targeting efforts, those that participated in the program had a mean of 1.6 ha, were male-headed and better educated.

- There was no statistical significance on whether or not burley clubs were biased against female-headed households.
- Households selected for the program were more likely to belong to burley or maize clubs, which allowed them to tap into extension services, seed and fertilizer
- Households with less land were more likely to allocate resources to food crops over cash crops. (Orr 2000).

VII. 1994- 1998: Transition to Democracy and Smallholder Liberalization

A. Meso/Macro Level Processes Influencing Vulnerability

Malawi's first multi-party elections were held in 1994, leading to the end of thirty years of authoritarian, single-party rule and inaugurating a new democratic government. The United Democratic Front passed a new constitution in 1995 that provided more civil freedoms (Fozzard and Simwaka 2002). A 1994 World Bank report found that at the close of the Banda regime in 1994, there was a multitude of institutions and departments with overlapping responsibilities, low performance, weak financial management and extremely centralized decision making. Management problems were further compounded during the transition between Banda and the democratic government (Fozzard and Simwaka 2002). The World Bank and IMF favored substantial reform to the public sector, however the government's reform efforts were limited (Fozzard and Simwaka 2002). This was because government aims to mediate previous imbalances were often derailed by factionalism, ethnic rivalry and regional pressures (Ellis et al 2002).

The new government of Malawi aimed to promote smallholder growth and poverty reduction through a series of policy reforms and investments in agriculture, social services and infrastructure. The primary goal was to use structural reforms to stimulate agricultural intensification and diversification. Policy reforms focused on:

- Removal of restrictions on production and marketing of crops, namely burley tobacco
- Liberalization of input and output markets.
- Reform of land markets.
- Removal of regulatory bottlenecks in the transport sector.
- Irrigation and dry season (dimba) gardens (Whiteside 1999).

"Implicit in the reforms is the notion that smallholders have underutilized or inefficiently utilized resources. Most rural Malawians, however, have limited resource bases" (Alwang and Siegel 1999).

Marketing restrictions on tobacco were lifted in 1994. Smallholders now had a choice of selling tobacco directly to auction floors, to intermediate buyers, or to ADRMARC (Ng'ong'ola 1996). Liberalization of the tobacco market led to better prices for smallholder tobacco (Whiteside and Carr 1997).

However, due to market liberalization of crops, too many farmers started to grow the same crops, leading to the collapse of market prices for most of these crops in 1996. This happened with tobacco, cotton and soybeans. The 1996 oversupply of burley, combined

with low quality and poor world market access, led to the collapse of the market, making cost recovery more difficult.

The Growth of Private Traders

The use of intermediary traders for burley came about in 1994-95 (Orr 2000: 351). The development of private traders complimented the activities on the ADMARC, however these traders often lacked capacity for large-scale ventures and had to overcome both financial and logistical constraints, such as transportation, storage, procurement of crops, etc. Traders could receive loans from the Small Enterprise Development Organization (SEDOM). (IMF 2002).

There was a close relationship between traders and ADMARC. When ADMARC was not open, traders were able to get goods at lower prices from farmers, however they adjusted their prices in-line with ADMARC when it was open, making it a more advantageous environment for sellers. Traders preferred working with legumes (except when maize was scarce and the profits high), due to the higher profit margin (Peters 1999).

The removal of export bans in 1994 provided positive influences to cross-border trade as well as circular migration (Orr and Mwale 2001). Import/export licensing was substantially simplified and a number of commodities requiring licenses had decreased. The paring down of licensing requirements led to an increase in grain legume production and rural trade. Production and marketing of hybrid maize seed was liberalized in 1993-94 (Ng'ong'ola 1996). In 1994 export bans on groundnuts, beans and pulses were also removed.

The removal of all forms of maize subsidies resulted in sharp increases in prices for hybrid seed and fertilizer to farmers with a corresponding drop for the purchase of these inputs . Although farmgate prices for maize also rose dramatically during this time, fertilizer prices rose twice as much. In 1992, it took 10kg of maize to pay for one kg of fertilizer; in 1996 it took 22 kg of maize to obtain that same quantity of fertilizer (Whiteside and Carr 1997). As a result of the elimination of subsidies in fertilizers (1993-94) hybrid maize production declined (Orr and Mwale 2001). The problem with privatizing the fertilizer market from control by ADMARC is the highly seasonal nature and risky business of the operation due to a single and highly-variable rainfall period. The liberalization of maize prices and the cost associated with private trade, had created a substantial rift in maize values from the start of the harvest season to later in the year. Poor farmers are negatively affected by the increased prices because they are forced to sell maize immediately after harvest at low prices to meet cash needs and then repurchase maize later in the year at substantially higher prices to meet consumption needs (Whiteside and Carr 1997).

Although the Fertilizer Subsidy Removal Program had been in place since 1987, the government never fully put it into operation until the mid-1990s. As a result, fertilizer prices quadrupled in two years (1995-1996). Fertilizer use became skewed towards largeholders and the estates, which marginalized the poor to an even greater extent. There was a lagged effect in the increase in fertilizer prices, attributed to free input

programs, such as the Drought Recovery Inputs Project (DRIP) in 1992-93 and the Supplementary Inputs Projects (SIPs) of 1994-95 and 1995-96, which will be discussed further in detail below (Gladwyn et al nd).

Credit

The credit system collapse in 1994 when repayment rates plummeted due to drought and election year promises (Alwang and Siegel 1999)[5]. SACA was dissolved in 1994 and was replaced with MRFC (Malawi Rural Finance Company), a private company with stringent eligibility criteria that excludes the most financially insecure smallholders: only smallholders that had never defaulted on a SACA loan were eligible (there were only 34,000 borrowers in 1994, down from 400,000 in 1992) (Diagne and Zeller 2001). This criterion contributed to high recovery rates. Interest rates increased from the low subsidized rates of the 1980s to rates ranging from 30-50%, depending on inflation. While the economic arguments for this change were sound and helped to deflate an artificially high demand for credit, the increased interest rates of 1997 and 1998 had negative impacts on tobacco production (Gladwin et al nd).

Tikolore Clubs offered an alternative to private lenders and assisted groups of poor households to help overcome chronic food shortages by taking a collective loan. Lenders to these Tikolore Clubs received subsidies from the government to cover higher initial transaction costs. Borrowers were required to attend ten weekly training sessions at the end of which they were offered modest loans at the standard interest rate (44% in 1996/7) (Whiteside and Carr 1997).

High default rates under SACA were attributed to several factors. First, lending structures highly influenced repayment. Second, credit schemes with conflicting agenda or motives created confusion over whether money offered is a loan or grant. Finally, agricultural loans were subject to high risk associated with weather and international market fluctuations (Jumbe 2002).

Environment

The Government of Malawi published the National Environmental Action Plan (NEAP) in 1994. It estimated that environmental degradation due to soil erosion, deforestation, water resource degradation, fisheries depletion and biodiversity loss amounted to over 10 percent of GDP (DREA 1994). A study published in 1998 by the Malawi Sustainable Development Network Programme says "It has been realized that poverty in Malawi is one of the root causes of environmental degradation. Low agricultural productivity, dwindling smallholder farmlands and escalating input prices have driven the rural poor into destitution and some look to cutting and selling wood as an alternative. Furthermore, continued population growth rate is exerting greater pressure on the environment".

Smallholder agriculture in the more populated Southern Malawi was facing a crisis of production. Intensive agricultural livelihoods, pressure from SAPs to increase

[5] Many politicians competing with the Banda regime promised to forgive farmers for loan repayments if they elected them. These promises, coupled with drought, led to only 13% of the 1992-93 loans dispersed being recovered by SACA (Gladwin et al nd).

intensification, and sheer population pressure pushed the capacity of the environment to sustain these activities to its limit. Many of the activities of smallholders, in particular the cultivation of hillsides, were not environmentally sustainable in the long term (Whiteside and Carr 1997). In addition to the environmental degradation occurring at the time, in 1994-1995, another drought hit, having another large negative effect upon production.

Environmental degradation contributed to crop production declines. By 1997, maize productivity was only 84% of what it was in 1988 (Stambuli 2002). Local maize grown on fertile soil produces twice the yield that hybrids can on poor soil. Therefore the constraint for farmers was not necessarily germplasm related, but soiled fertility related (Orr 2000).

Retrenchment
Thousands of Malawian workers, many of which were urban residents, were retrenched as a result of structural adjustment, public sector reform and privatization of estate enterprises. For example, in 1995, the government retrenched 20,000 civil servants. Retrenched workers were not provided training for new employment sectors and were not given a soft loan (Devereux 1999).

Devaluation
In 1994, the Malawian Kwacha was floated against the U.S. dollar and it depreciated 300%. The value of the Kwacha dropped by January of 1995 to 15.3 to one U.S. dollar with inflation estimated at 35% (Ng'ong'ola 1996). One positive benefit from this 1994 monetary policy was that cross-border trade in agricultural commodities increased (Orr and Mwale 2001).

Land Tenure
Access to land continued to diminish for smallholders due to the reallocation of land to relatives and children. Three percent of the households in the customary sector did not have any land for cultivation. Land conflicts were increasing due to pressures on landholdings and degradation of the natural resource base continued because of the breakdown of traditional systems of managing these resources (Bosworth 1998; Mbaya 2002).

By 1993, nearly half of all landowners in Malawi were considered functionally landless, holding less than 0.5 hectares of land. Due to the need to rotate crops, burley tobacco was not considered appropriate for smallholder farms of this size (Orr 2000). At this same time, the number of estates increased to 37,000 by 1995, with the size holding being between 10-20 hectares (Whiteside and Carr 1997).

In summary, although the structural adjustments began in Malawi in the 1980s, the 1990s saw an acceleration of processes begun earlier, such as devaluation, large maize price rises and rapid input price rises. As inputs became unaffordable, farmers that had access to livestock switched from using chemical fertilizers to organic manure. However, those farmers who did not own livestock and who did not have this option often shifted from plow cultivation to hoe cultivation (Devereux 1999). Many villagers felt that when

subsidies were dropped in 1994-95, this was a major factor contributing to their food insecurity. This, coupled with the collapse of SACA in 1994, also led to limited access to credit. Thus the liberalization of tobacco production was not the solution to poverty and food insecurity as was hoped. Only the larger farmers benefited disproportionately. Economic stratification of rural communities began to accelerate in 1995 (Devereux 1997).

Social transformation also occurred during the 1990s with the transition to democracy. Repressive rule of law was replaced with anarchic mob justice. Neighbors who once before supported each other, turned on each other. Observers believe that the freedom that accompanied democratization in 1994 contributed to a breakdown in community solidarity. In the past, even during the 1992 drought, wealthier neighbors would provide poorer community members with in-kind gifts of food or cash, loans, or ganyu opportunitities. However informal safety nets were no longer functioning as effectively as in the past (Devereux 2002). This led to livestock theft and crop theft and was one of the major reasons why the production of cassava did not take off in some areas, due to the susceptibility of tuber theft during drought periods (Jackson et al 2003).

Education

In 1994 the government of Malawi introduced a Universal Primary Education Fee to help reduce educational expenditures by households. Universal Primary Education increased the number of students, but did so at the cost of educational quality. The proportion of qualified teachers dropped from 84% in 1993 to 50% in 1997 and student repetition rates increased sharply (Fozzard and Simwaka 2002). Educational policy reforms were introduced to improve teacher training, increase the availability of instruction material and to address a highly skewed geographical distribution of teachers (IMF 2000). Although female enrollment rates were significantly higher, so were the dropout rates (Fozzard and Simwaka 2002).

B. Responses of Communities and Households to Economic, Political and Environmental Changes

Due to market liberalization, droughts and political upheaval, most Malawian households were forced to diversify their income sources to cope with volatile conditions. For example, although 80% of the land cultivated in the southern portion of Malawi was in maize, households typically intercropped with pigeon peas, cowpeas, beans, groundnuts, cassava, pumpkins, sweet potatoes, sorghum and various types of vegetables (See Annexes for information on crop diversification trends over time). In addition, non-food crops such as tobacco (burley and dark fired), chilies, sunflowers, grass and trees were also grown (Peters 1999).

Production of legumes, mainly peas and soybeans, as well as groundnuts, also increased. For the poorer households, crop diversification was heavily influenced by the size of landholdings and the quality of the land. For this reason, the number of crops grown were much fewer than for better-off households. Poorer households were likely to diversify their crop production with intercropping of groundnuts and cowpeas. Farmers were quick

to change crops to take advantage of the growing demand for a particular crop. For instance, chilies were in high demand, which increased production to the point of market saturation (Peters 1999).

Smallholders favored crop diversity niches that did not interfere with household food production, such as grain/legumes and vegetables intercropped with maize. By contrast, cash crops that competed directly with resources for maize were not widely adopted. In fact, households often adopted burley tobacco to obtain credit for maize production. Few households specialized in cash crop production because of the uncertainty of the market and the priority placed on household food supply (Orr and Orr 2002).

Despite opportunities for smallholders to enter new agricultural markets, they faced several problems. Traders had a shortage of capital and therefore had limited opportunity to invest in vehicles and storage facilities. As a result, transportation was a bottleneck for traders in many remote areas. Traders also had to compete with ADMARC for limited transportation and had to deal with laws prohibiting the transport of goods and passengers simultaneously. In addition, ADMARC continued to operate pan-seasonal and pan-territorial pricing policies that acted as a deterrent to traders (Smith 1995).

The high cost of growing fertilizer-fed hybrid maize had led to a decline in household maize production. Households cultivated both local and hybrid maize. Households preferred to grow hybrid maize due to taste and the quantity of flour produced, despite the lower yield due to soil infertility and lack of inputs (Peters 1999).

A number of smallholders had also taken up burley tobacco production. By 1994, Malawi was the fourth largest tobacco exporter in the world (Orr 2000). Despite high labor and input demands, many households in southern Malawi have taken up burley tobacco farming because of the high profit margins. Even after years where prices were poor, 80% of the farmers surveyed were still growing burley tobacco (Peters 1999). Poor farmers however were least likely to produce burley tobacco. In the Southern Region, soil quality was too poor for production of tobacco without fertilizers.

Women headed households were less likely to produce burley tobacco due to labor constraints. The time needed for childcare, cooking and gathering firewood constrained women's ability to dedicate time to burley production (Orr 2000).

The poorer households, particularly in Southern Malawi, did not participate in maize clubs because they were either excluded or were not confident they could pay back loans. Thus, the maize clubs were dominated by better-off farmers (Peters 1999).

A nation-wide livelihood study of 20,000 households conducted in rural Malawi in 1995 indicated that poor Malawians relied on a number of strategies to meet their consumption needs and to cope with food deficits. It is estimated that 26% of their food needs were met with their own production, 45% from income generated off-farm, 18% due to dietary adjustments, 7% through informal safety nets, such as meal sharing and food loans, and 4% from formal safety nets (Devereux 1999).

Micro-enterprise

As households reduced their household maize production because they could not afford inputs, the search for other forms of income became a necessity. There was a massive expansion of micro enterprises following market liberalization. According to National Survey Data collected by the Government of Malawi between 1992 and 1999, the number of new micro enterprises increased five times, from 20,000 to 100,000. (Orr and Orr 2002). Many rural households viewed micro enterprises as short-term, seasonal sources of income, rather than a livelihood strategy to replace agriculture (See Annex X). The highest returns to smallholder income were from petty trading (called geni), while craft enterprises (baskets, hoes, granaries) had the lowest return to labor, often employing elderly men too weak for ganyu. About one-third of households in Malawi were involved in micro enterprises, with about two-thirds of these being women. Income derived from micro enterprises was highest in the south. (Orr and Orr 2002).

Ganyu

Ganyu labor was one of the main strategies that the poor used to meet consumption needs. Some of the disadvantages of relying upon this source of income to meet food needs were: 1) It pulled labor away from their own fields during critical times in production; 2) Returns for labor were below minimum wage; 3) Women earned even less than men for equivalent work; 4) The amount of time searching for labor was considerable; and 5) Payment rates decreased in bad production years (Devereux 1999).

Ganyu labor was most prevalent in the most vulnerable areas in Malawi – the Southern and Central region. In the Southern region during the mid-1990s, after the war ended in Mozambique, cross-border trade began to flourish. Food, labor and the sale of other products were passing across the border. Malawians living in border communities next to Mozambique engage in both trading and ganyu labor (75%) in Mozambique (Whiteside 2002; Devereux 1999).

By the mid-1990s ganyu had developed a social stigma such that doing ganyu was an admission that the household had run out of food. However, a longitudinal study conducted by Peters in the southern region of Malawi found that better off households providing opportunities for ganyu labor to neighbors and relatives were compensating them with preferential rates, compared to those rates offered to income workers[6]. Thus, ganyu in this case operated as an informal safety net and did not follow classic supply and demand models. Another example of this was noted by Pearce et al (1996) who observed that households in the Southern region offering ganyu opportunities may hire more individuals than needed, or show preference to hiring neighbors or relatives during the hungry season (in Whiteside, 1999). Peters also observes that among local individuals participating in ganyu, the chronically poor were the most likely to work for food in pre-

[6] Whiteside (1999) notes that "There is little in the literature to show how the 'going rate' for ganyu is fixed. However in particular areas in a particular year a rate does seem to get established which becomes a local norm." He also notes that the observation of obligation to provide support to neighbors and relatives may warrant additional research.

harvest months and to have limited bargaining power in setting compensation amounts due to others knowing these individuals had few reserves (Peters 1996 in Whiteside 1999).

Leach (1995) noted that studies of ganyu labor by household heads indicated that male household heads typically earned 38% higher wages than female-headed households. Whiteside (1998 field notes) also noted disparity between wages for men and women, but partially attributes this difference to women working shorter hours in order to take care of household-related commitments (Whiteside 1999).

A survey conducted in 1993-94 found that the majority of ganyu was being done for other smallholders (an average of 64%). At the same time, 91% of the laborers received cash payment. A study from the Central Region in Malawi indicates that the preferred method of compensation was maize grain or flour. Payment was lowest on tobacco estates and highest on tea estates (Whiteside 1999). Poor households seemed to have preferred wage labor to small enterprise activities because these sources of income were less risky (Orr and Orr 2002). In 1993, when food aid was distributed, the supply of ganyu went down and larger farms had difficulty recruiting adequate amounts of labor.

A study conducted in Salima and Mchinji Districts found that following the drought of 1994-95, three-quarters of the poorest and intermediate households and one-quarter of the richer households did ganyu. In contrast, in a 'normal' year approximately one-quarter of poor households would participate in ganyu. (Pearce et al in Whiteside 1999).

Livestock

Livestock ownership in Malawi relative to the rest of Africa is quite low. Ninety-percent of the rural households owned no cattle and only 31% owned goats. Forty-four percent of rural population and 20% of the urban population owned poultry. Reasons given for why livestock ownership was so low included decreased security and increased theft, lack of capital to purchase animals, non-suitability of land for grazing (particularly in the densely populated areas of Southern Malawi) and limited access to veterinary services (Devereux 1999). The limited access to animals reduced the flexibility of rural livelihoods to manage risk and to accumulate assets as a path out of poverty (Ellis et al 2002). See the Annexes for information on livestock trends over time.

Vulnerability to food and livelihood insecurity will vary depending on the context in which households find themselves. In a study conducted by FEWS in 1997, the country could be divided into several clusters reflecting different strategies of food acquisition and production (Figure 1). Findings from this study include:

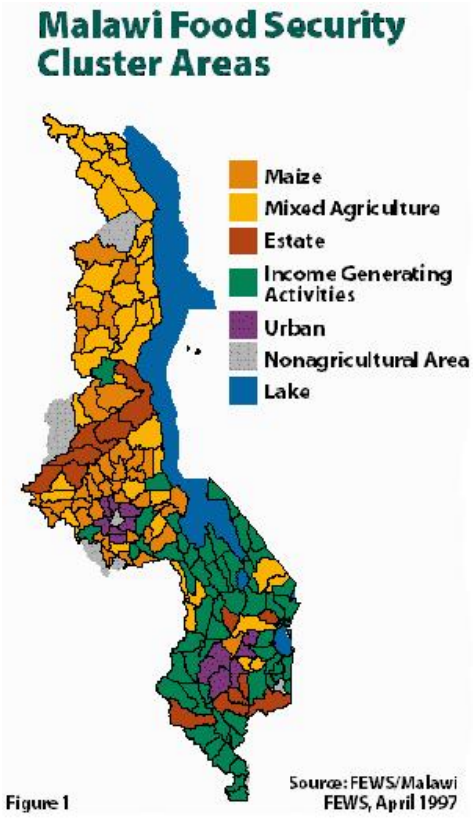

Figure 1

- In households where maize production was the primary source of food and income, those families that were most vulnerable tended to have smaller landholdings, plant fewer drought-resistant crops, be located further from trader centers and be women-headed households.
- In mixed-agriculture clusters, the most vulnerable households relied on a larger number of IGAs, possessed smaller landholdings and had fewer female members in the household.
- Estate cluster: Vulnerable households were located in areas with variable maize production, further from markets, and had more female headed households.
- Income-generating activity cluster (located primarily in the southern portion of the country): In areas where off-farm activity represented the majority of the income, the most vulnerable households were women-headed, had low school enrollment rates and larger families.
- Urban cluster: Households most vulnerable in urban and peri-urban areas were farther away from produce markets, did not receive much income from fish or produce, and faced lower prices for cassava, maize and other produce.

In 1995 the estate agricultural sector employed 376,000 workers, more than half the total wage employment in the country. Most employees lived on the estates and with their families comprised of approximately one million people (Whiteside 1999). In 1997, 589,000 rural Malawians were tenants on rural estates. They comprised the main labor force for burley tobacco and had no security of tenure. These tenants lived in extreme poverty and were often exploited. Their produce was under priced due to deliberate under-grading by estate owners. The consequences of these conditions were that malnutrition was high and so was turnover among tenants (Whiteside 1999).

C. Responses by the Government and NGOs

During the mid-1990s, there were three broad positions taken by government, donors and NGOs and UN agencies with regards to how to tackle food insecurity. The government was primarily focused on national self-sufficiency and was interested in concentrating resources on raising maize production for national food security. However, the government's capacity to deliver subsidized inputs was not sustainable, and their strategy failed to take into consideration the impact of the collapsed credit scheme. Escalating

input prices essentially made it more and more difficult for smallholders to grow hybrid maize (Devereux 1997).

Donors were interested in market liberalization. This involved introducing price incentives to increase smallholder income through diversification and investment in high value crops. World Bank and USAID wanted a rapid liberalization process to be put into place whereas DFID and the EU wanted to implement a slower-paced, more phased approach, ensuring that safety nets were in place to protect the poor as liberalization of the market occurred. One problem with the market liberalization approach was that it was difficult to guarantee food security to the poor in a context where infrastructure is weak, institutions were poorly developed and agricultural production was prone to fluctuations caused by drought, macro-economic processes and other shocks. In many ways, market liberalization actually accelerated the processes of rural economic differentiation and threatened the food security of the poor due to higher food prices (Devereux 1997).

NGOs and many UN agencies were interested in the household food security of smallholders and wanted to ensure that enough resources were targeted to the poor to enable them to meet their food and livelihood needs (Devereux 1997). In general, the approaches used by both NGOs and UN agencies were primarily focused upon safety nets that were based upon subsidized or free inputs or food aid. The impact of such interventions was limited due to the fact that food aid treated only the symptoms of food and livelihood insecurity, and the subsidized/free inputs were not sustainable or able to make much of an impact on households with very small landholdings. Additionally, programs investing in human capital were minimal, such as training for skill enhancement and off-farm employment.

Safety Nets

In 1994-95 in response to the collapse of the smallholder credit scheme and a second drought, the government of Malawi, DFID and ActionAid implemented the Supplementary Inputs Project II (SIP)[7], which targeted 800,000 smallholders primarily in Southern Malawi. This program involved a mixed strategy where hybrid seed and fertilizers were made available to smallholders. In addition, a limited amount of sorghum seed, cassava and sweet potato cutting were distributed. A third SIP was implemented in 1995-96, following the same mixed strategy. The third SIP was justified in response to the high input prices that accompanied the Fertilizer Subsidy Removal Program. Approximately 460,000 farmers in marginal areas were targeted as well as 200,000 in higher potential areas (Devereux 1997).

As food security and poverty got worse, all development agencies and the government agreed that targeted assistance was needed to assist the chronically poor through the transition period to a free market economy. The primary manifestations that such safety nets took on were public works programs. In 1995, as a part of the World Bank supported Poverty Alleviation Program (PAP), the Malawi Social Action Fund (MASAF) was set up. This program had three components: 1) Investment in village-level infrastructure 2) Community empowerment and poverty monitoring and 3) Public works (Devereux 1997).

[7] The first SIP program was the DRIP, implemented after the 1992 drought.

The public works part of MASAF essentially targeted food deficit areas and created labor-intensive public works projects to build roads, bridges and irrigation systems. Public work projects were piloted in 1996 and moved to full implementation by 1997. The World Food Program provided food resources to help support MASAF public works projects and a strong effort was made to target women participants in such programs[8] (Devereux 1997).

One of the criticisms of the MASAF program is that during the design process, it did not take into consideration the labor burdens it was creating for women. In addition, other vulnerable groups who were not able to work were excluded from these safety net programs (the elderly, chronically ill, pregnant women or women with small children). Therefore, although MASAF was a safety net program, it was not comprehensive in its targeting. Positively, MASAF used food-for-work programs in remote areas where markets were limited, and cash-for-work in urban areas where markets were well-established (Devereux 1997).

VIII. 1998- 2000: Chronic Poverty and Food Insecurity

A. Meso/Macro Level Processes Influencing Vulnerability

In 1998, the Malawian government laid out a decentralization plan. This was called the Local Government Act of 1998, which restructured local government in 28 districts and five municipalities. These political entities were given broad functional responsibilities that included education, health, environment, transportation, licensing and community development (Fozzard and Simwaka 2002). Some observers (e.g. Ellis et al 2002) felt that these decentralization processes were likely to make matters worse on the poor through increased formal and informal taxes and levies and various other hidden payments and restrictions due to institutional blockage.

Population increases over the last three decades put a great deal of pressure on Malawi's natural resource base, which had been declining rapidly. The reliance upon subsistence agriculture was not sustainable, given the current levels of technology utilized (Mataya 1998).

The Increasing Impact of HIV/AIDS

DHS data comparing death rates from 1992 and 2000 show an increase of mortality for women to be 74% and 76% for men. The assumption is this primarily is due to increases in HIV prevalence, since no major disease outbreaks have occurred during this time period (Ngwira, el al 2001). Malawian women are particularly impacted by HIV. They represent 55% of all current infections (UNAIDS, 2000), the result of increased susceptibility due to physiological factors, as well as cultural practices such as early marriage, and economic conditions that force women to engage in sexual activity in exchange for food or other essential items (Ngwira, et al 2001).

[8] When cash was used for the public work programs, men were the primary participants. When food was used, women were the primary participants.

Devaluation

The devaluation of the Kwacha by 62% in August 1998 caused a significant shock for Malawians and forced the prices of most basic commodities to double. For example, fertilizer prices in 1998 were 350 MK per 50 kg bag and in 1999 in was 800 MK per 50 kg and in 2000 fertilizer prices rose to 1,200 MK for 50 kg bag. The price of maize almost doubled in 1998 (3.9 MK/kg to 6.5 MK/kg by October 1998). This led to riots in Blantyre and Limbe. This devaluation imposed heavy pressure on informal safety nets, with more people requesting assistance (e.g. cash, loans and food) and less people able to meet these requests (Devereux 1999). The government tried to intervene by compensating for the devaluation of the Kwacha through limiting maize price rises. Fiscal policy in Malawi has been a continuing problem in the late 1990s. For example, rates of inflation had gone from 9% in 1997 to 45% in 1999 and 29% in 2000. The IMF blamed the government that increased fiscal deficits were the result of bailouts of ADMARC.

Also during this time, a number of other policy changes occurred. In 2000, export bans on maize were finally lifted (Orr and Mwale 2001). Tariffs were also phased out in 2000 (Ng'ong'ola 1996). By the late 1990s, the agricultural sector produced about 40% of GDP and contributed to 90% of the exports. Maize accounted for about 25% of this GDP and burley tobacco 65% (Fozzard and Simwaka 2002). However, in most markets in February 2001, maize prices were five to seven times greater than what they were the same time last year (World Development Movement 2002).

In 1999, the National Food Reserve Agency (NFRA) was created and was charged with managing the strategic grain reserve previously managed by ADMARC. The World Bank and other donors were recommending that the role of ADMARC be scaled back and that the grain stocks managed by the National Food Reserve Agency would be managed independently (Devereux 2002). In July 2000, the IMF advised the NFRA to sell off some of the grain reserve to pay off the debt of one billion Kwacha that was owed to a South African bank. Maize stocks began to be reduced from 225,000 MT to 140,000 MT. By 2001, these stocks had been reduced to 10,000 MT.

With regards to burley tobacco production, droughts and deteriorating terms of trade led to 30% lower prices in 1999 than in 1989 (Fozzard and Simwaka 2002). There is some evidence that suggests that correct farming practices for producing burley have been decreasing, resulting in negative impacts on production (Peters 1999). In addition, from 1990 to 2000, cassava production increased significantly, particularly near urban areas as well as cotton and groundnuts (Peters 1999).

In July 2000, there were signs that corruption was increasing. A report was produced by the Public Account Committee on the extent of government corruption and fraud (Devereux 2002). The report led to a souring of donor relationships with the government and resulted in the IMF withholding balance of payment funds and USAID, DFID and Denmark suspending their development funding. Thus, 2000-2001 was marked with

increased fiscal mismanagement, corruption and increasing political violence (Devereux 2002).

B. Responses of Communities and Households to Economic, Political and Environmental Changes

In a study that was carried out in 1998, 65% of Malawians lived below the poverty line and were considered chronically food insecure. Based on this study, the majority of these poor lived in the Southern and Central Regions of the country (Government of Malawi 1998).

Based on a participatory livelihood assessment that was carried out by CARE in the Central Region in1998, the poorest households earned less that 1,000 kwacha per year, could not afford inputs, were not educated, had trouble getting access to seed, had no animals, had no dimba gardens, either were landless or functionally landless (had 0.5 to 1.0 acres of land), lived in dilapidated homes, rationed food during a major portion of the year, ate maize bran and relied upon ganyu labor and firewood sales. The poorest represented 37% of the households in these communities surveyed. They were sick a great deal of the time, relied on one meal a day and were most likely to have defaulted on a loan sometime in the 1990s (most likely after the drought).

The next strata of poor households were not much better off, and represented 51% of the populations in the villages. They often had less than one hectare of land and also relied upon ganyu labor and selling firewood. They relied on two meals a day when income was in short supply.

This CARE study found that farmers in the Central Region grew a diverse range of crops, such as maize, soybeans, beans, groundnuts, tobacco, sugarcane and vegetables. The majority of farmers did not use fertilizer, due to its high cost. These households acknowledged that environmental degradation increased dramatically in the 1990s, due to the number of the trees that had been cut for firewood sales. Access to seed was considered a major problem and cuttings for sweet potatoes and cassava were in short supply. Vegetable seeds were also difficult to obtain. Many families lacked capital for off-farm income activities, such as petty trading. February to March was considered the worst time in terms for hunger and very few labor opportunities were available as a result. Theft increased and was given as one of the main factors for why households owned very few livestock.

In a similar study carried out in the Zomba district in the Southern portion of Malawi in 1998, the majority of households were also food insecure. Land scarcity was a serious problem and the average size of landholdings for women headed households was 0.83 hectares and for male-headed household 0.91. Over 30% of the households were female-headed. By August 1998, 50% of the households had emptied their granaries and 95% by December (Devereux 1999).

Because households could not afford to purchase maize due to the high prices, many households were forced to make dietary adjustments by cutting down on the number of meals consumed as well as the types of foods consumed. For example, the percentage of households reporting eating one meal per day increased from 2% to 74% in the hungry season. Every household had switched to cheaper, less nutritious relishes (which accompanied the staple dish of nsima). More households also went to ganyu labor than before to meet food purchases. Moneylenders were not providing loans to the poorest households and informal safety nets were inadequate to make up the difference (Devereux 1999).

Urbanization was increasing dramatically during the 1990s. The Malawi Population and Housing Census conducted in 1998 found that urbanization increased from 850,000 in 1987 to 1.4 million in 1998, an increase of 68%. (Government of Malawi 1998). A number of individuals are moving into urban centers because of the difficulty of securing livelihoods in rural areas. Coping strategies employed by individuals in urban areas reflects the higher level of access to market opportunities. The main income earning activities that they engage in are in the informal sector (i.e. petty trading). There are indications that informal safety nets are functioning better in urban areas than in rural areas. Roe (1992) found that urban Malawians had high levels of access to borrowing opportunities, remittances and in-kind gifts from neighbors and relatives compared to rural areas (Devereux 1999). See the Annexes for information on rural and urban population trends over time.

A baseline study was carried out by CARE in 2000 in the Central Region. The major indicators that differentiated households were access to land, assets, types of income sources, education, skills and capacities (CARE 2000). Fifty-six percent of the households were in the poorest of the two categories and between 11% and 17% of all households had orphans. Access to wetlands, such as dimba gardens, were considered one of the most important natural resources by households in terms of food security. A number of the villages in the survey were plagued by poor roads, and the resulting transportation difficulties had a multiplier effect upon their ability to access essential services as well as maize mills. Medical facilities were also at some distance away and had limited supplies with high treatment costs. Women were particularly constrained from traveling to markets, while men typically had the means or money to obtain transportation to these centers of trade.

About one quarter of households belonged to farmer clubs and credit clubs (MRFC), and these were primarily the better-off households. Female-headed households had difficulty accessing loans and were less likely to belong to these clubs. More than 50% of the households belonged to some sort of social or welfare group. Extension services were weak, with 60% to 80% of households having not received any contact with extension workers. People pursed a wide variety of income generating activities in order to meet consumption needs. In addition to cultivating crops and pursing ganyu labor, the poorer households engaged in the collection of firewood for selling, beer production, weaving mats and baskets, petty trade, and running tearooms. Over the past several years, the poor and very poor have had trouble retaining savings (CARE 2000).

Women had limited claim or control over the money generated by the sale of produce. The money that they did have access to was generated through petty sales, such as baked goods. The poorest households did not manage to cultivate all their land because of labor constraints. As a result, most of them rented out a significant portion of their land. These households are only able to grow enough food to last them about three months out of the year. As for the better-off households, most of their land is put to productive use because they have the means to hire ganyu labor. Most poor households tried to retain poultry and goats, if possible, because they represented a source of income when food supplies dwindled. The poorest households often sell a large portion of their produce immediately after harvest to make loan repayments and buy household necessities (CARE 2000).

More than half of the households in the CARE baseline study never consumed meat. Households made the distinction between coping strategies utilized for obtaining food versus those used to obtain cash for loan repayments and non-food needs. It is hypothesized that due to the increasing impact of HIV/AIDS coping strategies that generate cash will take precedence over those that are used to generate food in order to pay for medical care or funeral costs (CARE 2000).

Whiteside (1998) predicted that permanent migration to Mozambique was expected to rise, due to the significant devaluation of the Kwacha in 1998, however this out-migration did not occur. In fact, migration rates have fallen as a result of harassment of Malawian migrants in Mozambique, skepticism about lasting peace and increasing land scarcity (Whiteside 2002).

In summary, based on the results of these studies, it is obvious that between 60-70% of households are experiencing chronic poverty and food insecurity. The increased price of inputs has resulted in lower production and increases in maize prices have led to consumption rationing. Prior to 2001, the conditions were already in place for a major food security disaster. Any small shock would have huge consequences on such a fragile, vulnerable population.

C. Government and NGO Responses

Starter Packs were initiated in 1998 by the Government of Malawi with support from DFID to compensate for higher input prices. Approximately 2.5 million households were targeted in 1998-99 and 1999-2000 and were provided fertilizer and hybrid maize seed (Devereux 1999). As a result of the distribution of these inputs, maize yields were significantly high in 1999 and 2000[9]. The program was scaled back to one million beneficiaries in 2001 with the TIPS program (Targeted Inputs Program). The main problem with this scaled back program was with targeting. Many of the poorest households were excluded (Devereux 2002). Table 1 provides a summary of the various input subsidy programs implemented in Malawi during the 1990s.

[9] Rainfall was high during these years as well, so the Starter Packs do not account for all the production increases (Devereux 2002).

Table 1. Input Subsidy Programs in Malawi

Date	Program	Number of Beneficiaries
1992-1993	Drought Recovery Inputs Project	1.3 million
1994-1995	Supplementary Inputs Project	800,000
1995-1996	Supplementary Inputs Project	660,000
1998-1999 and 1999-2000	Starter Packs	2.5 million
2001	Targeted Inputs Program	1 million

In addition to these input programs, the government continued to implement the World Bank sponsored MASAF programs. Cash-for-work and Food-for-work activities were implemented in the most food insecure regions of the country. In the poverty study that was carried out in 1998, it was found that public works programs such as MASAF had a substantial poverty effect on poor households (Mukherjee and Benson 2003). Studies found that these public works programs contributed to 19% of a household's food consumption needs[10].

Another project implemented in the Central Region at this time was the CARE Central Region Infrastructure Maintenance Program (CRIMP). This program was modeled after the Bangladesh Road Maintenance Project, which primarily targets the poorest women in food for work/cash for work programs. A portion of the income generated from the maintenance work is saved and used to capitalize income generating activities after the work in completed. The program combines a training component on business management with this capital fund.

IX. 2001- Present: The Current Food Crisis

A. Meso/Macro Level Processes Influencing Vulnerability

The increasing vulnerability to food shortages in Malawi that occurred throughout the 1990s left people extremely susceptible to future shocks (See Annex II). Two sets of factors came together in producing the food crisis of 2002: livelihood vulnerability and weak government institutions (Devereux 2002).

The shocks that hit Malawi from 2001 to the present were a combination of weather-induced shocks and socio-political shocks. Chronic poverty due to falling terms of trade, the lack of off-farm employment opportunities, diminished access to land, declining soil fertility and falling applications of agricultural inputs all created food access problems. In addition, the HIV/AIDS pandemic was decimating the labor force and raising household dependency rations. These poverty processes were combined with government policies that did not favor smallholder agriculture. These factors that influenced people's access to food, coupled with low availability of maize in the market, pushed Malawi over the edge.

[10] The majority of the MASAF projects are located in the Central and Southern portions of the country. Despite the positive financial impacts upon participating households, only 7.3% of all households in need participated in the first MASAF project.

Localized flooding in the Central and Southern Region in February and March of 2001 led to a food production shock, reducing maize production from 2.5 million MT to 1.7 million MT. This left a deficit of 273,000 MT or a 32% drop from the previous years (Devereux 2002)[11]. The magnitude of this food short-fall was underestimated by the government and donors primarily because of optimistic forecasts related to roots and tuber production[12].

The Government of Malawi had inadequate grain reserves to respond to the crisis because they had sold off a large portion of the reserve in 2001[13] (Devereux 2002). Much of this stock was purchased by private traders who profiteered from the sale of the grain reserve by buying the maize cheaply (7 MK/kg) and then hoarding it until the prices rose and resold it back to ADMARC at 17 MK/ kg). The limited availability of maize in the market led to huge price hikes, such that maize was sold for 40MK/kg by January 2001 (ibid).

The poor faced three major problems accessing food: They had an initial production shock due to flooding, then the hoarding of maize by the traders and finally, the limited penetration of imported food into the rural areas. These factors all contributed to higher maize prices.

B. Responses of Communities and Households to Economic, Political and Environmental Changes

In October 2002, people with livestock began selling them to purchase food. Terms of trade fell to one-third of their value. People first began rationing food by consuming smaller portions during meals and limiting the number of meals per day. During the worst months of the agricultural season of 2001-2002, households resorted to boiling vegetables and consuming unripe green maize in February (up to 8% of their crop). A number of people moved to towns, primarily women and children seeking casual labor opportunities as well as begging and gleaning maize bran from mills. Asset sales decreased dramatically, school drop out rates increased by 25%, people started to migrate and informal safety nets began to collapse. A result of this was a decreasing ability to care for the elderly and orphans (Devereux 2002).

People working on estate lands experienced food shortages because owners couldn't provide food. Anti-social behavior increased where people acknowledged wide-spread theft, particularly with livestock, dimba green maize, tuber crops and household items. Some women began exchanging sex for food (Devereux 2002).

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[11] Although the production outcomes were similar to harvest of 1997-1998, and higher than eight of the last 10 previous years, these food deficits were more critical because of the problems associated with importing adequate stocks and the inability of households to generate income to purchase food.

[12] FEWS-Net predicted a shortfall, but expected households to have carry over stocks from the previous year and also assumed that root and tuber supplies would be high (Devereux 2002).

[13] In 2001, the IMF recommended that the Government of Malawi reduce its strategic grain reserve in order to pay off debts as well as to 'turn over' the supply. However, the IMF did not recommend selling the majority of the reserve.

In a study that was carried out by CARE and SCF-US in four districts in the Central Region of Malawi in May 2002, two-thirds of all households indicated a decline in income. Many of the villages were in a state of transition, the result of food production problems over the last several years. Households identified as better off, were found to have actually slipped in their wealth ranking categories (Sutter and Saaks 2002).

The December VAC report for Malawi indicated that compared to the August assessment, households in the Northern region are employing fewer coping strategies than the Central and Southern regions, which have shown an increase in the number of coping strategies utilized (Malawi VAC 2002).

A survey conducted in July 2002 indicates that along Lake Malawi in the Mangochi district, the second most important livelihood activity is fishing. Over-fishing, high input costs and over-use of herbs to kill off a large number of fish at one time has contributed to the decline of fish populations. During the fishing season, there is much in-migration, however on a seasonal basis young men may migrate to Mozambique to work on farms (Sutter and Saaks 2002).

Some of the reasons given for why income decreased included: low food and crop production yields due to lack of utilization of inputs, decreased ganyu opportunities, illness and disease that diverted labor resources, health care expenditures, increased food prices and the lack of institutionalized credit opportunities (Sutter and Saaks 2002).

In a study that was carried out in the Dedza district in Central Region and the Zomba district in the south in 2001, 73% of Dedza and 72% of the Zomba households were experiencing per capita consumption levels below the poverty line. In both areas studied, relatively few households had access to animals and chicken ownership was minimal (1-5 chickens). Maize was the dominant crop in all villages and 79% of all cropped area was in maize. Less than 5% of the households were self-sufficient in maize and 75% were less than 25% self-sufficient (Ellis et al 2002).

The study determined that participation in non-farm business activities was critical to becoming better off in Dedza, whereas in Zomba the key to income earnings and businesses were related to fishing. The poorest households were renting land to the better off in both locations. Religious institutions, such as churches and mosques, played an important safety net role. Similarly, many of the villages acknowledged that NGO safety nets were important, but they felt that there were major flaws in public health services, extension and marketing, and that government officials were corrupt (Ellis et al 2002).

The study concluded that poor rural families in both areas were facing such severe constraints that they had little room to maneuver, and that small shocks quickly pushed them into requiring emergency food relief. To summarize the major constraints they were facing, these include: 1) small and declining farm sizes; 2) lack of livestock; 3) deteriorating civil security; 4) constant food deficits; 5) little monetization of the rural economy; 6) little cash in circulation; and 7) institutional blockage (Ellis et al 2002).

C. Responses of Government and NGOs

Donors were slow to respond to the food shortage for a number of reasons. First, the donor/government relationship was strained due to questions regarding corruptions and mismanagement at exactly at the same time when resources were needed (Devereux 2002). Second, donors assumed that the initial reports were correct that there would be enough available food and that they did not need to respond with emergency resources. It was only after the media started to report food shortages and deaths that donors reversed their hard line and offered food unconditionally (Devereux 2002).

The government and donors were hesitant to accept the assessment data generated by Save the Children-UK from Salima and Machinji Districts. In November, 2001 SCF-UK made a presentation to donors with a prognosis that Malawi was running into a food crisis situation. Two additional nutritional assessments were carried out in late 2001/early 2002 that showed high increases in malnutrition rates. The increases in malnutrition rates were attributed to a 340% rise in the price of maize in October, 2001 and maize production that had fallen 40% compared to the 1998-99 year. The Malawi Economic Justice Network, consisting of faith based organizations and NGOs, also began campaigning to the media to pressure the government to respond to the worsening conditions. Much of this information was dismissed by the government and NGOs because it was not considered credible (Devereux 2002).

In February 2002, the Government of Malawi declared a state of emergency and established various sub-committees to work on medium and long-term responses to the food crisis. Long-term safety net programs, such as MASAF, continued to operate during this time. In April 2002, an NGO consortium was created to coordinate food efforts[14]. The Consortium divided the 27 districts between the twelve NGOs, placing each NGO in charge of coordinating efforts for each of their assigned districts.

Through a series of miscommunications about the marketing of maize, ADMARC created the opportunity for traders to manipulate the buying and selling of maize. In September 2001, traders were stockpiling maize, waiting to hear at what price imported maize would be sold to ADMARC. ADMARC indicated that it would buy maize at 17 MK/kg, more than double the previous price of 7 MK/kg of which local purchases had been made. This led to a price spike, making grain unaffordable for the poor. The National Food Reserve also mismanaged the grain stock. They had sold most of the strategic grain reserve by the first half of 2001. Most of this stock was purchased by wealthy and influential people, and then sold back to ADMARC at a higher price. Traders essentially created an artificial shortage by holding grain off the market, and then putting it back onto the market when prices were higher (Devereux 2002).

[14] NGOs in Malawi have a history of being territorial with little collaboration prior to this consortium. This consortium consists of twelve NGOs. These are: CARE, SCF-UK, SCF-US, AfriCare, Concern Universal, CRS, Emmanuel International, GOAL, Malawi Red Cross, Salvation Army, Oxfam-GB and World Vision.

The government also experienced significant logistics problems in bringing in imported maize. The floods that occurred washed out many of the roads, bridges and railway lines between Mozambique and Malawi and there was a train derailment at Beitbridge. The ports in Nacala and Beira in Mozambique also had capacity constraints. All of these factors led to slow imports and supply shortages. Maize was also imported from Tanzania by the NFRA in February to March 2002, but much of this went to the urban areas rather than the rural areas (Devereux 2002).

The World Food Program began bringing in substantial amounts of food aid and also initiated vulnerability assessments, with the first assessment beginning in July 2002. These assessments were done to determine the food gap and improve targeting of resources. Two rounds of assessments have been carried out so far. From these assessments, it has been determined that approximately 31% of the population (3.5 million people) will need food assistance between January and March 2003. This number has increased from the November assessment, which indicated 29% of the population was in need (Malawi VAC 2003).

In addition to these vulnerability assessments, CARE and SCF-US conducted a food/nutrition assessment in four districts in May 2002 for purposes of targeting vulnerable groups and identifying causes and consequences of acute food and nutrition insecurity. Using a 30 x 30 sampling strategy, nutrition and health data were gathered, as well as information on access to food, household assets and sources of income. Data derived from such assessments can be used to measure changes in food and nutritional status over the time of the emergency (Sutter and Saaks 2002).

UNICEF has carried out two national nutritional surveys, one in late 2002 and another at the beginning of 2003. These nutritional surveys provide an excellent baseline for monitoring nutritional change over time. UNICEF intends to set up sentinel sites throughout Malawi to track nutrition and health data over time.

UNICEF has been working closely with the Ministry of Health to develop manuals and training guides for supplemental feeding and targeted feeding, based on the SPHERE Guidelines. UNICEF is also prepared to provide NGOs participating in Co-Guard (see below) with similar training (Frankenberger and Luther 2003).

Based on the nutritional information that has come in, Malawi was not experiencing acute malnutrition problems as of the end of 2002. Given the fact that households are attempting to meet food needs through decapitalization, seeking alternative employment and other coping strategies, nutritional status as a late indicator has not changed to any great extent. Such information points out that a food and livelihood insecurity problem can manifest itself much earlier than would be indicated by changes in nutritional status. This places emphasis on the fact that alternative indicators are needed to respond early enough to save livelihoods (Frankenberger and Luther 2003).

A number of other NGOs have been carrying out nutritional assessments in their program areas. Oxfam-GB carried out a nutritional survey in Thyolo and Mulanje in March 2002.

World Vision conducted surveys recently in Machinga district (Frankenberger and Luther 2003).

The World Food Program started the Joint Emergency Food Distribution Program in June 2002. Working through the NGO Consortium, they began distributing food to approximately 15% of the population. Recently this number has increased to 30% (Frankenberger and Luther 2003).

Aside from the Emergency Food Distribution Program, the Consortium is implementing a supplementary feeding program funded by USAID, aimed at reaching six million people in twelve districts. This program is being coordinated with UNICEF under the project titled Co-Guard. In addition to these food aid activities, the NGO Consortium is also focusing on long-term response aimed at livelihood recovery. For example, the Consortium is working in fifteen districts on an agricultural recovery program funded by OFDA that is trying to strengthen crop diversity through the distribution of seeds and cuttings (beans, groundnuts, cassava and sweet potatoes). Nine of the Consortium members are also working on a USAID-funded development/relief program called C-SAFE[15] (Frankenberger and Luther 2003).

USAID is also supporting a number of partners to implement Input for Work programs. For example, the Evangelical Baptist Church of Malawi and Emmanuel International have been implementing fertilizer and seed for work programs in Machinje and Balaka districts. This program has succeeded in rehabilitating roads and improving food security dramatically. For example, maize yields in targeted communities rose 300% (Jackson 2003).

Although a number of safety nets have been implemented by the government, donors, UN agencies and NGOs, such interventions still primarily focus on addressing the symptoms of food insecurity through food aid and free or subsidized inputs for agricultural production. Safety net programs have not been designed to address long-term food insecurity, such as investment in human capital to generate off-farm employment opportunities. See Annex XI for a list of safety net programs. The crisis presents an opportunity for donors and the government alike, to break the cycle of chronic poverty through such human capital investments as Food-for-education and supplementary feeding.

X. Short-Falls of the Vulnerability Assessment Committee (VAC) Studies

The ability to provide credible evidence, both qualitative and quantitative, of humanitarian needs, is a pre-condition for needs-based decision making. Such a needs-assessment needs to build objectivity in its analysis through a consistent and transparent use of sound methodologies (Darcy 2003). Unfortunately, the vulnerability assessments that have been done in Malawi (as well as in the rest of Southern Africa) have equated need with a lack of basic commodities. Such systems lead to supply-driven responses, rather than demand-driven responses.

[15] C-SAFE is the 'Consortium for Southern African Food Emergency'

Essentially, the crisis in Malawi is more complex than just a food crisis, for which food aid can be a solution. Assessments, if done correctly, should provide a depth of analysis related to social, political and economic factors that have led to the current situation. However, current assessment approaches tend to mix up symptoms with causes (Darcy 2003).

The key problems that have been identified with the assessment are the following:

- The reports fail to clearly delineate between chronic and transitory food security. This is critical since chronic food insecurity affects more than 60% of the poor in Malawi. There should be a high correlation between where these chronically poor live and where the food aid is targeted. In the first assessment, this correlation did not hold for the targeting recommendations for the VAC.
- The sampling strategy used in these assessments do not allow for us to generalize to the districts in any statistically valid manner. Given the amount of resources that were spent on these assessments, statically valid samples could have been drawn to allow for these types of generalizations.
- Although a considerable amount of information was gathered on different aspects of livelihoods, very little of this information was actually analyzed. For example, HIV/AIDS data were not analyzed in the first assessment and the data are suspect in the second. This is because these assessments were primarily set up to capture food gaps rather than the major factors that will be critical for determining how to help households recover their livelihoods.
- The information on coping strategies is not grounded in context, so it is difficult to use this information to compare across regions. Coping strategies are only relevant to the livelihood systems to which they are related.
- The assessment and analysis was essentially carried out by the implementing agency which has a vested interest in the results. It would be difficult for donors to trust the analysis of an agency that is also using the data to justify funds.

Given the problems associated with these data, there is still a gulf between the kinds of macro-analyses generated by early warning systems such as FEWS-Net and more detailed geographically limited micro-assessments conducted by NGOs (Darcy 2003). In the future, we recommend that national assessments are undertaken that are statistically valid surveys where methods and analysis are transparent, where coverage is adequate to the scale and nature of the problem, which is reasonably accurate with regards to numbers and provides information and analyses necessary to make decisions both in saving lives and saving livelihoods.

XI. Cross-Cutting Themes

A number of cross-cutting themes are highlighted here to show the cross-sectoral impact of these issues. The themes discussed below are HIV/AIDS, gender and the right to food.

A. HIV/AIDS

In 2001, CARE Malawi conducted a study of the impact of HIV/AIDS on agricultural production and livelihoods for 15 villages in the three districts of central Malawi (Lilongwe, Dowa and Dedza). Most of the following discussion is derived from Shah et al, 2001.

The study found that over 22% of households are affected by HIV/AIDS morbidity and mortality with the most direct impact being loss of labor (Shah et al 2001). Three of the villages in the study had half or more of their households affected by chronic sicknesses in the past five years (two in Lilongwe district and one in Dowa district). In areas with high labor to land ratios, the impact of reduced labor due to HIV/AIDS is less apparent than with distinct landholdings where land may be left fallow. In instances where landholdings are transferred to relatives temporarily, the ability to regain control of the land may be difficult and result in conflict between family members (Mbaya 2002). The CARE study found that three-quarters of households decreased agricultural productivity (resulting in reduced yields) and moved towards less labor-intensive crops when there were labor shortages in the household. Labor-intensive cash crops, such as tobacco, may also be given up (Mbaya 2002). Additionally, land may be left fallow or households resorted to increasing dependence upon *ganyu.*

Forty-percent of surveyed households affected by chronic illness sold a portion of their assets in order to buy food or to pay medical or funeral expenses. Some farmers used standing crops (such as tobacco) as collateral for cash loans in order to meet immediate needs of the household. Families have also experienced decreased access to credit due to HIV/AIDS. Community-based credit groups will sometimes exclude families because they may perceive these households as high risk.

Gender and HIV/AIDS

Women are especially burdened by HIV/AIDS since they often are the ones who care for sick household members. They represent 55% of all current infections (UNAIDS 2000), the result of increased susceptibility due to physiological factors, as well as cultural practices such as early marriage, and economic conditions that force women to engage in sexual activity in exchange for food or other essential items (Ngwira, et al 2001). Additionally, children, especially young girls, may be withdrawn from school in order to care for younger siblings and to assist with domestic or agricultural activities. One coping strategy that is used is early marriages for girls, often times at the expense of getting an education (Munthali 2002). The loss of labor through AIDS-related death significantly impacts children whose parents were not able to pass along their specific agricultural skills and indigenous knowledge.

Coping Strategies- Informal Safety Nets

Assistance by extended family networks is a crucial source of support for households and has been instrumental in helping families cope with the impact of HIV/AIDS. However these networks are under a great deal of strain due to the number of individuals needing assistance (Munthali 2002). Twenty percent of families surveyed received long-term

assistance from extended family and 35% sought short-term assistance. Long-term assistance includes providing additional agricultural labor and caring for orphaned children. Short-term assistance includes helping with household chores and providing food and medicine (Shah et al 2002).

Participation of AIDS affected family members in the community may be constrained due to the burden of illness and the lack of time. In addition, AIDS affected families may be deliberately excluded from community meetings due to stigma and discrimination.

Development efforts by rural institutions, such as training programs targeting specific populations, are impacted by AIDS-related illness and mortality. For example, a government-sponsored development program in fisheries has been impacted by high number of deaths of trained fisherman (Topouzis 1998). The study conducted by CARE Malawi found that rural institutions exist in a very limited capacity. In some communities, churches or village headmen provided some support, however this represented only 5% of households surveyed. Health care facilities are considered inadequate and medicines are generally not available. Additionally, very few villages interact with government extension workers.

Addressing the underlying vulnerabilities of livelihood systems to HIV/AIDS involves a two-pronged approach that focuses upon livelihood systems that will experience a *higher degree of shock* due to HIV/AIDS and those livelihood systems that make individuals susceptible to a *higher rate of infection*.

Factors that increase the likelihood of HIV/AIDS shocks:

Inheritance Systems

Patrilineal systems are practiced in the northern region of Malawi and in the far southern portion of the country. In patrilineal systems, women who become divorced or widowed are particularly vulnerable because women's access to land is through their husbands. Upon the death of a husband, if she is not inherited by a brother-in-law, she may be forced to return to her own village. Livelihood and food security may further be impacted if the woman has become infected with HIV herself and is unable to work due to illness (Ngwira, et al 2001; Shah et al 2002).

Remarrying is a common coping strategy for women in patrilineal systems. Children are inherited by the husband's family. A growing trend over the past twenty years has been an increase in patrlineal systems developing in urban areas. Women from matrilineal systems who move with their husbands into the city for employment may have their children claimed by their husband's family upon his death.

Matrilineal Systems are practiced in Central and Southern Malawi. The wife's brother holds a great deal of authority and men live in their wife's village. Inheritance and control of customary land is through women. However, it is up to a woman's maternal uncle on how land is accessed. Despite men primarily being the decision-makers in matrilineal systems, women in these systems are in a much better position than in patrilineal systems since they can call upon their relatives for assistance (Ngwira, et al 2001). In instances

where the wife dies, men are sent away from the village and children may not have immediate caregivers (Ngwira, et al 2001).

Dependence upon Ganyu
Poor households that own land may depend on ganyu as a way to supplement income during times of livelihood stress. In a study conducted by CARE Malawi, over half of the households surveyed depended upon ganyu more than four months out of the year with women representing a larger percentage than men. Although households benefit from increased cash in the short-term, it is often at the expense of working their own land. As a result, crop yields decrease, placing them into a position of becoming more dependent upon seeking ganyu to meet future food and cash needs. In addition, traveling to seek wage opportunities takes men away from their families, increasing their risk of exposure to HIV (Ngwira et al 2001).

Livelihood systems that make individuals more susceptible to infection include:

Livelihoods with greater reliance on mobility
Highly mobile groups, such as truck drivers, military personnel, construction/mine workers, and commercial sex workers are at a high risk for contracting and spreading HIV. However, less research has been conducted on how the mobility patterns of smallholder farmers impact their risk to infection. In the CARE Malawi study, research was conducted on villages located various distances from trading centers. Agricultural activities "create poles where people congregate and where sexual contracts are concentrated". This includes markets and trading centers, as well as plantations and estates. The necessity for men to travel distances to sell cash crops such as tobacco and sugar cane takes them away from their families for periods of time (Ngwira, et al 2001). In the CARE study, it was found that remote villages where individuals traveled to markets for trading or vending had higher incidences of chronic illness than those villages located closer to trading centers. This was due to men staying the night at trading centers and engaging in sexual activity before returning to their villages.

Dependence upon transactional sex
Women and girls who are economically vulnerable may engage in transactional sex in exchange for cash, food or to receive assistance with arduous tasks, such as collecting firewood. In a participatory assessment conducted by CARE Malawi in 2002, girls who were interviewed ranked money as the most influential reason for why they engaged in sex (Shah et al 2002b). Food insecurity and extreme poverty are powerful forces that influence the actions of individuals who would otherwise not choose to engage in risky behavior.

Orphans and Youth
For children orphaned by HIV/AIDS or other causes, the amount of assets they have to draw from has been depleted due to their parent's illness, as well as to relatives seizing assets. Orphans also have many psychosocial needs that are not being met after a parent death. Programs to help orphans typically focus on physical needs only (Munthali 2002).

Households headed by youth are likely to cope by engaging in off-farm activities such as selling prepared food, selling land or engaging in wage labor. Older orphans may leave school in order to care for younger siblings (Munthali 2002). Orphans may also have difficulty accessing land. In some cases, orphans allow families increased access to land for those families with custodianship of land for under-aged orphans (Mbaya 2002).

Education

Kadzamira, et al (2001) indicates that HIV/AIDS has had a negative impact upon teachers, many who are absent in order to care for ill relatives. Women teachers are more likely to be absent because of their traditional role in caregiving. The effect is poorer quality education and lower enrollment rates, especially for girls (Ngwira, et al 2001)

Impact Of Chronic Sickness And Death Due To Chronic Sickness

Impact Indicators Related To Livelihoods	**Variables That Determine Intensity Of Impact:**	
	At The Household Level	**At The Community Level**
Immediate impact: • Loss of labour • Depleting reserves • Change in crop-mix • Change in land use (land left fallow) • Delayed agricultural operations • Change in livelihood sources • Decrease in agricultural productivity ***Subsequent impact***: • Increased dependence on *ganyu* • Selling assets • Indebtedness • Distress sales • Change in household wealth category • Loss of skills • Increased dependence on others ***Other impact:*** • Dissolved households (especially in patrilocal communities) • Impact on children (orphans, school drop-outs, start working early, etc.) • Social exclusion	• Timing of sickness and death • Duration of sickness • Wealth category • Who in the household is sick (gender and age) • Household size • Households facing multiple stress • Kinship and other social support	• Marriage system and other social customs • Institutional support

From: Shah, M. et al 2001

B. Gender

Thirty percent of smallholder households in Malawi are female-headed. Forty-one percent of rural households are food insecure and 40% of these are female-headed (Gladwin and Thomson nd). Female-headed households are particularly labor constrained and unable to take advantage of off-farm employment (Smith 1999 in Whiteside 1999: 13). Some of the general findings regarding women in Malawi are the following:

- Fewer female-headed households report any improvement in economic conditions compared to male-headed households (Orr and Mwale 2001).
- About 70% of all full time farm workers in the smallholder sub-sector are women (Whiteside and Carr 1997).
- Women also make up 87% of the total agricultural labor force, including part-time labor (World Development Movement 2002).
- In households where maize production is the primary source of food and income, those families that were most vulnerable tended to have smaller landholdings, plant fewer drought-resistant crops, be located further from trader centers and be women-headed households (FEWS 1997).
- Gender differences in decision-making, asset ownership, and inheritance depend upon the systems of social organization of specific ethnic groups; matrilineal systems are found mainly in the central and southern portion of the country, and patrilineal in the northern and southern portion of the country (Whiteside and Carr 1997).
- Women are more risk adverse than men when adopting new technologies due to the constraints women face and the responsibilities they have (Whiteside and Carr 1997).
- In mixed-agriculture clusters, the most vulnerable households relied on larger numbers of IGAs, possessed smaller landholdings and had fewer female members in the household (FEWS 1997).
- Among the estate cluster: Vulnerable households were located in areas with variable maize production, further from markets, and had more female headed households (FEWS 1997).
- Female enrollment rates are significantly lower and drop-out rates higher than those for males (Fozzard and Simwaka 2002).

The Structural Adjustment Impact on Women

The SAPs disadvantaged households headed by women because women headed households sell less of what they produce and therefore stand to benefit less from market liberalization. In some instances, migration encouraged by SAPs has led to a decline of male labor availability leaving the bulk of agricultural responsibilities to women in de facto female-headed households (Whiteside and Carr 1997). Agricultural reforms have done little to address discrimination against women. Gender differentiated access to resources and benefits continue to hinder women's full participation in improving food productivity (World Development Movement 2002).

Tobacco production and Women
A recent review of USAID agricultural development programs in Malawi found that women have less interest than men in producing tobacco and other cash crops (Jackson et al. 2003). One reason for why women-headed households are less likely to participate in burley tobacco production is labor constraints. Two-thirds of women headed households have no spouse and have higher dependency ratios. This, coupled with time needed for childcare, cooking and gathering firewood, constrains women's ability to dedicate time to burley production (Orr 2000).

Credit
Because women traditionally grow maize for home consumption (dictated by traditional division of labor norms) in Malawi, they lack access to cash and credit. Conversely, cash crops (including hybrid maize) are considered part of the male domain. Thus, Green Revolution technologies such as hybrid seed and fertilizer are not typically available to women. In addition, relatively few women participated in the credit market. In 1986/87, only one-quarter of credit club members were female-headed households, although 69% of Malawi's full time farmers were women and 28% of households were female headed (Gladwin et. al n.d.). Studies have found that, for women, attending credit clubs was often a stigma, rather than a privilege, indicating their status as single women and/or impoverished (Gladwin and McMillan 1989).

Off-Farm Activities
Off-farm activities in the Southern Region represent roughly one-third of household income, with agricultural sales and subsistence farming representing one-third each. For men, these activities include brick-making, bicycle repair, weaving mats and baskets, shoe repair, reselling goods purchased in towns, tailoring, and retail crops and fish. For women, activities include making beer and gin (kachasu), pot-making, food processing and retail crops (Peters 1999).

In areas where off-farm activity represented the majority of income, the most vulnerable households were women headed that had low school enrollment rates and larger families (FEWS 1997).

Micro enterprise
About 34% of all micro-enterprises are owned by women and are concentrated mostly in off-farm activities, primarily commerce (selling farm produce) and manufacturing (processing foods and brewing beer) (Jumbe 2002). Rural women tend to take small loans for their micro-enterprise, however, lending institutions are unwilling to service small loans because of high transaction costs (World Development Movement 2002).

Land Tenure
Approximately 30% of rural households are headed by women, due to divorce, separation, widowhood, or by being married to a polygamous man or one who migrates for work. A study conducted by Women and Law in Southern Africa (WLSA) on women's access to land in Southern Africa stated that although legislation pertaining to freehold land does not explicitly differentiate between men and women, women do not enjoy equal access.

As stated above, in matrilineal systems, land is at the discretion of the woman's maternal uncle, therefore a woman does not have the power to make decisions about the land that is 'hers'. The report also stated that women are often not informed on what rights they do have, including how to buy and register land, claim ownership or contest land rights (Mbaya 2002).

Social and economic discrimination against women restrict their ability to acquire and hold onto land (World Development Movement 2002). Women in patrilineal inheritance systems may be cut off from land access due to inheritance practices, with this being lesser of an issue for men in matrilineal societies. Strategies women employ to maintain access to land include remarriage, widow inheritance or involuntary celibacy (in order to maintain ability to access a portion of their deceased husband's land). (Mbaya 2002).

Customary rather than statuary law dictates land inheritance practices. In matrilineal systems, women's rights to customary land is primary, however in instances where this land is leaseholder, if a man dies, his sister's children inherit the land, thereby excluding the man's own children, causing disputes between cousins. The Presidential Commission in Malawi has acknowledged that Malawians would prefer direct inheritance in this situation, with land going to the widow and her children (Mbaya 2002).

The National Land Policy (2001) acknowledges the marginalization of women, however it also favors those individuals with the 'ability and resources' to utilize the land effectively, which excludes women (Mbaya 2002).

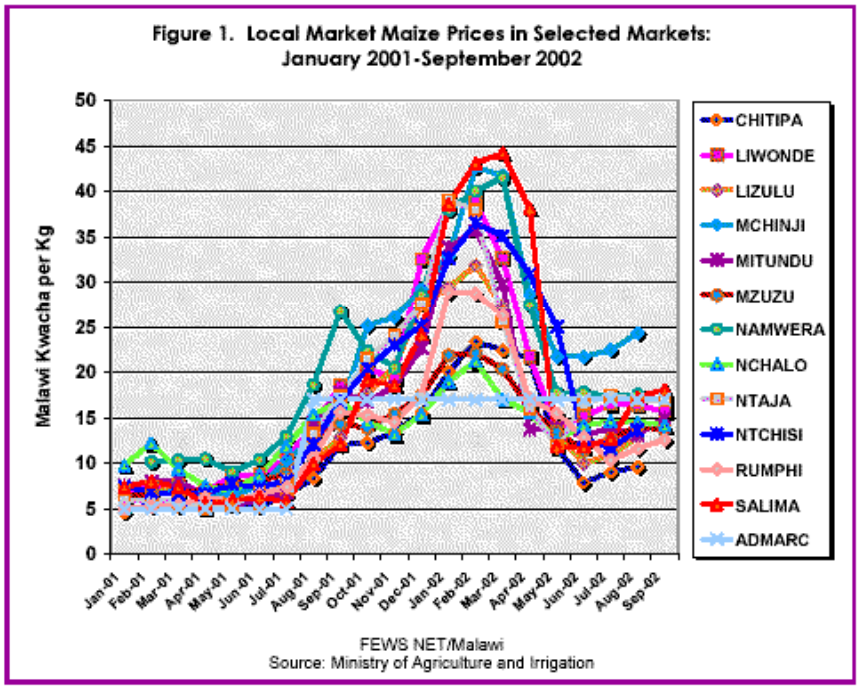
C. Right to Food

The current crisis in Malawi is due to the intersection between vulnerable livelihoods and weak institutions. The key questions are: Could these livelihoods have been made more secure through appropriate interventions in the past? And, could more have been done to strengthen the institutions that are currently weak?

It is apparent from the review that a number of steps have been taken by the government that favored national food security over poor people's household food security. For example, the restrictions that were placed on smallholders in tobacco sales and other crops throughout the 1970s and 1980s, seriously constrained their ability to generate income. The confiscation of customary land for the establishment of estates exacerbated land shortages. The prices that ADMARC paid to smallholders for crops was low and surpluses generated were used to invest in the estate sector. Market restrictions that were placed on the private sector and discrimination against Asians in the 1970s and 1980s disrupted marketing opportunities for many of the households living in rural areas. These factors all contributed to increased food insecurity among the poor.

In the more recent past, several actions were taken, either deliberately or by mistake, that had negative consequences for the chronically poor. Government mismanagement of information regarding maize marketing allowed private traders to manipulate the market such that major price increases disproportionately penalized the poor. The market short-

fall created by hoarding by traders led to price increases. Maize prices were so high that many poor people were unable to afford purchasing maize (see chart below). This is clearly a violation to the right to food for the majority of Malawians.



With regards to the safety nets currently being implemented in Malawi, the bias is towards short-term fixes with food aid; the symptoms are the primary focus, not the underlying causes. Safety nets that are aimed at food-for-work or cash-for-work exclude a number of vulnerable people, such as the elderly, the chronically ill and pregnant women or those women with small children. Safety net programs implemented in the future need to take into consideration the perspectives of vulnerable groups during the project design phase. For instance, food-for-work that provide child care allow women with young children to participate. Food aid distributions only provide relief to consumption problems in the short-term. To truly address the food insecurity that face smallholders in the long-term, other types of investments must be made in human capital that allow people to be able to generate income off-farm. Currently very few agencies are making these investments.

XII. Hypothesis and Recommendations for Future Research

Based on this review, a number of hypotheses have been generated that explain why food insecurity has continued through time in Malawi. The following hypotheses are listed below:

- Market liberalization had a differential impact on smallholders, with the poorest households becoming poorer and better off households being able to capture market benefits. Rural stratification became more severe in the 1980s and has accelerated since 1994. Women have become disproportionately worse off.

- Government policy and implementation, particularly over the last decade, has increased rather than ameliorated differentiation, both because policy has tended to favors better off farmers, and because of the weak capacities and corruption entailed in the implementation of policy. Decentralization will only exacerbate these trends

- The 1992/93 drought led to major loan defaulting, limiting credit options for many smallholders from this date forward. This led to limited access to inputs and therefore significant reductions in maize yields. Drought increased the future vulnerability of rural populations.

- Beginning in 1998, the transition from parastatal marketing structures to liberalized markets left a vacuum in terms of institutions responsible for maintaining safety nets. The capacity of institutions replacing ADMARC (the National Food Reserve Agency) was limited. The crisis that began in 2001/02 was an institutional shock combined with livelihood vulnerability (exacerbated livelihood insecurity), rather than a weather induced shock.

- Informal safety nets are becoming weaker, under the stress of increased asset decline, and the additional pressures of the impact of HIV/AIDS. Formal safety net strategies that are more than just hand out mechanisms, have yet to be developed.

- Rural households have resorted increasingly to off-farm income sources, including ganyu, as well as to rural-urban migration for survival. Public sector investments in non-farm activities and infrastructure will benefit smallholders more than investments in agriculture. Certain regions may be more amenable to quick returns to non-farm investment.

Based on this analysis, there are still a number of issues that need to be clarified in follow-up research. These information gaps are listed below:

1. What is the relationship between rural traders, prices and differentiation of rural market infrastructure?

2. What role has cross-border trade and linkages with Mozambique had in allowing for border communities to adapt to the current crisis?

3. What has been the impact on ganyu labor prices, given that such a large number of people (both the poor and the middle level households) are seeking such employment?

4. What are examples of successful skill-building programs that have enabled households to find non-farm employment. Can these serve as a model that can be scaled-up for the country?

5. What is the impact of HIV/AIDS on the structure of labor for smallholder households?

6. Does ADMARC have a role to play as a food security institution, given the weak capacity of the National Grain Reserve Agency?

7. Are informal safety nets getting weaker, or are there variations of this in different parts of the country?

8. How significant has urbanization become as a response to the crises?

Many of the issues outlined in the follow-up information needs can be captured through key information and focus group interviews, carried out in several regions of the country. For example, the information needed on smallholder estates, informal safety nets, cross-border linkages and ganyu labor could be captured in key informant and focus group interviews. Information regarding macro government policy could be captured through key informant interviews. Information regarding urbanization would be gathered through livelihood assessment carried out in urban areas. The Consortium of NGOs that already coordinate food aid program (such as C-SAFE), could be play a significant role in capturing this information.

XIII. Conclusion

The current vulnerability in Malawi is the result of decades of exposure to macro-economic shocks, weather-induced production short-falls and demographic pressures. The Government's focus on national self-sufficiency has not been sustainable or appropriate in the context of rapid population growth, rising input costs and recurrent droughts and floods. The country enjoys few employment opportunities outside of agriculture and market liberalization has increased rural inequality and stratification.

Unless steps are taken to use the existing crisis to create an economic transformation, rural Malawians will face continual food insecurity in the short and long-term. This will mean that Malawi will become permanently dependent upon massive inflows of aid to address chronic food production deficits. Negotiating the balance between public sector investments that ensure national food security and creating an enabling environment for the private sector to flourish is a difficult task that has not been achieved as of yet.

A viable approach needs to be three-pronged: First, opportunities need to be created to enhance human capital to allow poor households to pursue off-farm employment opportunities that are not agriculturally-based. Second, efforts must be made to invest and strengthen the institutional capacity of the government so that it can serve the interests of poor Malawians to ensure that food insecurity does not result from poor market decisions or other policy initiatives. Third, safety nets have to be in place to address short-term food security needs. These safety nets have to be more comprehensive and less tied to just food for work/cash for work (MASAF) or input subsidies (Starter Packs). Such safety nets need to be designed to enable the poor to have time to make the transition to alternative livelihood opportunities. This will involve addressing the opportunity costs that face poor people in their attempt to survive in a high-risk, uncertain environment.

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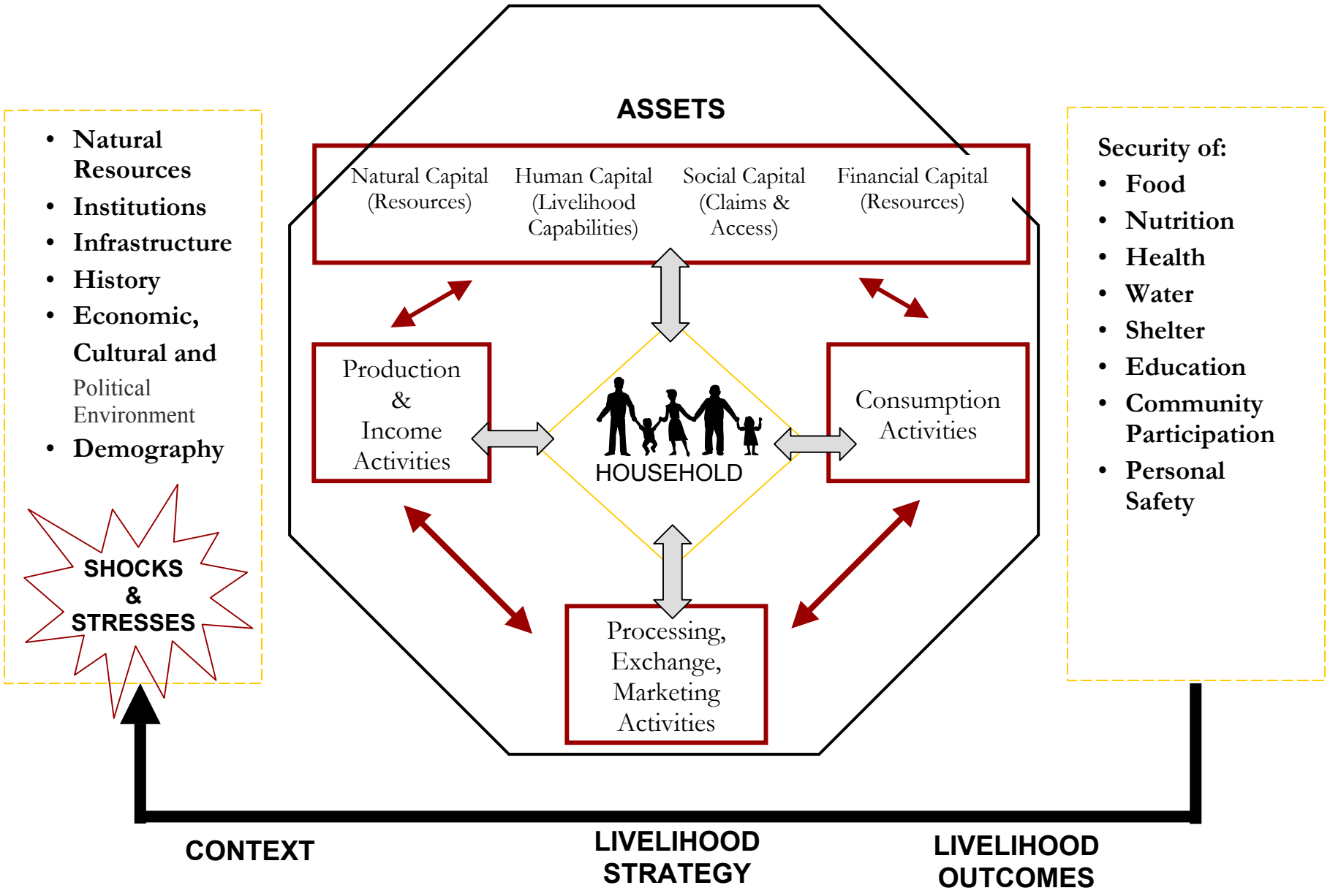
Annex I: CARE'S LIVELIHOOD SECURITY MODEL



After Swift, 1989, Drinkwater, 1994, Carney, 1998, Frankenberger and Drinkwater, 1999

Annex II: Vulnerability Through Time

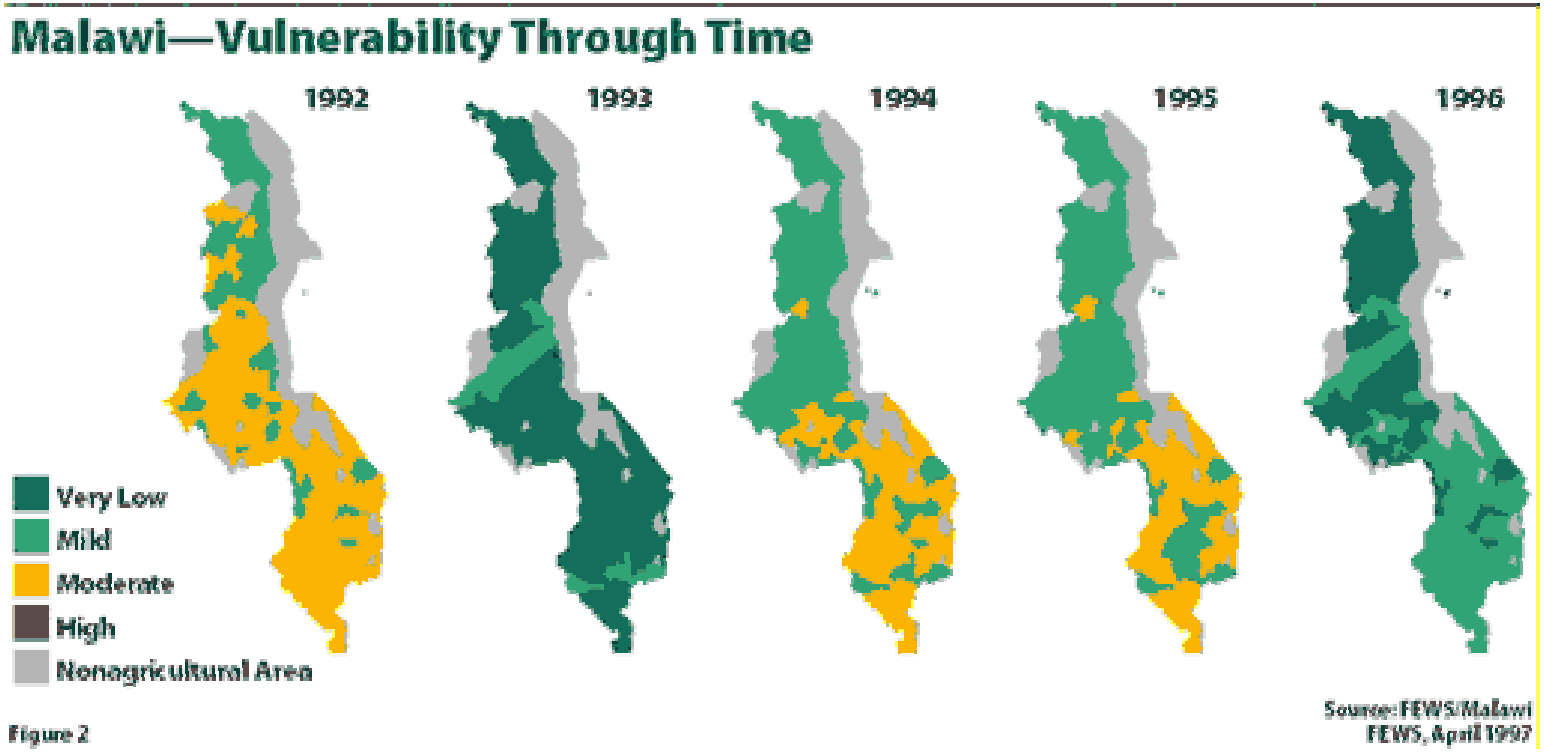
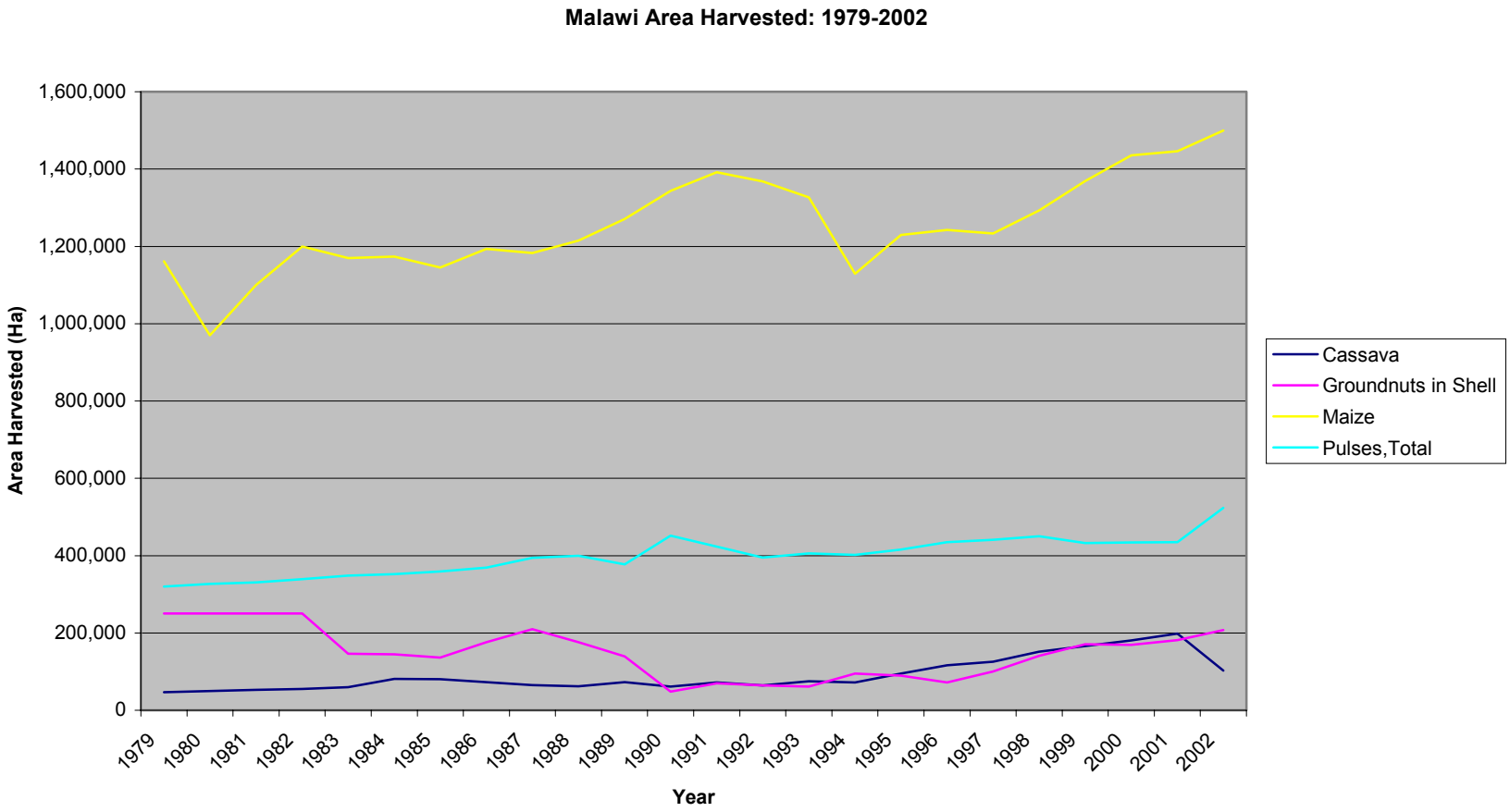
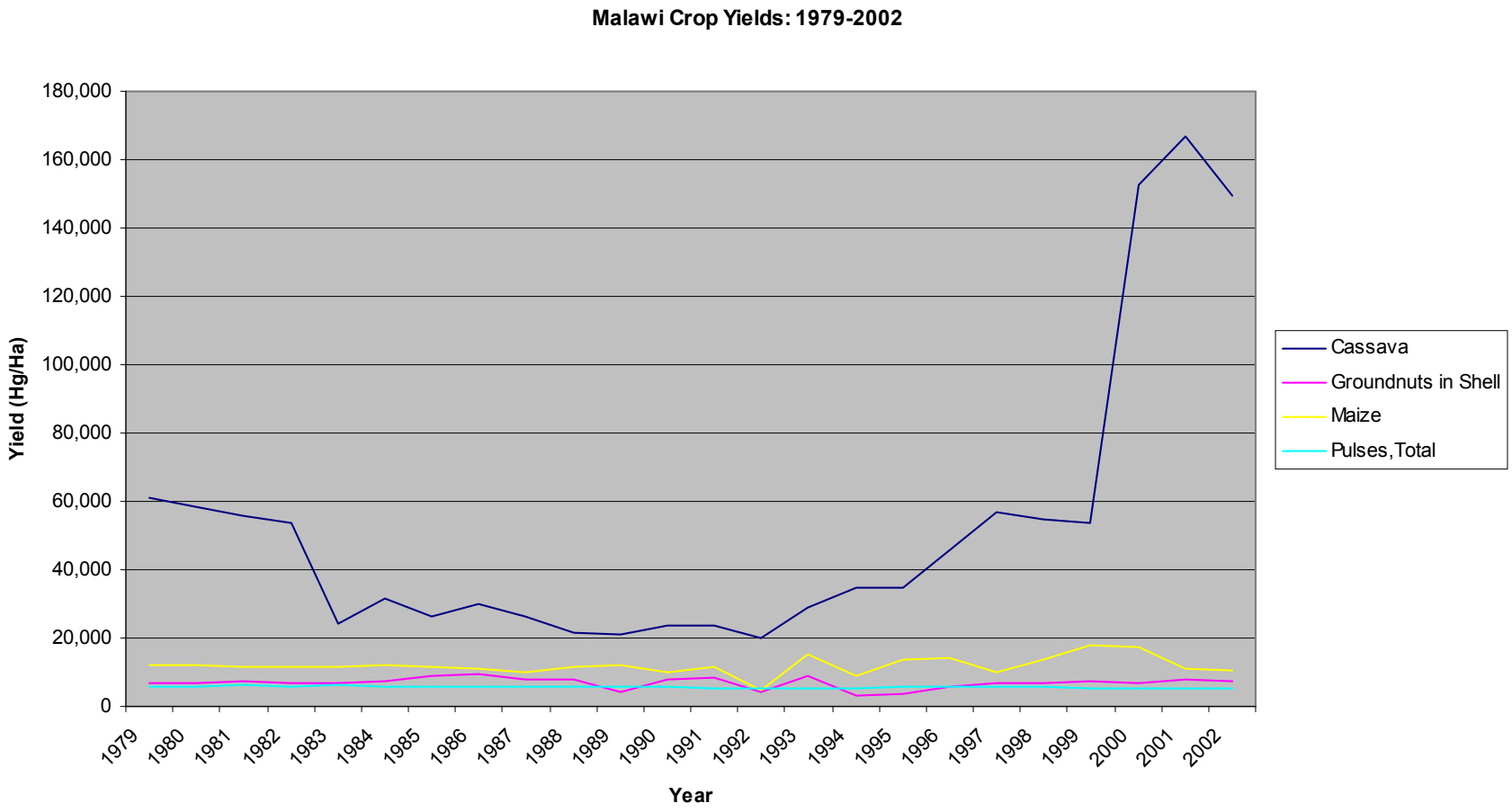


Figure 2

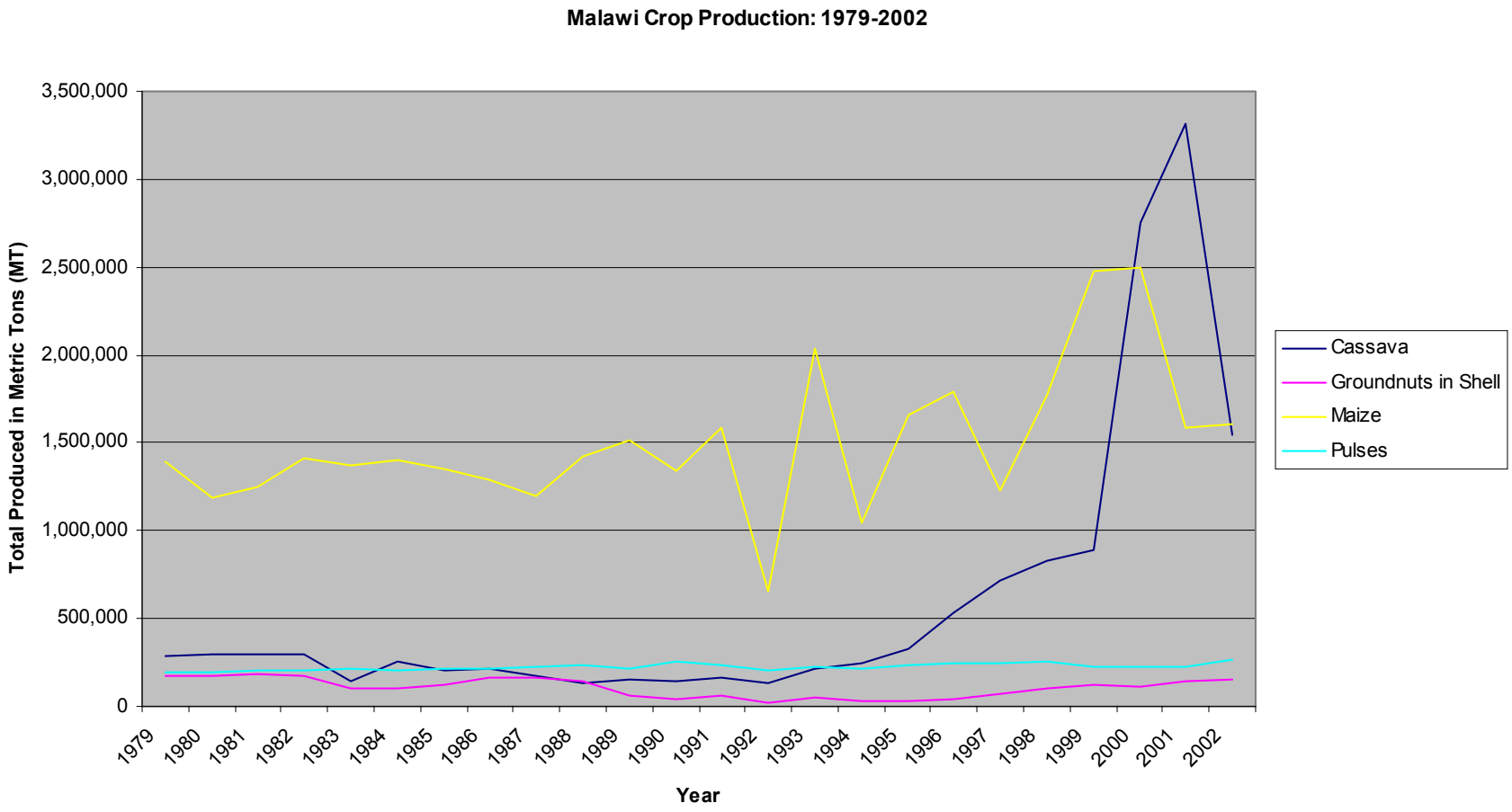
Annex III


Malawi Area Harvested: 1979-2002
Area Harvested (Ha)
1,600,000
1,400,000
1,200,000
1,000,000
800,000
600,000
400,000
200,000
0
1979
1980
1981
1982
1983
1984
1985
1986
1987
1988
1989
1990
1991
1992
1993
1994
1995
1996
1997
1998
1999
2000
2001
2002
Year
Cassava
Groundnuts in Shell
Maize
Pulses,Total

Annex IV

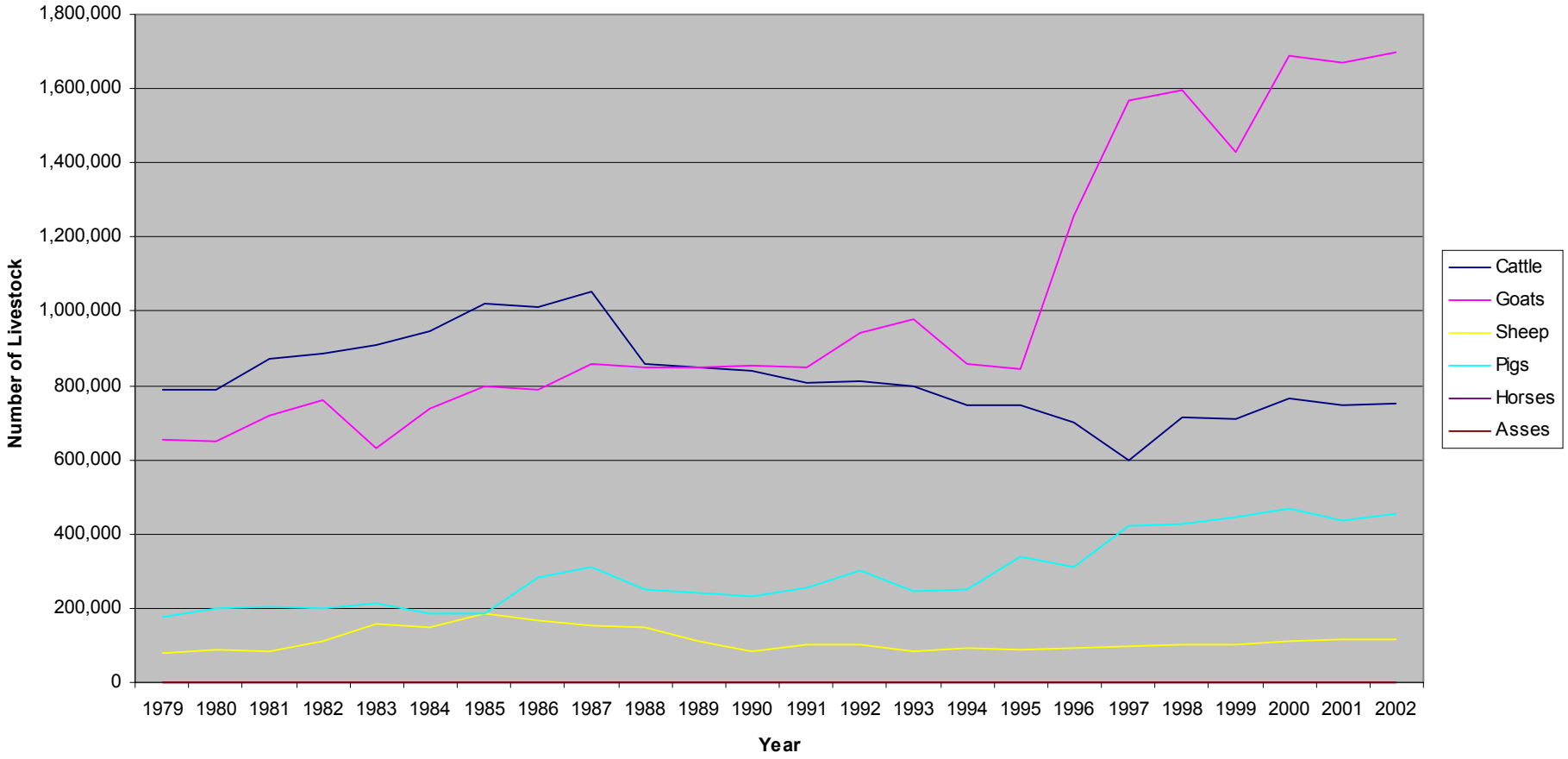

Malawi Crop Yields: 1979-2002
Yield (Hg/Ha)
180,000
160,000
140,000
120,000
100,000
80,000
60,000
40,000
20,000
0
1979
1980
1981
1982
1983
1984
1985
1986
1987
1988
1989
1990
1991
1992
1993
1994
1995
1996
1997
1998
1999
2000
2001
2002
Year
Cassava
Groundnuts in Shell
Maize
Pulses,Total

Annex V

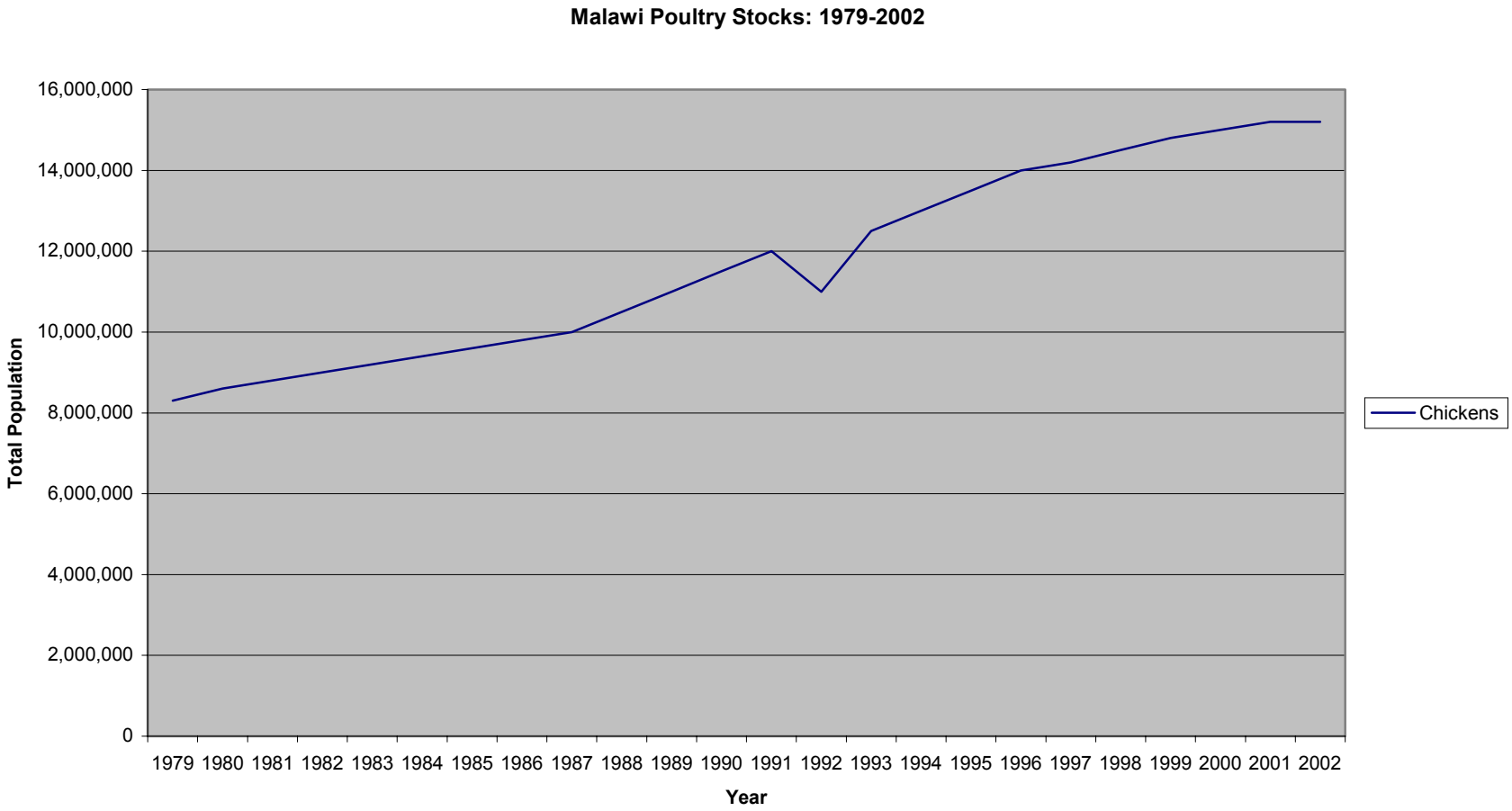

Malawi Crop Production: 1979-2002
Total Produced in Metric Tons (MT)
3,500,000
3,000,000
2,500,000
2,000,000
1,500,000
1,000,000
500,000
0
1979
1980
1981
1982
1983
1984
1985
1986
1987
1988
1989
1990
1991
1992
1993
1994
1995
1996
1997
1998
1999
2000
2001
2002
Year
Cassava
Groundnuts in Shell
Maize
Pulses

Annex VI

Livestock in Malawi: 1979-2002

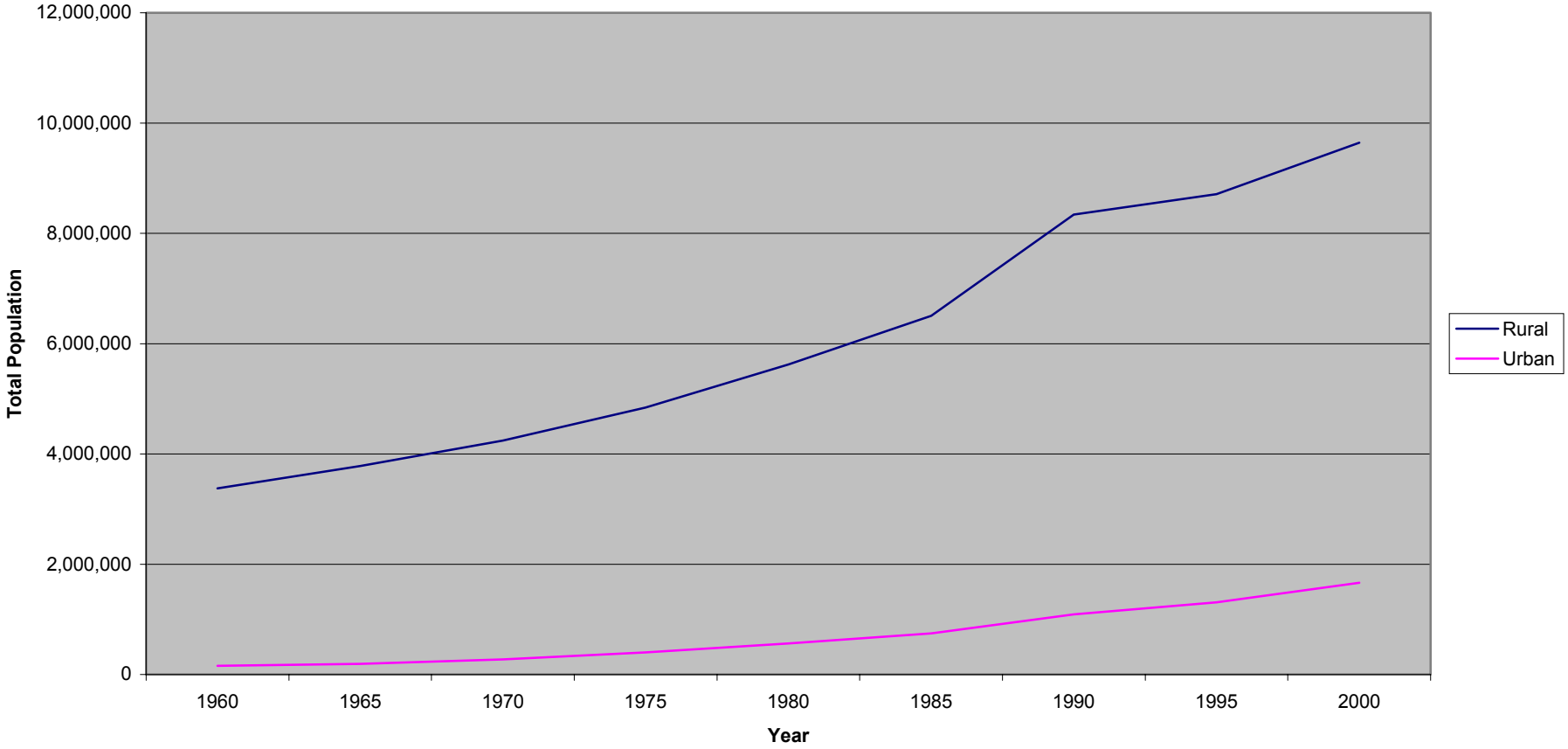


Annex VII


Malawi Poultry Stocks: 1979-2002
16,000,000
14,000,000
12,000,000
10,000,000
8,000,000
6,000,000
4,000,000
2,000,000
0
Total Population
1979 1980 1981 1982 1983 1984 1985 1986 1987 1988 1989 1990 1991 1992 1993 1994 1995 1996 1997 1998 1999 2000 2001 2002
Year
Chickens

Annex VIII

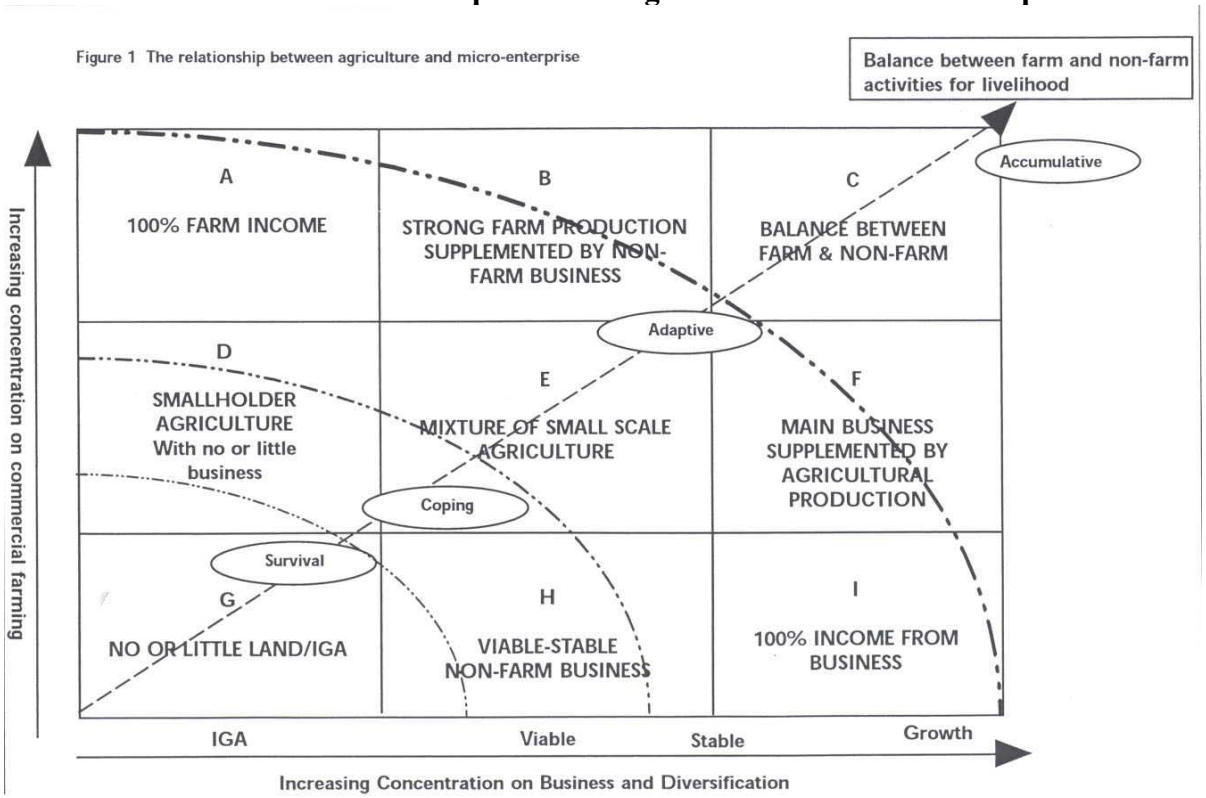
Rural versus Urban Populations In Malawi: 1960-2000



Annex IX: Malawian Disasters 1979- 2001 (Source: OFDA/CRED Database)

Year	Total Events	Total Killed	Total Affected	Drought/famines			Earthquakes			Epidemics			Floods		
				Events	Killed	Affected	Events	Killed	Affected	Events	Killed	Affected	Events	Killed	Affected
2001	3	79	510,250	-	-	-	-	-	-	1	20	1,500	2	59	508,750
2000	2	83	23,323	-	-	-	-	-	-	1	83	3,323	1	-	20,000
1999	1	-	2,000	-	-	-	-	-	-	-	-	-	1	-	2,000
1998	1	4	15,000	-	-	-	-	-	-	-	-	-	1	4	15,000
1997	3	10	400,282	-	-	-	-	-	-	2	10	282	1	-	400,000
1996	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1995	3	1	1,300	1	-	-	-	-	-	-	-	-	2	1	1,300
1994	1	-	3,000,000	1	-	3,000,000	-	-	-	-	-	-	-	-	-
1993	1	-	7,000,000	1	-	7,000,000	-	-	-	-	-	-	-	-	-
1992	2	-	5,700,000	1	-	5,700,000	-	-	-	1	-	-	-	-	-
1991	1	472	268,000	-	-	-	-	-	-	-	-	-	1	472	268,000
1990	1	-	2,800,000	1	-	2,800,000	-	-	-	-	-	-	-	-	-
1989	3	57	362,835	-	-	-	1	9	145,391	1	35	444	1	13	217,000
1988	1	-	878,000	1	-	878,000	-	-	-	-	-	-	-	-	-
1987	1	-	1,429,267	1	-	1,429,267	-	-	-	-	-	-	-	-	-
1986	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1985	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1984	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1983	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1982	1	-	6,000	-	-	-	-	-	-	-	-	-	1	-	6,000
1981	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1980	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1979	1	-	20,000	-	-	-	-	-	-	-	-	-	1	-	20,000

Annex X: The Relationship Between Agriculture and Micro-Enterprise



Source: Orr and Orr 2002

Annex XI: Safety Nets for Sustainable Livelihoods In Malawi

Natural Capital	• Inputs-for work (vouchers through traders) • Food/cash-for community woodlots
Physical Capital	• Public works projects (feeder roads) • Food/cash-for-community infrastructure
Human Capital	• School feeding (support to education) • Supplementary feeding (support to health)
Financial Capital	• Microcredit (support to urban IGAs) • Maize price stabilization
Social Capital	• Food/cash-for-carers (AIDS orphans) • Food/cash-for-community policing

Source: Devereux 1997