PROGRAMME AID AS AN APPROPRIATE POLICY RESPONSE TO DROUGHT

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Summary

The traditional international response to drought has been to provide humanitarian relief, in particular food aid for direct distribution. The drought of 1991-92 in Southern Africa, however, saw a change from a response that was preoccupied with direct relief, to a response that incorporated both programme food aid and programme financial aid. Although a considerable amount of research has been done on the impact of direct relief in response to drought, very little has been done on the impact of additional programme aid. This paper puts forward the argument for programme aid as a policy response to drought. It suggests its importance lies in the initial impact of the aid transfer, and in the additional opportunities made available by the counterpart funds to carry out strategic policy. Programme aid can short-circuit many of the economic knock on effects of drought which contribute to destitution and a need for emergency food aid; it can help to stabilise food prices; and it can provide governments with the necessary budgetary resources to fund drought relief programmes which are more diversified and more appropriate than the direct distribution of foreign food. The paper concludes that the effectiveness of programme aid will be determined by a particular country's characteristics.

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1. Introduction

While drought has occurred cyclically throughout Africa's recorded history, it has only been in the last two decades that it has become recognised as Africa's most costly human and economic disaster. UNDRO conservatively estimate that during the 1980s, 67 percent of the African population were affected by drought (in contrast, only 22 percent of the population were affected by civil conflict), between 400,000 and 2 million lives were lost, and economic damages amounted to US $ 5 billion.

The traditional international response to drought has been to provide humanitarian relief, in particular food aid for direct distribution. There are now many well documented failings associated with this form of response. Key difficulties that have been identified in the literature include: i) the untimeliness of food aid, the fact it usually arrives late; ii) the difficulty in targeting the food aid to those most in need; and iii) the logistical problems of distributing large quantities of food. Related to these difficulties further problems have arisen with the creation of: relief camps; dependency; and disincentive effects.

With increasing numbers of emergencies and decreasing aid budgets, these problems associated with traditional responses have become even more worrying. This paper argues that a different form of aid, programme aid, provided in food or cash, can be a more efficient and cost effective response to drought.

Programme aid can short-circuit many of the economic knock on effects of drought which contribute to destitution and a need for emergency food aid; it can help to stabilise food prices; and it can provide governments with the necessary budgetary resources to fund drought relief programmes which are more diversified, and more appropriate, than the direct distribution of foreign food. Of course, programme aid is not appropriate in all cases, and there will remain a residual need for relief distribution. However, it offers scope for an improved response to drought. Greater selectiveness and efficiency is especially important in an era of constrained food supply.

This section proceeds with a fuller account of the importance of developing this line of enquiry. Section 2 outlines the economy-wide impact of drought on African economies, agreeing with Benson and Clay (1994) that drought can be defined as an exogenous, but internal, supply-side shock. Section 3 briefly considers the extensive literature on shocks and identifies the textbook solution to such shocks, namely financing, which if given from official sources, is commonly known as programme aid. Section 4 defines programme aid, while section 5 describes its macroeconomic impact and the potential of counterpart funds for carrying out strategic policy. The sixth section considers the traditional response to drought and suggests an improved relief programme. Having identified programme aid as a possible policy response, section 7 outlines the impact of programme

aid in response to drought. The paper concludes with an assessment of the appropriateness of programme aid as an alternative policy response and discusses its feasibility, suggesting that its effectiveness will be determined by a particular country's characteristics. A final section is added suggesting further research needs.

The drought of 1991-92 in Southern Africa saw a change from a response that was preoccupied with direct relief, to a response that incorporated both programme food aid and programme financial aid. The Overseas Development Administration (ODA) provided Zambia with £10 million in balance of payments support for drought-related imports between March and June 1992. The World Bank provided an emergency recovery loan of $150 million to Zimbabwe, and made additional drought-related modifications to credits of $50 million to Zambia. The United States provided packages of support for food imports including export and food aid credits and grants to Zambia and Zimbabwe to address the direct balance of payments problems of the drought. Other donors provided a combination of programme aid to relieve balance of payments pressure and conventional relief for vulnerable people, while others modified existing financial assistance to allow these funds to be used for buying needed food and other imports.

Although a considerable amount of research has been done on the impact of direct relief in response to drought, very little has been done on the impact of additional programme aid. The importance of developing this line of enquiry has been highlighted by the recent research on the macroeconomic impact of drought (Benson and Clay, 1994), and the renewed discussions on linking relief and development aid (Buchanan-Smith and Maxwell, 1994).

Conventional models on the impact of drought suggest that economies heavily reliant on agriculture, both as a source of income and employment, are most vulnerable to a drop in rainfall. Benson and Clay's (1994:20) recent paper on the impact of drought, however, suggests a more complex relationship exists between the level of economic development of a country and the impact of drought. "As an economy develops, with related growth in financial and commodity markets, an expansion of the monetised consumption base, and particularly, expansion of non-agricultural sectors, its vulnerability to drought initially increases." They argue that the impact of drought varies according to the economic structure of the country and the nature of linkages between sectors within that country. Countries with diversified economies, but strong inter-sectoral linkages, find the effects of drought more widely diffused through their economy. Thus understanding the mechanisms by which drought impacts and spreads through an economy becomes essential for the formulation of appropriate polices.

Related to research on the impact of drought, has been the renewed discussions on the division between relief and development aid. A recent report edited by Maxwell and Buchanan-Smith (1994)

has highlighted the growing need to link relief and development aid. Case studies on the effects of aid have shown that, historically, relief aid has often disrupted development programmes, by ignoring or cutting across government and development institutions. Development policy on the other hand, has often ignored the risk of drought and other shocks, and hence the importance of securing households against risk.

Recent trends in Africa have underlined the inconsistency of these two policy approaches. For a large number of countries in Africa, especially Southern Africa, increasingly emergencies have been arising from long term impoverishment rather than one off shocks. The deterioration of Africa's economic performance over the past two decades has increased the long-term impact of drought; while in exacerbating the problems of poverty, poor government policy, and environmental mismanagement, drought has accelerated the process of economic decline.

The body of literature on coping strategies has found that drought leads to a downward spiral of impoverishment, leading to increased vulnerability (Davies, 1993). A documented feature of the last three major droughts has been that for many people recovery has not taken place (1968-73, 1983-85 and 1991-92, ODI 1987, Scoones 1994). As Green (1989:289) notes, mass starvation in sub-Saharan Africa has been triggered by the interaction of drought, poor transport systems and war, but more importantly it has been "triggered because (i) the margin between 'normal' food supply and starvation is narrow, and is narrowing, and (ii) most poor households have neither self employment nor wage employment opportunity, either to grow enough to eat or to be productive and well rewarded enough to buy adequate food. Reversing the persistent development of poverty is therefore the challenge".

This increasing trend toward emergencies has resulted in a greater proportion of government, donor and NGO budgets being devoted to relief rather than development aid. As Maxwell and Buchanan-Smith (1994) note, the share of aid budgets taken up in providing relief to the victims of drought, war, and other emergencies has increased more than five-fold in the last decade. For the British Overseas Development Administration, emergencies now account for over 10 percent of the budget, compared to 2 percent in 1982. For United Nations agencies the figure is nearly 50 percent. In Southern Africa in 1992, the total cost of relief was estimated at 12% of the region's GDP.

Not surprisingly, with the proliferation of emergencies and stagnation of aid budgets, less aid is now available to address the underlying development problems of the world's poor. An appropriate policy response to drought must therefore improve the developmental impact of relief. In other words, relief aid should be consistent with, and reinforce, development objectives.

More traditional economic analysis, in particular Sen's (1981) entitlement approach to famine, has also emphasised the importance of this line of enquiry. Sen's work revealed that the principal cause of

famine was the inability of individuals to obtain food based on their earning capabilities and asset ownership, rather than an absolute lack of supply. Fluctuations in household income limits a household's ability to maintain a stable level of demand for food, while fluctuations in food supply and prices alter their terms of trade. If lives are to be saved and livelihoods secured, this suggests appropriate responses to drought should be concerned with short and long-run solutions to low and unstable incomes and declining job prospects. Measures needed to ameliorate the situation include stabilisation of the macroeconomy - balance of payments and government budget improvement, and inflation control - and policies which address poverty reduction - income growth, improved access to markets, stabilisation of market supplies, and reduction of excess variability in market prices.

The paper sets out the case for programme aid as an appropriate policy response to drought. The working hypothesis is that additional programme aid, including food and cash, is effective in: i) addressing the macroeconomic effects of drought; and ii) through the counterpart fund mechanism, establishing a direct link between balance of payments support, poverty reduction and drought relief.

The paper concludes that programme aid can contribute to relieving the main constraints imposed on an economy by drought. By increasing foreign reserves and the supply of food, programme aid provides balance of payments and budgetary support, while curbing inflation. In addition, the counterpart fund debate highlights the potential developmental impact of programme aid in helping to meet poverty reduction and/or food security objectives. Programme aid can provide governments with the necessary budgetary resources to fund drought relief programmes which are more diversified, and more appropriate, than the direct distribution of foreign food.

2. The Impact of Drought on African Economies

The recent literature on the impact of drought challenges the conventional view that economies which are heavily reliant on agriculture are the most vulnerable to drought. Instead, Benson and Clay's (1994:20) research suggests that there is not a negative correlation between the impact of drought and a country's level of development, but an "inverted-U" shaped relationship. That is, the economic impact increases during the earlier stages of development - as the country diversifies into manufacturing, utilising domestically produced raw materials - before declining as the economy becomes more developed. They conclude that drought shocks have large, but highly differentiated, economy-wide impacts. Thus, policy makers designing effective responses need to be aware of these impacts and be sensitive to them.

This section outlines the economy-wide impact of drought. Due to the inter-relationship of many variables within an economy, a flow chart is a useful way of following the channels of impact (Box

1). The overall picture suggests that the impact will be direct in some sectors, through a fall in output and income, and indirect through linkages and multipliers in other sectors and parts of the economy. From the flow chart four main headings emerge - the impact of drought on the balance of payments, employment, inflation and the government budget. It is important to bear in mind that any impact is sensitive not only to the economic structure of the economy, which is discussed in greater detail in section 7, but to the duration and magnitude of the drought, and the economic position of the country before the drought. The section will conclude with a brief overview of the direct impact of drought on people.

2.1 Impact on the balance of payments

A drop in rainfall has an immediate impact on sectors dependent on water, namely the agricultural sector and water intensive industries. A decline in agriculture output directly affects the balance of payments in two ways: first, it leads to a fall in exports and related export revenue; and second, it leads to an increase in the demand for food imports which puts pressure on foreign reserves. Empirical evidence supports this. A report by the World Bank in 1991 showed that drought in the mid-1980s led to a serious fall in export earnings for many African countries. In particular, economies dependent on cash crops for export found their agricultural export earnings fall by between 15 and 27 percent. Combined with an increase in the need for imports, this meant many countries saw a fall in their foreign exchange reserves. Ethiopia, for example, experienced a fall in export revenue of 15 percent in 1984 compared to relatively normal previous years, but due to an increase in food imports suffered a 78 percent drop in reserves. In Zimbabwe, while export revenue fell by 12 percent in 1983, reserves fell by 75 percent due to the large increase in food imports.

A similar scenario occurs in water intensive industries.[1] Again, drought leads to a fall in output and related earnings, and, in addition to an increase in demand for food imports, there is an increase in demand for alternative energy sources, which puts further pressure on foreign reserves. Evidence suggests non-food imports are often displaced resulting in further costs in import dependent sectors. In Sudan, in 1984, while food imports increased by 54 percent, other imports fell by 52 percent.

Conversely, the selling of livestock, which is associated with drought, could increase the export of meat and related earnings. Evidence suggests two forces operate. On the one hand, drought reduces the available export supply through death and increases in the number slaughtered, which reduces local prices. On the other hand, drought leads herders to take or send their cattle to other areas. Scarcity of usable data makes it difficult to assess which effect is dominant, but Berg (1975) argues the export-raising rather than herd-reducing effect was more important in the 1974 drought.

[1]. Benson and Clay (1994:25) highlighted the significant ramifications for all industries using hydro power as their source of energy.

Another grey area concerns the effect of remittances on the balance of payments. Labour in search of employment could lead to an increase in remittances. However, if the drought is regional and migrant labour returns home, remittances could fall.

Overall, evidence tends to suggest that drought results in a deterioration in the balance of payments. This is a result of the fall in export earnings and the increase in imports. As will be discussed later, the pressure on foreign reserves can lead to increased government borrowing and/or depreciation or devaluation, depending on the exchange rate regime. Depreciation or devaluation leads to an increase in the price of imports and exports. The increase in the price of imports will have serious consequences for both the poor who are trying to buy the imported foodstuffs, and industry who are trying to buy non-food imports such as fuel and essential raw materials.

2.2 Impact on inflation

During a drought, the pressures to push prices up will be felt through: the increased demand and fall in supply of food; the increased price of imports; and possibly an expanding money supply, if the government attempts to ease the budgetary burden by increasing the supply of money. In contrast, the reduced available purchasing power and mass sale of assets could depress prices. Economic theory suggests the overall tendency is for inflation to rise.

In Zimbabwe, in 1982, prior to a drought, the inflation rate was 10.6 percent, in 1983 this increased dramatically to 23.1 percent and remained high at 20.5 percent in 1984, before it fell to 9 percent in 1985 (note, such comparisons do not reflect the impact of other events in the economy which cannot be controlled for, except through extensive modelling exercises).

2.3 Impact on employment

A fall in output leads to a fall in employment. As already emphasised, drought produces not only a fall in output in the agricultural sector, but also in water-intensive industries, sectors linked to agriculture and water intensive industries, through input supply and output uses, and import dependent industries. Thus, the fall in employment will be felt throughout the economy, translating itself into an overall fall in income, consumption, savings and investment. The Reserve Bank of South Africa developed a macroeconomic model to isolate the impact of the 1992 drought. Their results estimated that the 1992 drought resulted in the loss of 49,000 agricultural jobs and 20,000 formal sector jobs in non-agricultural sectors.

Concurrently, the price of foodstuffs increases, affecting the poor further. As a result, assets are sold to secure an alternative income, leading to the situation described previously of a downward spiral toward destitution, from which it becomes more difficult to recover (Davies, 1994).

Simultaneously drought has beneficiaries. Those in the non-agriculture sector producing for export benefit from the resulting depreciation/devaluation of the currency. Those still employed in sectors where prices have increased will benefit. Berg (1976) argues that drought leads to a migration of labour to urban areas, resulting in an increase of labour in the urban informal sector. This reduces the returns to labour in this sector, while wages in the formal sector are protected by statutory minimum wage regulations.

It is also the case that while drought often affects only certain regions of a country, the resulting macroeconomic impact can affect the whole country. Certain regions may gain, while others not actually suffering from the drought, may be harmfully affected. Drought can therefore be seen to widen the differences in income between the rural and urban areas, and between agroclimatic zones within countries. As such, it can result in serious short and long-term implications for income distribution.

2.4 Impact on the government budget

The fall in production in both agricultural and non-agricultural sectors, and the related fall in trade and income, reduces the tax base and tax capacity in an economy. In Sudan, in 1984, agricultural GDP fell by 18 percent, while total GDP fell by 7 percent. Accompanying the fall in revenue are expenditure increases. The demand for drought relief measures, including an increased demand for social welfare and health services, puts pressure on the weakened budget. As a result, the government budget worsens.

While it is evident that factors explaining economic performance vary from country to country, one observation by Berg (1975) in relation to revenue performance is of interest to later discussions. Berg found countries like Mauritania and Niger were able to offset declines in income and economic activity resulting from drought, through the stability of non-agricultural sectors, in particular extractive industries - iron ore in Mauritania and uranium in Niger. This supports Benson and Clays hypothesis about different economic structures. Clearly these two countries represent dualistic economies which find the effect of drought cushioned. This discussion will be continued in section 7.

The overall developmental impact is dependent on the response of government. Government could reallocate existing resources within and between sectors, and probably from the capital budget to the recurrent budget. The implies that long-term development objectives are sacrificed. The worsening

budget deficit could also lead to higher interest rates and reduced access to credit for both the poor and industry as the government increases its borrowing to finance the deficit. Increased borrowing itself could also have an inflationary effect.

2.5 Impact on people

Recognising both the economy wide impact of drought, and the knowledge that famines are linked to the wider problem of poverty, it is not surprising that drought greatly increases the number defined as vulnerable. In the 1992 drought in Southern Africa only a small elite could be considered "not affected": in Zimbabwe, almost half of the adult population were registered for drought relief; in Mozambique, where 66 percent of the population are desperately poor, the effect of drought was to increase that estimate to 80 percent (Thompson, 1993:7).

Drought affects people either because they lose sources of income or because food prices go up. As already shown, these effects, especially the first, are more widespread than often thought. In the initial stages of the drought it is the most vulnerable who are the most severely effected. Because recovery for many people has not taken place after the last three major droughts, these groups are now less well equipped to cope with food shocks than they were twenty years ago. For people at this level of the livelihood system, coping strategies conventionally reserved for periods of stress, have become adaptive strategies, that is, activities used to fill the food gap for part of every year, irrespective of prevailing agroclimatic conditions (Davies, 1993).

As the drought continues, the effects spread to other sectors of the economy leading to further unemployment and loss of income. Those with cattle or other assets try to sell their goods in order to survive. Hence many more pass into the most vulnerable category. Once the rains return, diseases, malnutrition and forced migration, will have reduced the ability to regain quickly, any former levels of production.

The literature identifies four key groups of people as vulnerable: small farmers; pastoralists; the urban poor; and the landless. Conventionally small farmers and their families have been seen to comprise the largest group of food insecure people in sub-Saharan Africa. For these resource poor people, the fall in food production and the increase in food prices alters their terms of trade unfavourably. With no assets to sell, no income, and high food prices, these groups become destitute very quickly.

Pastoralists also form a major population group vulnerable to terms of trade failure. African pastoralists now receive a large part of their subsistence through market exchanges or barter deals. This makes them particularly vulnerable to changes in animal-to-cereal price ratios. If animal prices fall (because animals are in poor condition, or many herders are selling, or few people want to buy),

pastoralists face an exchange crisis even if the price of cereal does not rise, although the same forces that bring down animal prices are likely to push up cereal prices. Berg's (1975) study found animal-raising people were more hurt than any other socio-economic group, and within this category nomadic groups which move in relatively restricted areas suffered the greatest losses.

In addition to these conventionally defined vulnerable groups, war and related factors have produced large urban concentrations of displaced people. These urban poor also face reduced employment opportunities, as do the landless who depend on wage incomes. In general, the urban poor, landless people, and female headed households feature with increasing prominence among the food insecure (Maxwell, 1993:4).

The conclusion of this section is that drought affects more sectors and people than is often thought. Empirical work to date supports the conclusions. In Zimbabwe, economists have shown that shifting weather conditions strongly affect output, particularly on communal lands (Davies, R. 1993:2). Reported experience shows that agricultural drought implies economy wide contraction. The rest of the economy is influenced through several channels: agriculture delivers raw materials to industrial processing; food is the major wage good of the economy; foreign trade in agriculture reflects domestic market conditions; and agricultural income is a source of demand and savings. Further, domestic industries are dependent on imported intermediate goods, the availability of which thus influences capacity utilisation. Investment is similarly import intensive. The domestic economy is therefore affected by variations in import capacity, which is determined by export revenues and exogenous foreign savings. When exports fall, imports have to follow.

This scenario could describe any shock to an economy, and in fact from an economic perspective, Benson and Clay (1994:10) have defined agricultural drought as an exogenous, but internal, supply-side shock. While little has been written on drought as a shock, an extensive literature on external shocks does exist. The next section provides a brief summary of the macroeconomic impact of shocks and identifies the textbook solution to such shocks.

3. External Shocks

3.1 The macroeconomic impact of shocks

The literature on the macroeconomic impact of shocks focuses on shocks originating from: (i) the international goods market, through the export or import market; and (ii) the international capital market, arising from changes in the cost of borrowing, as determined by interest and inflation rates, and constraints on international borrowing. However, irrespective of the origin of the shock, the

macroeconomic impact appears to be similar. Krugman (1988:64) argues that the immediate impact of a shock is to create a balance of payments problem. An adverse shift in the economic environment leads either to a fall in the revenue from abroad or an increase in payments to foreigners, both of which lead to a drain on the foreign exchange reserves. Often, foreign reserves are limited. The immediate need is therefore to stop the fall in the Central Banks foreign exchange reserves. In addition, adverse external shocks have direct and indirect repercussions in the domestic economy. Krugman notes that a decline in export demand reduces income and employment in export sectors, which in turn lowers demand for the products of industries that serve the home market. An increase in interest payments on foreign debt could worsen the government budget deficit if the debt is public or threaten the solvency of domestic firms if the debt is private. Furthermore, the indirect repercussions of the policies that are undertaken to cope with the balance of payments problem need to be addressed.

Using simple national accounts identities, it is possible to summarise the potential responses to shocks.
Since income equals expenditure in an open economy, then

$$GDP \equiv C + G + I + E - M \qquad (3.1)$$

where (C) equals private consumption, (G) equals government consumption expenditure, (I) equals investment.

E = exports and M = imports;

Daniel (1990:24) summarises the impact of an external shock in terms of domestic absorption (A) and trade balance (B), where

$$GDP = A + B \qquad (3.2)$$

Absorption (A), is total domestic expenditure,

$$A = C + G + I \qquad (3.3)$$

The trade balance (B), is equal to exports (E) minus imports (M).

$$B = E - M \qquad (3.4)$$

If a shock lowers national income (GDP), either absorption (A), or the trade balance (B), must adjust. The policy implication is that domestic expenditure must be cut, or the trade deficit financed.[2]

If the shock is expected to be temporary, financing would be the best response. The trade deficit could be met by borrowing, as long as the shock seemed likely to reverse itself before the implied borrowing became unsustainable. Domestic repercussions could be offset by using tax cuts or public expenditure to sustain domestic demand. If the shock does not appear temporary it must be met by adjustment. The government will have to take action to cut imports, and/or increase exports.

Adjustment involves either expenditure reduction or expenditure switching. Expenditure reduction involves governments: reducing their own spending - cutting government programmes, or reducing public investment; inducing cuts in private consumption by raising taxes or cutting subsidies; or reducing private borrowing by putting limits on credit creation by the banking system.

These policies reduce spending in the domestic market, which lowers demand for imports, and therefore improves the trade balance. However, they also reduce demand for domestic goods, thus leading to unemployment and excess capacity (which may in an indirect way lead to increased exports). Cuts in government expenditure reduce development programmes; tax increases affect the living standards of the population; and credit restriction has serious long run consequences for growth.

The alternative means of adjustment is expenditure switching, which encourages the public to switch their spending from foreign to domestic goods, thus raising exports and cutting imports. Expenditure switching requires either devaluation or the use of commercial policy instruments - import quotas, exchange controls or export subsidies. Devaluation decreases export prices, improving competitiveness and encouraging increased supply, and increases import prices discouraging demand. Commercial policy provides a more detailed intervention aimed at promoting particular exports and discouraging particular imports.

However both methods have an inflationary effect. Devaluation increases import prices which shifts demand to home goods. If there is limited supply in the home market, this pushes up prices. Quotas and exchange controls reduce the domestic availability of imports, pushing up their prices. Export

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2. Introducing savings to the simplified identity presents two other broad paths of adjustment. One response to a negative shock would be to increase domestic savings - since an excess of expenditure over income implies an excess of investment over savings, which in turn implies an excess of imports over exports. A rise in savings requires a reduction in private consumption relative to GDP and/or a reduction in the government deficit relative to GDP. Another response would be to reduce investment which would affect the external balance as would an increase in savings. Both paths would be strongly contractionary at least in the short-term. Reduced investment would also constrain the long-term rate of growth (Daniel, 1990:25).

subsidies divert production to foreign markets, raising the home prices of export goods. In countries where incomes are already at the margin, adjustment on its own would not be a desirable response to drought. Any further inflationary pressure on the economy would result in even more people falling into destitution. However, it is worth bearing in mind the discussion in section 1 about linking relief and development. While the deterioration of Africa's economic performance has increased the long term impact of drought, drought itself accelerates the process of economic decline. While adjustment requires a cut in living standards and a sacrifice of longer-run growth prospects, and is therefore undesirable, long-term financing can also create problems by postponing the necessary adjustment and making the adjustment harder because of the additional debt accumulated during the interval. While the immediate response should therefore be financing, given the longer term nature of droughts, a strategy must include some adjustment.

The immediate suggestion of this analysis is that the appropriate response to drought, viewed as a temporary shock, is financing. Developing countries can either run down their own reserves, if available, or seek financing from official or private sources - financing from official sources is commonly known as **programme aid**.

3.2 Defining programme aid

There are two main methods of disbursing foreign aid: project aid, which is designed to finance a specific and independent productive unit, requiring capital investment or technical assistance; and programme aid, which is designed to support the recipients country's macroeconomic policies, and finance the importation of goods related to a national development programme. Within this second category is programme commodity aid (for example, food, fertiliser, etc.) which is programme aid given in kind rather than cash.

The Development Assistance Committee (DAC) of the Organisation for Economic Co-operation and Development (OECD) provides a useful working definition of programme aid (1991). They define programme assistance as all contributions made available to a recipient country for general development purposes, not linked to specific project activities. Their Principles of Programme Assistance (PPA) identify four main sub-categories: general programme assistance, which includes assistance made available for general development purposes, that is, balance of payments support, general budget support and commodity assistance; sector programme assistance, which includes assistance directed to a specific economic or social sector, such as agriculture, education, community development and transportation; programme food aid, which provides balance of payments support through saving the foreign exchange that would have been used to pay for the imports; and debt relief, which fills financing gaps and improves the debt profiles of heavily indebted countries. Their definition does not include disaster relief, even though it often has programme aid characteristics. For

the purposes of this paper, the DAC definition of programme aid will be used. However, unlike the DAC definition it will also include aid given in response to an emergency.

The macroeconomic impact of programme aid will be realised through its effects on foreign exchange reserves, local currency revenue, and an increase in commodities in the market place. Counterpart funds may be generated, and these too may have a macroeconomic impact, and/or provide a valuable resource for carrying out other policies.

Counterpart funds are broadly defined to refer to "local currency generated by the sale of aid commodities or foreign exchange received as aid by recipient countries" (Maxwell, 1995:1). Their generation can produce a combination of effects, leading to balance of payments and/or budgetary support, and/or an increase in the supply of commodities. (For a recent discussion on the definition of counterpart funds and their role in the evaluation of programme aid see Maxwell, 1995).

4. The Impact of Programme Aid

The importance of programme aid as a policy response to drought lies in the initial impact of the aid transfer, and in the additional opportunities made available by the counterpart funds to carry out strategic policy. Drawing on Bruton and Hill's (1991) review of the literature on counterpart funds, this section considers the macroeconomic impact of programme aid on four key macroeconomic indicators - the money supply, the balance of payments, the government budget and inflation. It then briefly reviews the debate on the potential contribution of counterpart funds towards poverty reduction.

4.1 Impact on the money supply

The distinguishing characteristic of programme aid is that it is sold. Its initial impact is therefore felt on the money supply and the commodity markets for the commodity aid, and its outcome is dependent on who buys the aid. The actual contribution of programme aid to changes in the money supply depends on the change in counterpart funds on deposit at the Central Bank (independent of effects on the balance of payments and government budget). Increases in counterpart funds or deposits act to reduce reserve money, while spending counterpart funds and thus drawing down deposits at the Central Bank increases reserve money. The net effect is the change in counterpart funds deposited minus the deposits spent.

Commodity aid sold by the recipient government to the private sector transfers domestic currency or commercial bank deposits from the private sector to the government. If the government deposits the

money at the **Central Bank**, reserves of the commercial banking system fall, reducing the money supply by the money multiplier. If the government holds the money in the **commercial banking system**, the contractionary effects are smaller because reserves are not withdrawn from the commercial banking system. If the donor owns the counterpart funds and holds them in the Central bank or the commercial banks, the monetary effects are the same, but foreign liabilities increase.

An alternative scenario is for the **government** itself to buy the aid provided imports. This results in an increase in the availability of food in the economy, but the government does not acquire revenue in the form of counterpart funds directly. Instead the government has to increase taxes, cut expenditure or borrow from the Central bank to create the counterpart funds, all of which will have a strong anti-inflationary effect.

Foreign exchange sold to the **private sector** reduces currency or commercial bank deposits, thereby reducing the money supply in a similar way to the sale of commodity aid to the private sector. If foreign exchange is sold to the **Central Bank**, foreign assets increase - a credit to the Central Bank, and government deposits in the Central Bank increase by an equal amount - a liability of the Central Bank. The monetary base therefore remains unchanged, but the aid is used to increase international reserves.

Many factors influence the final monetary impact of the counterpart funds generated by the sale of the programme aid. First, if the counterpart funds are spent by the government or the donor, it is generally agreed, the effects on the Central Bank balance sheet and money supply are reversed. Thus immediately spending counterpart funds generated from the sale of commodities or foreign exchange has no effect on the money supply. Second, the impact will be changed according to the impact on the government budget and balance of payments. General equilibrium effects of aid and counterpart funds are thus different from the impact effects.

Bruton and Hill (1991:33) identify four extreme scenarios: 1) government spending (minus taxes) increases by an amount equal to the counterpart funds generated, while imports remain unchanged, resulting in an increase in high-powered money equal to the counterpart funds; 2) government spending (minus taxes) increases, while imports also increase by the amount of the counterpart funds generated, leaving the level of high powered money unchanged; 3) government spending (minus taxes) stays constant, and imports remain unchanged, leaving the level of high powered money unchanged; and 4) government spending (minus taxes) stays constant and imports increase, resulting in a fall in high-powered money by an amount equal to the counterpart funds.

Finally, the effect on the money supply is related to the share counterpart funds are of government resources. The monetary effects become more important the larger the share of counterpart funds relative to the money supply.

4.2 Impact on the balance of payments

The impact of programme aid on the balance of payments is dependent on whether the aid is: (a) supplied as commodity aid or foreign exchange; (b) given as a loan or a grant; or (c) substitutes, or is additional to, initial imports (Bruton and Hill 1991:28; Roemer 1989:798; Clement 1989:5).

Commodity aid supplied on a **grant** basis increases unilateral transfers. Assuming the aid substitutes normal imports, the current account improves by the amount of the aid, since the aid enters as a credit under unilateral transfers in the current account. This implies that borrowing from abroad that otherwise would have occurred decreases (reducing the capital account surplus), international reserves increase, or some combination of the two takes place, all of which offsets the improvement in the current account. In addition, if the exchange rate appreciates, exports fall, further offsetting some of the effects of the aid on the current account.

Commodity aid supplied on a **loan** basis creates a credit in the capital account rather than the current account, by the amount of the loan drawings. Assuming exports and imports remain unchanged, only the type of borrowing from abroad, level of international reserves, or some combination of both is affected, in line with the level of drawings.[3]

Where the **commodity aid** is additional, that is, the commodity imports made available are not replacing imports that would have been purchased in the absence of aid, the effect is different (Bruton and Hill, 1991:29). In the case of a **grant,** the current account remains unchanged - higher imports which create a debit in the current account, are offset by increased unilateral transfers. Therefore there is no change in international reserves.

In the case of a **loan,** the increase in imports reduces the current account. This is offset by inflows on the capital account - from the loan which is a credit in the capital account. Again there is no change in international reserves.

The effect of programme aid in the form of **foreign exchange** on the balance of payments is somewhat similar. If given on a **grant** basis, unilateral transfers increase. If given on a **loan** basis,

[3]. If the loan is held in a foreign bank account, the impact on reserves will only be felt as the loan is drawn down. However, if the loan is held in the recipient country, the impact will be felt as soon as the money is credited to Central Bank.

there is an increase in capital inflows. Assuming imports, exports and borrowing do not change, both situations result in an increase in international reserves. Under a fixed exchange rate regime, this increase in international reserves affects the money supply by increasing high powered money.

Clement (1989:6) makes the point that increases in international reserves only occur under a fixed exchange rate system. Under a floating exchange rate system, foreign exchange aid results in an appreciation of the exchange rate. Bruton and Hill (1991:38) argue that under a fixed nominal exchange rate, if the aid and counterpart funds are inflationary, the real exchange rate appreciates. In this case, although the aid releases the foreign exchange constraint, it also leads to an appreciation of the exchange rate which reduces net exports. Under a flexible exchange rate system, assuming that the exchange rate moves to keep the balance of payments in equilibrium, the aid leads to an appreciation of the exchange rate if it improves the balance of payments - thus acting like a commodity boom with Dutch Disease effects. If the real exchange rate appreciates, part of the benefit of the aid is offset and the country might be worse off if the aid is discontinued than it would have been otherwise.

Bruton and Hill (1991:30) conclude that if the initial import level is constrained by foreign exchange availability, it seems likely that aid will result in additional imports by relaxing the foreign exchange constraint.

4.3 Impact on the government budget

There is consensus in the literature that counterpart funds, generated through the sale of commodities or foreign exchange, to the private sector or the Central Bank, do not constitute additional resources (Bruton and Hill, 1991:30, Roemer, 1989:799). The previous sections identified the general equilibrium effects of generating and spending counterpart funds on the money supply, dependent on what happens to the government budget and the balance of payments. This section will focus on the partial equilibrium effects of counterpart funds on the government budget.

Independent of the type of aid that generated the counterpart funds, the effect on the budget depends on how the government uses the additional resources made available to the country by the aid (not by the creation of the counterpart funds). The government could: increase spending; cut taxes; or reduce borrowing previously required from abroad, the private sector, or the Central Bank.

If government spending remains unchanged and the counterpart funds are used for expenditure within the existing budget, the additional resources go to the private sector or foreigners. They can go to the private sector through: a smaller inflation tax; less lending by the private sector to the government; or

a reduction in taxes. They go to foreign creditors if the additional resources are used to reduce borrowing from foreigners or to pay back debt (Roemer, 1989:800).

Alternatively, leaving expenditure and taxes unchanged, the amount of central bank credit from the Central bank to the government is reduced. In times of balance of payments difficulties and inflation, Clement (1989:10) argues this is the best response. In addition, by not using the counterpart funds, macroeconomic policies aimed at reducing inflationary pressures and narrowing the balance of payments deficit are reinforced. In response, Bruton and Hill (1991:35) argue counterpart funds can only be used once to reduce the money supply. Any gap between revenue and expenditure will be financed by net credit to the government, which in the end is the same as spending the counterpart funds.

4.4 Impact on inflation

Independent of the type of programme aid, the effects on inflation depend on the available supply of goods and the money supply. Both commodity aid and foreign exchange transfers could either increase resources available to the economy or improve the balance of payments.

Aid used to increase imports results in a fall in prices or at least a slowing in inflation. Aid that does not lead to an increase in supply moves the balance of payments toward surplus, which increases foreign reserves. Roemer's (1989:798) monetarist model suggests this leads to money creation. As commercial banks collect more foreign exchange from exporters than they pay out to importers, they accumulate foreign reserves. When these are deposited at the Central Bank, commercial banks are credited with additional local currency deposits with which they can expand their loans to the public. Under a fixed exchange rate system, aid used to cut the balance of payments deficit increases international reserves and therefore the monetary base.

In an economy facing serious inflation, the most deflationary effects of aid occur when imports are allowed to rise, that is, aid flows are not used to cut the balance of payments deficit. In this situation supply increases, and an increase in the monetary base from increased international reserves is avoided.

As discussed in section 2, drought might lead to a devaluation which could further fuel inflation. By providing imports that are facing strong excess demand, inflation could be controlled. Using the counterpart funds to encourage increased productivity of a product that the devaluation made exportable could also be anti-inflationary.

The composition of the aid is also important in combating inflation. In the case of drought one of the major bottlenecks is the lack of food. By increasing the supply of food, the aid itself becomes the anti-inflation instrument, rather than the manipulation of the money supply.

The effects are also dependent on what happens to the government budget in response to the aid. The aid and counterpart funds could affect central bank credit to the government which affects the money supply. As discussed, leaving government spending and taxes unchanged leads to a smaller increase in Central bank credit to the government.

Bruton and Hill conclude that there are few cases where counterpart funds have been large enough to have had an inflationary effect. Maxwell with Owens (1991:14) agree, but extend the analysis to examine the indirect effects of providing programme aid. Multiplier analysis indicates second and subsequent round effects which might generate demand for products not provided by the aid. This demand might therefore be inflationary, or it could translate into increased imports, increasing demand for foreign exchange and worsening the balance of payments deficit. Their point raises the need for ex-ante analysis of sector response to increased demand.

The potential therefore, for programme aid to have an impact on an economy are enormous. Through general equilibrium effects programme aid can: increase or reduce the money supply depending on who buys the aid and where the funds are deposited; and alter the balance of payments by increasing foreign reserves or changing borrowing from abroad. Partial equilibrium effects will be felt through: the government budget, depending on how the government uses the resources; and the impact on inflation, dependent on whether the aid is used to increase resources available to the economy, or improve the balance of payments.

4.5 Impact on poverty

In addition to the macroeconomic effects, counterpart funds are linked to wider development debates through their potential developmental uses. Of interest to this paper is how they can be used to improve the poverty targeting of programme aid.

Within the literature, Maxwell (1992:2) identifies two main debates concerning the contribution counterpart funds might make towards poverty reduction. The first is with respect to programme financial aid, and how balance of payments support can be linked into domestic poverty reduction programmes. Often balance of payments support is seen as the primary objective of programme financial aid, if more specific developmental or poverty reduction objectives appear at all, they are usually found only in second place (Maxwell, 1992:2). Advocates of counterpart funds argue that the counterpart fund mechanism can offer a way of overcoming this disadvantage. Counterpart funds can

provide governments with resources to fund more diversified and appropriate relief and development programmes which can be specifically targeted at the poor.

The second debate is related, but is more generally concerned with the monetisation of food aid. The growing debate over the future of food aid and the strong argument for increased monetisation, has by extension, called for the greater use of counterpart funds. The question is whether food aid is best delivered in kind, or whether it is more appropriate to sell the commodities on the market, pay the proceeds into a counterpart fund, and use these resources to meet poverty reduction or food security objectives.

Before illustrating how counterpart funds can be used in policies aimed at alleviating poverty, it is worth briefly reviewing the arguments for and against monetisation. (This debate has been reviewed extensively in the literature, for a fuller discussion see Maxwell and Templer, 1994).

A World Bank/WFP (1991) study on food aid to sub-Saharan Africa reviewed the arguments for and against monetisation. The main argument presented in favour of monetisation was its economic efficiency. Efficiency savings included the savings on internal transport, storage, handling and administration costs. Reutlinger (1983) argues, if food aid is sold in a convenient urban centre and the cash generated used to finance public work schemes, the efficiency savings are high. The World Bank estimated that direct distribution might add between 25 and 50 percent to the administrative costs of public work programmes.

As Maxwell with Owens (1991:17) point out, the arguments against monetisation are often to do with the operation of counterpart fund accounts, which can be overcome. The World Bank/WFP objections can be summarised as follows: (i) exchange rate problems: if the exchange rate is overvalued, there is an apparent loss of resources to the counterpart fund. The report notes that "in strictly economic terms, this is not a problem", but adds that "in practical terms ... the apparent loss of counterpart funds has been a real constraint on the monetisation of food aid." (ii) food subsidies - subsidies may reduce the value of the counterpart fund; (iii) local food markets - paying workers in cash may cause food prices to rise, especially in isolated regions; (iv) intra-household distribution - payments in cash may divert resources away from women and therefore reduce nutrition-enhancing expenditure; (v) dependency - food payments may be less likely to encourage dependency than cash payments; and (vi) poverty focus - cash based projects are more likely to be fungible, so that the poverty focus of a direct distribution programme is lost.

If counterpart funds are planned in advance, credited and spent quickly, and managed in as simple a way as possible, then they should overcome many of the above problems. For example, if markets are imperfect and cash transfers to vulnerable groups could increase prices (Coates, 1987) then food aid

could be used to supply wholesale markets, or support market intervention by the grain marketing parastatal.

A workshop on counterpart funds held at IDS in 1991 concluded that there should generally be a presumption in favour of monetisation rather than direct distribution. The workshop came up with a revised statement of principles listing the conditions necessary for programme aid to be effective (see Figure 4.1). It emphases the importance of the size and regularity of aid transfers, the correct valuation of commodities and the undesirability of allowing counterpart funds to accumulate. Practical consideration are listed in paragraph eight. (For a fuller discussion of these issues see Maxwell with Owens 1991, Maxwell and Owens 1991, Maxwell (ed) 1992.)

In exploring the scope for monetising food aid to finance famine-related activities in Ethiopia, Belshaw (1992:46) illustrates how programme aid can be translated into domestic poverty reduction.

After the two famines in Ethiopia in the 1980s, it was asked whether a major part of relief could not be directed towards productive purposes, while providing food security for drought-stricken people at the same time. It was proposed that one way of doing this, attractive because of its cost effectiveness at the micro-level, was to monetise the food aid to provide both balance of payments and budgetary support, and use the counterpart funds to set up a wage fund to employ unskilled labour to work on pre-planned, or expanded development projects.

It was argued that the wage fund should be established before the drought years. As long as the food aid replaced normal commercial food imports, the potential to create disincentive effects - given food would be relatively plentiful with prices tending to be at or below import parity price levels in pre-disaster years - would be avoided.

Potential inflationary pressure during the drought could also be avoided. If the time gap between the sale of the food aid and the expenditure of the funds was large, then there would be a tendency toward inflation. Also wages paid during the famine would inject additional effective demand for food, thus increasing inflation further. These inflationary pressures, however, could be avoided if expenditure from the food aid fund were offset by under-expenditure in the annual budget - which would be expected in times of drought due to the fall in government revenue and foreign reserves.

Belshaw concluded that the most beneficial economic consequences would be obtained by monetising wheat food aid up to the quantity of regular food imports, and maintaining an ongoing programme of public works using wage labour in any area and for any group suffering from chronic food security. The rest of the food aid would be best consigned directly to centres of chronic and transitory food insecurity, where able bodied people would work on pre-planned projects for physical quantities of

food. In emergency years, as much can be monetised as can be justified by cost savings on transport, storage and handling.

Figure 4.1 Counterpart Funds. A revised statement of principle.

1. Counterpart funds consist of local currency generated by the sale of aid commodities or foreign exchange in recipient countries, over the use of which the donor has some control.

2. The purpose of most aid which results in counterpart funds is to assist the recipient country in meeting agreed strategic objectives, through carrying out specific polices, programmes and projects. It does so by helping to meet foreign exchange and government financial requirements. The strategic objectives are likely to include poverty alleviation and food security, as well as stabilisation and structural adjustment.

3. Both the provision of aid and the use, when appropriate, of counterpart funds, provide opportunities for dialogue over the size and composition of government expenditure, with due allowance for fungibility of budgets. In addition, the planning, use and monitoring of counterpart funds will require attention to polices on poverty alleviation, taxation, commodity pricing, and macroeconomic and sector policy, in order to maximise the benefit of aid and avoid the risk of dependency and disincentives. However, government policy, including policy on government expenditure, should not be developed as an adjunct to aid or counterpart funds - the reveres is the case.

4. The real resource transfers are represented by the commodity or financial aid inflows, not the counterpart funds. However, counterpart funds do constitute a mechanism for translating payments for imported goods and services into government revenue, for use on agreed programmes and projects. They may be especially appropriate if it is desirable to target or otherwise influence government expenditure.

5. The expenditure of counterpart funds will set in motion a process of expansion of demand for and production of a varied basket of commodities. For this reason, a diversified basket of aid commodities, including consumer goods, is necessary to help fill any deficit in commodity balances.

6. Dialogue on policy issues and budget expenditure will be especially important when the total (commodity) aid/counterpart fund package supplied by donors makes a sizeable contribution to commodity supply or the government budget, at a national or regional level. If it does not, then the operating costs of the counterpart funds are likely to outweigh the benefits.

7. The scope for efficient policy dialogue will be weakened if counterpart funds are allowed to accumulate; or if they are eroded by inflation, implicit subsidies or over-valued exchange rates. It will be strengthened if counterpart funds are predictable, regular, sizeable, and adjusted to inter-annual fluctuations of the recipient economy.

8. It follows that where counterpart funds are appropriate they should be:

a) planned in advance, preferably in the context of a rolling , multi-year agreement, linked to other aid and with the possibility of 'substitution actions' on a year to year basis to ensure flexibility;

b) disbursed in the context of an agreed policy framework, subject to regular monitoring and fully accounted for in the national budget of the recipient;

c) credited without delay to a government-controlled -interest-bearing account at full cif value, before subsidies or deductions;

d) disbursed quickly, following an agreed plan, to the agreed programme and project spending accounts, including subsides and domestic debt reduction where appropriate;

e) subject to the normal budget formulation, accounting, monitoring and evaluation procedures on the financial and physical sides;

f) managed in ways minimising the administrative load and strengthening national planning, budgeting and reporting processes, perhaps on a multi-donor basis through the creation of a common counterpart fund account.

Source: Maxwell and Owens (1991)

5. An Appropriate Relief Response

5.1 The impact of traditional emergency aid

The traditional international response to emergencies has been to provide food aid for direct distribution. Despite theoretical advances in the understanding of famine processes, in practice the implications have not extended fully to public action. The key to future responses is still often seen in terms of increased food aid, more trucks, better roads and more precise targeting of food distribution. As the literature assessing the impact of emergency aid suggests, this strategy is not always the most effective approach (Dreze and Sen, 1989:85).

Perhaps because the overriding focus of emergency aid is to save lives, in assessing its impact the literature has tended to avoid issues of cost effectiveness, and instead used anecdotal evidence. In general it is accepted that food aid does save lives, but as Borton and Clay (1986:261) point out, there

is no quantitative data on the extent of its impact on mortality, malnutrition and suffering. While acknowledging the difficulty in making reliable estimates of the number who died, the numbers who would have died without food aid, or who would have lived if more or different aid had been provided, their absence in the literature is significant.

As Buchanan-Smith and Davies (1995) note, the most widely observed problem of food aid for direct distribution is concerned with its late delivery. Logistic failures caused by institutional or political realities[4] can lead to dependency and disincentive effects. Large and late deliveries of food aid which coincide with harvests can have serious negative effects on prices and incentives (Ingram, 1987:9) and may cause market distortions (Fraser, 1988:230). The resource cost of transporting and distributing the food to recipients may be substantial. Extended emergency aid can also have production and policy disincentive effects. Such aid may reduce the incentive to work, or as Thomson (1983:213) notes, in the case of Somalia, the continuous flows of bulk food aid sold on the market had a probable disincentive effect on local production (though she points out the analytical difficulty of isolating the impact of food aid). Food distribution may also change consumption habits.

As Thomas et al (1989) note, free distribution in feeding centres or camps has been thought to create dependency and discourage cultivation. It has been suggested indiscriminate distribution of food aid can contribute to a shortage in labour to harvest and thresh. In 1985, De Waal (1989:3,9) argued that continued feeding would lower the price of grain and inflate labour rates making it unprofitable to bring in the next harvest. He did note however that such extreme pessimism proved to be unfounded and that in fact farmers did not let food relief influence their farming decisions.

Distribution problems can also be severe. Food aid provided at an advanced stage of distress through centralised feeding or distribution centres leads to population displacements. This has an impact on future livelihoods, in that people are not on their farms preparing for the next season when the rains do come. It also creates a health problem. Critics of food aid, such as De Waal (1989), argue that badly managed food-relief can actually increase mortality through the creation of disease prone famine camps. The health-crisis model of famine argues epidemic disease is the prime cause of famine mortality. It is now recognised that a major factor in famine mortality is related to diseases which spread easily in relief camps.

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4. As Buchanan-Smith and Davies note better prediction of famine has not lead to corresponding improvements on the response side. They argue there are two main reasons for the failure to translate early warning information into timely response: (i) the international relief system responds to famine once it is under way, but is ill-equipped to respond to early warning; and (ii) it is not the severity of the crisis, but relations between international donors and national governments which is the single most important determinant of the timing and scale of the international response.

While there has been a growth in decentralised distribution centres, due to constrained resources at the local level, these centres have had to rely on indiscriminate allocation mechanisms, such as public distribution with universal eligibility, or distribution mediated by local institutions. As Dreze and Sen (1989:86) report, much of the food aid in 1984 in sub-Saharan Africa was "given away in indiscriminate, inequitable or simply unascertained ways, with the consequence that in many places the most vulnerable groups did not get enough to survive through the crisis".

Finally, it has been argued that emergency food aid can have a negative impact on ongoing development projects. Case studies have found that relief aid often ignores or cuts across government and development institutions. Subsequent development efforts can be made more difficult by the diversion of funds from local institutions, or the creation of new chains of command which are less responsive to development needs.

5.2 An improved relief response

The argument often used with respect to emergency relief is that there is no time to implement any other type of response than food aid for direct distribution. Such statements imply that emergencies are few and far between, and unforeseen. Emergencies however, have arisen frequently and repeatedly in sub-Saharan Africa over the last decade, and in many cases, have been well predicted (Buchanan-Smith and Davies, 1995). Recognising that famines are not purely a result of a food availability decline, but are linked to wider issues of poverty, they will continue to occur. There is therefore both the time and the need to draw up overall guidelines for broader approaches.

In accepting that famines are as much a crisis of livelihood as they are a food crisis, relief programmes must adapt. In aiming to save lives and livelihoods an appropriate relief response must involve "a network of decisions relating to diverse policy areas such as the generation of incomes, the delivery of health care, the stabilisation of food prices, the provision of drinking water, and the rehabilitation of the rural economy" (Dreze and Sen, 1989:118).

Circumstances will probably dictate more than one policy response. The question is not whether to provide one or another type of aid (programme aid or food aid for direct distribution), but to assess when each of a bundle of responses is appropriate. Questions should include: in what circumstances should alternative types of aid be given; in what proportions they should be given; and how they should be planned and managed effectively.

Key elements of such an approach must:

i. Link relief aid with development, or at least not undermine development objectives;

ii. Be integrated into existing government structures. In the short term, governments of affected countries have quick access to information, administration, communications, transport and storage. Aid which takes advantage of local skills and channels already in operation will be more cost-effective. In the long term, government support is needed for future sustainable food security, therefore international agencies should aim to co-operate with recipient governments when providing relief, and in so doing build national capacity (Mugwara, 1994:94). In the absence of strong local government capacity, NGOs can play a role in working closely with local bodies. Often enhancing local capacity is a stated objective of their intervention (Walker, 1994: 107);

iii. Recognise the economy wide impact of drought (as discussed in section 1); and

iv. Take account of the heterogeneous nature of African situations - for example, the occupational characteristics of the affected population, the pattern of intra-family divisions, the structure of markets, the nature of co-operative village institutions, and the mobility of vulnerable groups (Dreze and Sen, 1989:118).

Within these broad guidelines a relief programme must focus primarily on people. In particular, it should aim to:

i. Safeguard assets. In other words, prevent households selling their assets. Evidence shows that people will go hungry in order to preserve seed, tools, and livestock, and may sell relief food in order to preserve productive assets. De Waal (1989) argues that in the early stages of drought food may be less valuable than fodder, veterinary services or cash. Cash allows vulnerable groups to maintain their own survival strategies without significantly interfering with them. It can prevent distress sales and, as Dreze and Sen (1989) and Keen (1993) argue, may be quicker and cheaper than distributing food. If, however, assets have been sold or seed/livestock consumed, rural emergency provisions need to include inputs, such as seed, tools, transport home etc., to enable households to begin to produce again (Green, 1986:294).

ii. Generate/maintain employment. Buchanan-Smith and Maxwell (1992: 6) note that it may be possible to turn a consumption subsidy into an investment subsidy. Evidence shows that affected populations positively look for work in crisis situations. Relief aid used as a wage to pay for development work could increase current income and thus reduce future vulnerability. Maxwell (1993) writes about food aid in emergencies being used for employment-based safety nets. He argues that for countries with a labour surplus the potential is enormous. In addition, a further developmental impact will be felt if the resources are used to fund a previously planned

development project, such as the building of a new health centre, and hence accelerate development plans.

iii. Prevent migration (Hay, 1989:25). Relief aid should prevent peasants from migrating, allowing them to remain in their homes, maintain their social units and prepare for the return of rains. This approach is much more conducive to making survival the first step to self rehabilitation than food aid distributed in mass camps of dislocated, totally dependent people (Green, 1986:294).

iv. Protect rural-rural and urban-rural terms of trade (Hay, 1989:25). The most obvious way of protecting terms of trade is to keep food prices down. Their successful containment would help protect vulnerable people. Relief sold through the food marketing system can stabilise prices and prevent adverse price changes, thus defending terms of trade.[5]

v. Finally, a caveat to all of the above is needed. As Walker (1994:107) points out, "Relief is really about providing very basic life-supporting needs. Sufficient food, water, shelter and medical care and protection from violence, to keep body and soul together." An overriding objective of a relief programme must be to ensure that these minimum conditions are met.

6. Programme Aid and Drought

This next section deals with the potential of programme aid as an appropriate policy response to drought in light of the revised thinking about the impact of drought and the issues of linking relief and development. Programme aid can contribute to relieving the main constraints imposed on the economy by the drought. By increasing foreign reserves and the supply of food, programme aid provides balance of payments and budgetary support, while curbing inflation. This next section outlines the potential impact of programme aid on the four macroeconomic indicators - the balance of payments, the government budget, and the money supply and inflation. It reviews the potential of counterpart funds, and concludes with a summary of the impact of programme aid on people.

[5]. It is also important, however, to look beyond the initial response of an injection of aid. Dreze and Sen, writing on cash support argue that, the initial inflationary effect of cash support can have a positive effect on the total supply of food (Dreze and Sen, 1989:97). Cash support can have the immediate effect of exerting an upward pressure on food prices, since the effective demand for food increases. This inflationary pressure, however, may not be a bad thing, if it has the effect of both stimulating production (repeated sowing, growing alternative crops, reducing livestock feeding and gathering wild foods, are often rendered more attractive by increases in food prices), and encouraging private trade which is effective in redistributing food (large variations in food output are common in Africa).

6.1 Impact of programme aid on the balance of payments

As the analysis in section 2 indicated, the initial effect of a drought is shown in a worsening of the balance of payments. The associated fall in foreign reserves creates a severe bottleneck within the economy. The textbook solution to a serious balance of payments deficit is adjustment, which, because of the lack of foreign exchange, usually necessitates an immediate cut in imports. To cut imports during a drought would cause further inflation, unemployment and fall in output.

Programme food aid which substitutes normal imports, allows international reserves to increase or not be reduced. An increase in foreign reserves permits the importation of both food and non-food items, which reduces the prices of imports and improves local terms of trade. Import dependent sectors are therefore protected, preventing further falls in unemployment and output. In addition the government's need to borrow to finance imports is reduced and the depreciation of the exchange rate caused by the drought is offset by appreciation due to inflow of aid.

Conversely, programme food aid which is additional has little or no effect on foreign reserves. In this case the impact is felt primarily in the food market where the increase in the supply of food eases the pressure on food prices. It also reduces the pressure on the use of foreign reserves which can be directed towards non-food imports, especially alternative sources of fuel. Hence import-dependent sectors are less affected. In addition, counterpart funds generated from the sale of this programme aid could be used to ease one of the other bottlenecks in the economy.

Programme financial aid supplied as a loan or grant will increase international reserves, assuming imports remain unchanged, and exports and borrowing that otherwise would have taken place do not change. As above, the increase in reserves will permit the importation of both food and non-food items and hence stabilise the marketing structures.

6.2 Impact of programme aid on the government budget

During a drought government revenue falls and spending increases, thus increasing government borrowing. Programme aid counterpart funds could be used to ease the borrowing requirement, or finance additional projects to relieve the burden of the drought on particular sections of society. Programme food aid, in increasing the supply of food, reduces pressure on the government to introduce large relief measures. This also reduces their need to increase borrowing.

Controlling government borrowing maintains current interest rates, ceteris paribus, leaving access to credit for other sectors open. This allows long term growth targets to be maintained. Additional

resources remove the need to reallocate resources away from the capital to recurrent budget, and development objectives are not sacrificed.

Counterpart funds could be used to increase investment: fund cash projects to provide wages for unemployed agriculture workers; intervene in the urban informal market; promote accelerated rural development programmes; and/or improve export potential of industries benefiting from the change in international terms of trade.

It is important to avoid the accumulation of counterpart funds, especially in a situation of drought where the economy is particularly vulnerable to constraints. If this happens one expedient means of using the counterpart funds is to direct the funds towards reducing the budget deficit.

6.3 Impact of programme aid on inflation and the money supply

Programme food aid and programme financial aid sold to the private sector, or the government itself, acts to reduce the money supply. On the other hand, programme financial aid sold to the Central Bank leaves the monetary base unchanged, but increases international reserves. Because during a drought one of the greatest constraints is the lack of foreign reserves, a valid option may therefore be for the Central Bank to buy the aid.

Roemer (1987:798) argues that the most deflationary impact of programme aid occurs when commodity aid is additional to normal imports. If there is little or no increase in foreign reserves, the deflationary impact of more goods will prevail, as long as the Central Bank ensures that the counterpart funds do not create additional money. Although this is correct, non-additional food aid and financial aid also reduce inflationary pressures by increasing foreign reserves, allowing more goods to be imported. A grant or loan of programme food aid increases the supply of food, reducing inflationary pressures, while a grant or loan of programme financial aid allows imports to rise, curbing demand inflation.

Within the counterpart fund literature, many argue that a way of combating inflation is to sterilise the counterpart funds generated by the sale of the programme aid. This might be a solution if the inflation is high and caused by rapid money supply growth - for example in a drought economy where the government prints more money to ease the budget deficit. However, as Bruton and Hill (1991:35) argue, sterilising counterpart funds is a one off expedient to reduce the money supply.

In an economy suffering from drought, simply reducing the money supply by itself almost certainly results in a further fall in output and employment. In addition, the gap between revenue and expenditure will still have to be financed by net credit to the government. There is therefore no

difference between not using the counterpart funds and borrowing to meet the government expenditure, and using the counterpart funds to finance expenditure. While the commodity aid or foreign exchange acts on the demand side of the economy, the counterpart funds will enable the government to act on the supply side as well.

6.4 Impact of counterpart funds

As mentioned earlier, the poverty targeting of programme aid can be improved by the correct use of the generated counterpart funds. First, counterpart funds can be used as a wage to pay for development work. Instead of receiving free food, people can be employed in a number of developmental project such as, developing irrigation facilities, planting trees, carrying out soil conservation works, or building roads. These projects will not only increase/secure peoples incomes, but will also reduce future vulnerability to shocks. In addition, counterpart funds can be used to develop infrastructure that will be of value after the emergency has ended. For example, new health centres or water sources already identified as necessary in local or regional plans could be built, hence accelerating development plans (Buchanan-Smith and Tlogelang, 1994:55).

6.5 Impact on people

Where programme aid increases foreign reserves countries can import both food and non-food items. This reduces the prices of imports and hence improves peoples terms of trade. It also secures employment in import-dependent sectors. Where programme aid does not increase reserves but does increase the supply of food, the pressure on food prices is reduced and hence peoples terms of trade are again improved. By providing budgetary resources to fund diversified and appropriate drought relief programmes peoples incomes are secured. Finally, by reducing the pressure on the government budget long-term development goals are less likely to be sacrificed, improving peoples future well-being.

7. Conclusion.

The paper has stressed the importance of looking beyond direct distribution of food aid as the only response to drought. Recognising the economy wide impact of drought and the current situation of almost "permanent emergency" responses must adapt. In order to safeguard livelihoods, maintain people's terms of trade and generate/maintain employment levels, a policy response must aim to stabilise the macroeconomy and address the issue of poverty reduction. Measures needed to stabilise the macroeconomy include balance of payments and government budget improvement, and inflation

control. Polices which address poverty reduction include income growth, improved access to markets, stabilisation of market supplies, and a reduction of excess variability in market prices.

The way to achieve these goals has been identified in the paper. In summary, a response must aim to: increase foreign reserves; increase the supply of food; stabilise the food marketing structure; stabilise other marketing structures; reduce pressure on the budget; promote growth; and provide a safety net. An assessment of the appropriateness of a policy response must therefore ask whether the policy instrument was effective in addressing each of the objectives. Table 7.1 scores the three main policy instruments available to donors in an emergency according to their ability to address the key objectives.

Table 7.1

Instrument: Effect: .	programme food aid	programme financial aid	food aid for direct distribution
increase foreign reserves	3	1	
reduce pressure on the budget	2	1	3
increase the supply of food	1	3	1
stabilise food marketing structures	1	2	2
stabilise other marketing structures	3	2	
promote growth	3	2	
provide a safety net	2	2	

Programme financial aid has the greatest impact on the macroeconomic objectives - it can increase foreign reserves and reduce pressure on the government budget. Indirectly, it stabilises the marketing structures, and controls the erosion of livelihoods through the promotion of growth, and can finance many different types of safety nets.

Programme food aid has the greatest impact on both the supply of food and the food marketing structure. Indirectly it reduces pressure on the budget, improves people's terms of trade, and again controls the erosion of livelihoods.

Finally, food aid for direct distribution can directly increase the supply of food which indirectly stabilises the food marketing structure. Its potential, however, to achieve any other goal is limited.

The overriding conclusion is that programme aid can overcome many of the difficulties associated with traditional emergency relief. It acknowledges the macroeconomic impact of drought and can be a useful instrument for linking relief and development. What has not been mentioned yet is under what conditions, and to what extent, programme aid is an appropriate response. To conclude the paper, this section identifies the alternative relief responses available and suggests criteria for deciding when they are appropriate.

It is obvious that the impact of drought and the effectiveness of alternative responses will vary between countries depending on their particular characteristics. It is therefore important when deciding on an appropriate response to bear in mind the feasibility of alternative policies. In order to construct a realistic number of plausible responses it is useful to group countries. Table 7.2 is an adaptation of Maxwell's classification of food secure country types in sub-Saharan Africa. Buchanan-Smith and Maxwell (1994) reduced the "individuality of African situations to seven basic country types", depending on (i) the character of food insecurity; (ii) the political stance of the country - whether it is engaged in a high degree of intervention or a structural adjustment programme; (iii) the poverty/food security orientation of the country - whether the government is committed to poverty reduction and food security; (iv) the state capacity - whether the civil service has the administrative skills or financial strength to carry out the policy; and (v) of considerable concern, the country's political stability - the strength of democracy or presence of war can aid or hinders any policy response.

Added to Maxwell's typology is a sixth characteristic and eighth country type taken from Benson and Clay's analysis of the impact of drought (1994:23). Benson and Clay built on Nowlan and Jackson's (1992) typology of subsistence, to identify the need for different forms of international response required by drought-affected economies in Southern Africa in 1992. They divide countries into four categories depending on their type of economy: simple economies, which are heavily reliant on agriculture; intermediate economies, where there is a significant manufacturing base with strong links between sectors; complex economies, where agriculture makes a small contribution to the economy, the productive economy is diversified, and there are weak links between agriculture and the rest of the economy; and dualistic economies, where there is a large capital-intensive extractive industry which is weakly linked with other sectors.

In addition, policy considerations related to how much aid, and what combination and sequence of interventions, has to be addressed within particular country situations. Feasibility of policy responses is highly sensitive to country circumstances (see Table 7.2).

The impact of drought on country types I to IV describes the conventional model of drought. The impact is felt by its direct impact on the agricultural sector, reflected in falls in GDP, agricultural exports, employment opportunities and widespread sale of assets. Due to weak inter-sectoral linkages and the greater importance of imports of final rather than intermediate goods, the multiplier effect through the rest of the economy is fairly limited. A further characteristic of these country types is their low state capacity and weak commitment to food security. This makes instruments aimed at linking relief and development more difficult to implement.

For these country types, drought tends to be concentrated in the rural sector, thus an appropriate response would include a high proportion of targeted interventions. The pattern of political instability and low state capacity constrain the channelling options available to aid agencies. In such circumstances government inefficiency, the risk of diverted assistance, and problems of large areas being beyond the control of government agencies, requires alternative channels for the relief to reach those in need.

As touched on, targeting itself is a problematic issue and does not necessarily immediately imply food aid for direct distribution. Dreze and Sen (1989:108) identified three alternative selection mechanisms: (i) administrative selection - based on observable indicators of deprivation, such as anthropometric measures, asset ownership, demographic characteristics, or geographical location; (ii) market selection - intervening at the level of the market, such as subsidising food prices or supporting livestock prices, and letting the share of different groups in public support be determined by their market situation (they do conclude this selection criteria is undependable); and (iii) self selection - requiring work in exchange for relief in order to discourage privileged groups. For countries I to IV, this third method, by providing food or cash for work, may be the most suitable selection criteria, in which case there is a clear role for programme food aid.

Even these economies, however, may have to face other economic difficulties, like higher levels of debt, larger balance of payments deficit, reduced and less equitable distribution of assets. In cases where there is an effective government, then general support with programme financial aid would also be appropriate.

For country types V to VIII, drought impacts on the manufacturing as well as agricultural sector. Due to overall integration of the economy the impact is more widely diffused. However, with the increased state capacity and general commitment to food security, development programmes are feasible. An appropriate response would therefore include financial aid to provide balance of payments and budgetary support, and cash support for development programmes. Quickly programmed and disbursed programme food aid would be as effective as programme financial aid in

achieving these objectives. If counterpart funds are generated, special attention should be paid to the impact of their generation and use. Direct aid for these countries would be less appropriate, given it does not address the economy wide aspects of the shock. However, the overriding aim is to save lives and if a situation has reached an advanced stage of distress then increasing the supply of food must be the first priority with reducing future vulnerability and promoting development as secondary objectives.

Finally, country types VIII are characterised by a large capital-intensive extractive sector which is weakly linked with other sectors of the economy. While the impact on the economy may appear small, the impact on certain sections of society may be severe. However the country itself should be in an adequate position to provide relief measures.

To conclude, with the increase in number of emergencies, stagnating aid budgets, and growing concern that emergency relief may be adversely affecting development efforts, this paper has put forward the argument for a more efficient and cost effective response to drought. The paper has shown how programme aid can overcome many of the difficulties associated with the more traditional response to drought. It has highlighted the tremendous scope programme aid offers government for an improved relief strategy. By short-circuiting many of the macroeconomic effects of drought, programme aid reduces the number of people likely to fall into destitution, and therefore reduces the need for emergency aid. It is also very effective in stabilising food prices, and can provide governments with the necessary budgetary resources to fund drought relief programmes which are more diversified, and more appropriate, than the direct distribution of foreign food.

8. Further Research Needs.

Finally, in arguing that programme aid is as an appropriate policy response to drought the paper has not addressed issues relating to its effectiveness. As the literature on assessing programme aid, in general, has found, this is not a simple task.

Cassen (1994), Riddell (1987) and White (1992) all note that to date there is no set method for evaluating programme aid. Evaluations of programme financial aid have centred around discussions on trends in the recipients balance of payments, and how far the conditions insisted on by the donor have been met. As Cassen (1994:125) notes, these evaluations have been inconclusive. Methods have not been able to disentangle the effects of aid from general movements in the economic position of the country, thus involving value judgements about countries' entire development efforts and ignoring the contribution of other factors in the improved/worsened balance of payments. In addition,

the bulk of evaluations have rarely considered the impact of the aid on the poor, ignoring the effectiveness of programme aid in terms of saving lives, or preserving livelihoods.

Evaluations of the effectiveness of programme food aid have encountered the same problems. If food aid substitutes for normal imports and frees foreign exchange then its effectiveness will, to a significant extent, depend on the use made of the freed foreign exchange. Again, the evaluations in the literature are inconclusive.

Therefore, to evaluate effectively the impact of programme aid, traditional methodologies need to be modified. After extensive literature reviews, Cassen (1994:133), Riddell (1987:235) and White (1992) conclude, until more general equilibrium, dynamic analysis is undertaken no conclusion, either positive or negative can be made.

References

Belshaw, D., 1992, 'The macroeconomics of counterpart funds: the case of food for hunger prevention in Ethiopia', in Counterpart Funds and Development, **IDS Bulletin**, 1992, Vol. 23, No 3, Sussex, April

Benson, C., and E.Clay, 1994, The impact of drought on sub-Saharan African Economies: a preliminary examination, **ODI Working Paper**, No 77, London

Berg, E., 1975, 'The economic impact of drought and inflation in the Sahel', University of Michigan, June (mimeo)

Borton, J., and E.Clay, 1986, 'The African food crisis of 1983-86' **Disasters**, Vol. 10, No. 4, London

Bruton, H. J., and C.B.Hill, 1991, **The Development Impact of Counterpart Funds: A Review of the Literature**, USAID, Washington DC, February

Buchanan-Smith, M., and S.Davies, 1995, **Famine, Early Warning and Response: the missing link**, IT, London

Buchanan-Smith, M., and S.Maxwell, 1994, 'Linking Relief and Development: an introduction and overview', in Linking Relief and Development and Development, **IDS Bulletin**, 1994, Vol. 25, No 4, Sussex, October

Buchanan-Smith, M., and G.Tlogelang, 1994, 'Linking Relief and Development: a case study of Botswana', in Linking Relief and Development and Development, **IDS Bulletin**, 1994, Vol. 25, No 4, Sussex, October

Cassen, R.C., et al., 1994, **Does Aid Work?**, second edition, Clarendon Press, Oxford
DAC Guidelines, 1991, OECD, Paris

Clement, J.A.P., 1989, The macroeconomic impact of counterpart funds, **IMF Working Paper**, WP/89/63, Washington, August

Coates, S., 1987, 'Should food aid be given away or sold during the famine', Northwestern University, **Discussion Paper**, No. 70IR, Evanston, Illinois

Cole, R., 1989, 'Measuring drought and drought impacts in Red Sea Province, Sudan', **Oxfam Research Paper**, No. 2

Daniel, P., 1990, 'Economic policy in mineral exporting countries: what we have learned?', **IDS Discussion Paper** No. 279, November

Davies, R., R. Rattso, and R.Torvick, 1993, 'The macroeconomics of Zimbabwe in the eighties - a CGE model analysis', ESRC Development Economics Study Group, Draft (mimeo)

Davies, S., 1993, Versatile Livelihoods: Strategic Adaptation of Food Insecurity in the Malian Sahel, IDS, Sussex, February (mimeo)

De Waal, A., 1989, **Famine that Kills**, Clarendon Press, Oxford

Dreze, J., and A.Sen, 1989, **Hunger and Public Action**, Clarendon Press, Oxford

Fell, A., 1992, 'The treatment of counterpart funds in the development assistance committee's principles for programme assistance', in Counterpart Funds and Development, **IDS Bulletin**, 1992, Vol. 23, No 3, Sussex, April

Fraser, C., 1988, **Lifelines for Africa still in peril and distress**, Hutchinson

Gardiner, S., 1992, 'Counterpart funds: the Canadian experience in Latin America and the Caribbean', in Counterpart Funds and Development, **IDS Bulletin**, 1992, Vol. 23, No 3, Sussex, April

Green, R.H., 1986, 'Hunger, poverty and food aid in sub-Saharan Africa: retrospect and potential', **Disasters**, Vol. 10, No. 4, London

Hay, R., 1989, 'Food, aid and relief-development strategies', **Journal of Social Development in Africa**, Vol. 4, No. 2, Zimbabwe

Ingram, J., 1987, 'Food and disaster relief: issues of management and policy', UNDRO lecture by Executive Director of WFP, Geneva, October

Keen, D., 1993, 'Famine, needs-assessment and survival strategies in Africa', **Oxfam Research Papers**, No. 8, Oxford

Krugman, P., 1988, 'External shocks and domestic policy responses', in **The Open Economy: tools for policymakers in developing countries**, edited by Dornbusch, R., and Helmers, F.L.C.H., Oxford University Press, New York

Maxwell, S., 1995, 'Catch the tiger by its tail: Counterpart funds in the evaluation of programme aid' IDS, Sussex, (mimeo)

Maxwell, S., 1993, 'Can a cloudless sky have a silver lining? The scope for an employment-based safety net in Ethiopia', IDS, Sussex, (mimeo)

Maxwell, S., 1992, 'Counterpart Funds and Development' in Counterpart Funds and Development, **IDS Bulletin**, 1992, Vol. 23, No 3, Sussex, April

Maxwell, S. with T.Owens, 1991 'The developmental uses of counterpart funds', **Discussion Paper** No 289, IDS, Sussex, June

Maxwell, S. and T.Owens, 1991, 'Commodity aid and counterpart funds in Africa', **Discussion Paper** No 291, Sussex, June

Maxwell, S., and G.Templer, 1994, 'Monetisation or distribution in kind: a review of the issues, IDS, Sussex (mimeo)

Mugwara, R., 1994, 'Linking relief and development in Southern Africa: a SADC perspective on the 1992/92 drought emergency', in Linking Relief and Development and Development, **IDS Bulletin**, 1994, Vol. 25, No 4, Sussex, October

Owens, T., 1991 'Counterpart Funds: an annotated bibliography', **Development Bibliography Series** No 6, IDS, Sussex, November

ODI Briefing Paper, 1987, Coping with African Drought, London, July

Reutlinger, S., 1983, 'A fresh look at PL480 Title II', **Food Policy**, Vol. 8, No. 3, August

Riddell, R.C., 1987, **Foreign Aid Reconsidered**, ODI publications, James Currey, London

Riley, B., 1992, 'An Analysis of the Uses of Counterpart Funds in Mozambique', **IDS Bulletin**, Vol. 23, No 3, Sussex, April

Roemer, M., 1989, 'The macroeconomic impact of counterpart funds revisited', **World Development**, Vol. 17, No. 6, June

Scoones, I., 1994, Coping with risk and uncertainty in Zimbabwe's communal lands', Ministry of Lands, Agriculture and Water Development, Harare, Zimbabwe

Sen, A., 1981, **Poverty and Famines: An essay on entitlement and deprivation**, Clarendon Press, Oxford

Taylor, L., 1979, **Macro Models for Developing Countries**, McGraw-Hill, New York

Thomas, M., et al, 1989, 'Food aid to sub-Saharan Africa: A review of the literature', **WFP Occasional Paper**, No 13, Rome

Thompson, C., 1993, 'Drought management strategies in Southern Africa: from relief through rehabilitation to vulnerability reduction', Food Security Unit, SADC, Harare

Thomson, A.M., 1983, 'Somalia: food aid in a long term emergency', **Food Policy**, Vol. 5, No. 3, August

UNDRO, 1991, 'Preliminary study on the identification of disaster prone countries based on economic impact', UN. , New York

Walker, P., 1994, 'Linking relief and development: the perspective of the international federation of red cross and red crescent societies', in Linking Relief and Development and Development, **IDS Bulletin**, 1994, Vol. 25, No 4, Sussex, October

White, H., 1992, The macroeconomic impact of development aid', **Journal of Development Studies**, Vol. 28, No. 2, January

World Bank/WFP, 1990, **Food aid in sub-Saharan Africa: an agenda for the 1990s**, Washington, D.C., Rome

World Bank, 1991, 'Food security and disasters in Africa: a framework for action', Washington, D.C. Africa Technical Department

World Bank, 1994, **Social Indicators of Development**, John Hopkins University Press, Washington