# MITIGATING FAMINE IN SOUTHERN AFRICA - WHAT HAVE WE LEARNED FROM THE PAST?

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## **ABSTRACT**

Famine continues to threaten the livelihoods of many sub-Saharan Africans. Presently, six countries of southern Africa: Lesotho, Malawi, Mozambique, Swaziland, Zambia and Zimbabwe, are threatened by famine due to low output in the staple crop maize. Policy lessons learned from studies conducted by the International Food Policy Research Institute (IFPRI) on famine mitigation efforts in sub-Saharan Africa can be instructive in developing measures to remove the threat. Famine mitigation must be seen in terms of three goals or phases: immediate relief, recovery and short-term development. This paper presents policy options for each of these phases, including food aid, labor-intensive employment programs, public-private partnerships, agricultural input transfers and institution building. Interventions must be combined and sequenced for an overall strategy to be effective. Certain broader goals, such as governance, are also essential to consider for long-term famine prevention and food security. The paper examines a range of issues: 1) the causes of famines, the time frame for various policy measures and the criteria for choosing interventions, (2) interventions for immediate relief, (3) measures to help affected households recover from famine, (4) the development of technological, policy and institutional foundations for stepping out of famine and attaining food security, (5) how interventions should be combined and sequenced, and (6) several overarching issues that should be considered for famine mitigation and prevention.

Keywords: famine, southern Africa

## ALLÉGER LA FAMINE EN AFRIQUE AUSTRALE - QU'AVONS-NOUS APPRIS DU PASSÉ?

## RÉSUMÉ

La famine menace sans cesse les moyens de subsistance de nombreux africains au sud du Sahara. A présent, six pays de l'Afrique australe, à savoir le Lesotho, le Malawi, le Mozambique, le Swaziland, la Zambie et le Zimbabwe, sont menacés de famine à cause de la production insuffisante de l'aliment de base qui est le maïs. Les enseignements d'ordre politique tirés des études menées par l'Institut International Recherche sur les Politiques Alimentaires en matière d'initiatives visant à alléger la famine en Afrique instructifs dans sub-saharienne peuvent être l'élaboration des mesures de lutte contre cette menace. L'allègement de la famine doit être perçu en terme de trois buts ou phases, aide humanitaire immédiate, redressement et développement à court terme. Ce document présente des options de politique pour chacune de ces phases, notamment l'aide alimentaire, des programmes d'emploi intensif, des partenariats entre les secteurs public et privé, des transferts d'intrants agricoles et la construction d'institutions. Les interventions doivent être combinées et mises en séquences pour qu'une stratégie globale soit efficace. Certains buts plus élargis, comme la gouvernance, sont également essentiels et méritent d'être considérés en vue d'une prévention de famine et d'une sécurité alimentaire de long terme. Ce document examine une gamme de questions: 1) les causes des famines, le temps nécessaire pour les différentes mesures politiques et les critères de sélection des interventions, (2) les interventions d'aide humanitaire immédiate, (3) des mesures pour aider les ménages affectés à se rétablir de la famine, (4) la mise au point de fondations technologiques, politiques et institutionnelles permettant de se libérer de la famine et atteindre la sécurité alimentaire, (5) comment les interventions devraient être combinées et mises en séquences, et (6) de nombreux problèmes généraux qui devraient être considérés pour alléger et prévenir la famine.

Mots clés: famine, Afrique australe

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### INTRODUCTION

In spite of development efforts, famine continues to threaten the livelihoods of many sub-Saharan Africans. Presently, people in six countries of southern Africa: Lesotho, Malawi, Mozambique, Swaziland, Zambia and Zimbabwe, are either experiencing or under the threat of famine due to production shortfalls and decreased planting in the staple crop, maize. Approximately 10 million people in the region are in danger and several thousands, it is believed, have already died. The possibility of the toll increasing remains [1,2].

Of the six countries, Malawi, Zambia and Zimbabwe have been the most seriously affected. Malawi faces a severe food shortage that has affected seventy-five percent of its population. This year, after harvest. supply in Malawi is expected to fall short of meeting demand by approximately 400,000 metric tonnes [2]. In Zambia, the supply shortfall will be by more than half a million metric tonnes. However, the production deficit is most serious for Zimbabwe, where this year there will be a shortfall of seventy nine percent of a normal 1.5 million metric tonnes of maize harvested. [2,3]. The gap between supply and demand in Zimbabwe will be roughly one-million metric tonnes [3]. crisis is not quite as severe for the other three countries. Lesotho, Mozambique and Swaziland. In Mozambique, only certain areas have been affected, and in the other two countries food shortages are moderate-to-serious. For the region as a whole, about 4 million metric tonnes will have to be imported to meet consumption needs this year [2]. In the past, shortfalls could be filled with imports from South Africa. However, this year South Africa too has experienced lower-than-normal output. As a result, the prices for maize in the region have been extremely high and beyond the reach of the poor. The famine has not only caused suffering for millions in the present, but also placed the achievement of future food security in jeopardy through the toll it will take on social and human capital, and financial resources [4].

This paper aims to present the policy lessons that have been learned from efforts to address past famines over the last twenty years in sub-Saharan Africa, and apply them to the present situation in the sub-region. The lessons are based largely on research that the International Food Policy Research Institute (IFPRI) conducted during the 1980s and 1990s on famine and other issues in sub-Saharan Africa [4].

Based on research conducted on famine [5], it is now understood that the more immediate causes of famines in general have been environmental harzards, such as drought, or armed conflict. Drought and flooding have been the proximate causes of the crisis in southern Africa. However, what makes countries vulnerable to famine are chronic and widespread poverty, and deficient

agricultural and development policies. Environmental hazards and wars only bring collapse to systems that are already weak due largely to inadequate governance [6]. This has certainly been true for the southern African countries, where the majority of the rural population remains very poor. In Zimbabwe, a country that normally exports maize to others in the region, a lack of adequate governance led to the low planting of maize, and inability to harvest what had been planted. governments once had the capacity to prevent famines, this capacity has not been maintained. In 1991-92, unlike in the present, some of the southern African countries were able to avoid an impending famine in the region through institutional innovation and collaboration. Clearly, to avert famines in the future, economic, political and human resources must be directed at building long-term development and famineprevention policies.

In formulating policies to reduce the threat of famine, it is important to think in terms of three-time horizons or goals: immediate relief, recovery and short-term development. Famine mitigation interventions lie on a spectrum of immediate relief to short-term development [5,7]. The goal of a mitigation strategy should be to first begin at the immediate relief end of the spectrum. Following this, the objective should be to move towards the other end of the spectrum by adopting policies for recovery and short-term development. The possible programs should be seen as lying on a spectrum because measures taken in one phase, for example recovery, if designed properly, can contribute to the achievement of goals in the later phases, short- and long-term development, and famine prevention. In famine mitigation it is important to understand that no one program will be sufficient to mitigate famine. Therefore, along with the issue of time horizon, the question of how interventions should be combined and sequenced has to be considered [5].

## IMMEDIATE RELIEF: GETTING FOOD TO THE HUNGRY

During the initial crisis stage of a famine, the goal should be to make food available to those suffering most in as rapid a manner as possible. This is generally done through the distribution of free food aid with the assistance of relief organizations. When a famine is already under way, there are in reality few other options available. Relief could be provided even sooner if a country has buffer grain stocks that it can release to help keep prices affordable. The objective of immediate relief is to minimize the various effects of famine, which include dislocation and destitution in addition to mortality. Efforts should be made to ensure that areas that are difficult to access due to distance or poor infrastructure receive disbursements of the same quantity and as regularly as do other regions. Preparations

should be made for the possibility that some areas will require food aid for a long period of time [5]. In fact, in drought-prone areas, populations may require free food aid for several years. In Ethiopia, between 1984 and 1992, many households obtained food aid for a number of years [7].

It is imperative in food aid distribution that food is delivered to people where they live. This is vital for several reasons. The weakness that extreme hunger causes can prevent, and has prevented, significant numbers of people from traveling to central distribution sites to obtain food. Other reasons for making food aid accessible to people where they live is the importance of maintaining household stability necessary for recovery and future development, and safeguarding the population's health. The formation of food camps adversely affects household stability by uprooting people and making them vulnerable to disease. In fact, one of the main problems with camps is the spread of diseases due to overcrowding and poor sanitation. Cholera is one of the main diseases that arise. Eighty-thousand Rwandans during the 1994 crisis died in camps due mainly to cholera and dysentery, and a large number of people in southern Africa are already succumbing to this and other diseases. In camps especially, weak management and ineffective operation can lead to the neediest not being assisted. Food camps, therefore, need to be avoided as much as possible. However, when roads do not exist, and people have already come to central locations, there will be little choice for project administrators on what they can do [5,7].

Targeting the most adversely affected areas first is essential. In many cases, only certain regions of a country experience a famine, or experience it more severely than do others, due to localized environmental calamities, higher pre-famine levels of hunger and malnutrition or other factors [5]. In some of the southern African countries, the food shortages are occurring in only certain areas. In Lesotho, poverty and malnutrition are particularly pronounced in the mountainous and possibly difficult-to-access areas. In Mozambique, the regions experiencing food shortage are in the south and center. In Zimbabwe, the south, west and extreme north are the areas most affected [5]. It is vital to target these areas first with the limited resources available. In one region of Sudan, during the country's famine in the 1980s, criteria used to rank districts for targeting were: crop production record, emigration numbers, nutritional anthropometric measures, and reported mortality rates. In fact, if food shortages are severe in only certain areas, a national famine mitigation strategy can be more effective if it targets these areas with food aid, and addresses the threat of hunger in other areas through other programs [5].

Within targeted and non-targeted areas, assistance should be aimed at the neediest households. Within same areas, are usually differences between households in terms of wealth, household composition, coping capacity and size. While all households in an area may require assistance for a time, leading aid administrators to distribute food aid evenly, efforts must be made to ensure that the poorest households receive what they need to survive. In one food aid program in Sudan, the differences between households in terms of needs were unfortunately not recognized.

All households received equal shares of aid. Large families and those that have no other coping mechanism other than food thus suffered. Providing food based on absolute rather than relative poverty levels can lead to high costs, insufficient quantities per household and needs of most disadvantaged not being met [5].

To ensure that the most disadvantaged households are targeted, standardized and formal guidelines for distribution should be employed. Often, discrimination by gender, age, status and ethnicity exists in food aid distribution, whether in camps or communities, and in other famine recovery programs. Households that are headed by either women or the elderly are of low status, or of a minority ethnic group are frequently poorer to begin with. Relying on informal means, such as the judgments of village leaders or project administrators, and on criteria that vary from one area to another, might make the situation only worse for them. Procedures for targeting must be established and followed, or else the most disadvantaged households could go without the aid they need and resources will be used inefficiently [5,7].

Because of the threat that prolonged food shortages pose to human health, investments in health need to be expanded or maintained during the relief and recovery stages. A large number of the deaths that occur during famine periods are actually due to disease and not starvation. This is true outside of food camps as well. Undernutrition and malnutrition make people more susceptible to diseases and existing health services are generally unable to take on the added burden since they just are not prepared. It is, therefore, imperative that during famine and relief periods, public investments in health services are increased or maintained. Measures will accordingly need to be taken to maintain sanitation systems and safeguard water quality. In fact, food security policies have a limited impact on reducing health risks unless they are integrated with effective nutrition, health and child-care interventions [7].

# FAMINE RECOVERY: VULNERABLE ASSESSMENT, LABOR-INTENSIVE EMPLOYMENT PROGRAMS, AND PUBLIC AND PRIVATE PARTNERSHIPS

As the population of a country emerges from under the threat of mass starvation, or for areas that have not been

affected severely, various policies and measures can be implemented in the public and private spheres that can not only lead people further away from famine, but also contribute to development in the future. Just as immediate relief programs should be designed carefully to save lives and not jeopardize further efforts, recovery measures must be planned in a manner that lays the foundations of short-term development and food security.

To determine what kinds of relief and recovery interventions will be needed across a country, an assessment of the different areas will be needed regarding their vulnerability to famine [8]. Indicators and information that are essential to have for households in each district include: levels of food intake, average income level and income range, food sources, coping capacities, links to markets, level of asset holdings and water scarcity. This information should also be made available at the district level for planning local interventions. Other information that is crucial to generate at this level are the number and concentrations of households headed by females or the elderly, and those with members suffering from AIDS.

One of the most effective and practised programs for bringing a population out of famine is the laborintensive employment scheme. These can be implemented once areas come out of the crisis phase, or in areas where the hunger problem is not severe. Labor-intensive employment programs are generally public initiatives, in the form of public works projects designed to assist the poor. They provide food or cash wages in exchange for labor in a cost-effective manner. These programs provide three benefits: short-term income, risk insurance where public works schemes provide employment guarantees, and long-term direct and indirect effects from asset creation. These programs create assets by developing or improving public goods. such as infrastructure and the natural resource base. Infrastructure development would enable food transport and market integration, while natural resource conservation would enhance productivity. Which of the three benefits a program should focus upon will depend on the health of the participating households as they emerge from severe hunger, their coping capacities, and the level of food shortages and hence food prices [4, 5].

When food supply is still low, and prices are thus high, it is preferable for public works programs to make payments in the form of food. The poor may not be able to afford sufficient food even if imports are made available. Hence the basic cash wages that these programs could offer would not be enough for the recipients to afford staple foods. Food-for-work schemes would be an appropriate intervention for certain regions within the southern African countries, where prices are currently very high but extreme shortages at the

household level do not yet exist. Poor infrastructure, long distances to markets and the general lack of development of private markets in the region are additional reasons why payment should be made in food rather than cash. In regions where food prices are within the reach of households, but lack of income prevents purchase, wages in cash can be given. The benefit of cash-for-work schemes is that they are less expensive in administrative terms. This solution would be appropriate for urban areas where food access exists. but incomes have declined and thus the food is unaffordable [4, 5]. Zambia, for example, has experienced a decline in its industrial and public sectors, and thus the wages of urban dwellers are likely to be low [5]. Cash-for-work projects can also be successful in rural areas where food markets function well [5].

If a public works program is already in existence it should be expanded for famine recovery. Zimbabwe has had experience with public food-for-work employment programs during the drought period of 1981-82. Employment continued until 1987 to ensure that households could sustain themselves. The ability of the country to prevent a famine in 1991 when food shortages existed has been attributed to the scheme. Furthermore, more people worked in the scheme than the number that received free food. Where the food need was rather severe, food was distributed first, and labor procured later as payment. However, the program was able to meet less than two-thirds of the officially recognized need, as expansion in scale during the period affected by drought was small and difficult to achieve. A lack of funding was the principal obstacle [5]. Laborintensive employment schemes, however, require a good level of administrative capacity if they are to contribute effectively to a nation's recovery efforts. If such capacity is not yet present, other schemes, such as private employment projects discussed below may be more suitable. In such situations, food aid may have to play a larger role in mitigating famine.

Like food aid, public works schemes should be targeted at poor households. The poor would most likely depend more on such schemes to cope with the famine. Such programs can succeed in reaching the poor, and transferring more benefits to them more than to the nonpoor, if wages are set low or the food supplied is limited. Measures that could be used to distribute the benefits across poor households are either a quota system based on sex, or limiting the number of participants per household. However, limiting the number of participants during a famine to the "needy" can be difficult. As with food aid distribution, standardized and formal criteria should be employed to target those suffering most. Adjustments in the wage setting over time can also improve targeting and efficiency [4, 5].

However, as much as public works schemes can put a country on a path to development and out of famine, it is important to note that these programs only reach households which have is an adult who is able to work. Many households, even when a famine is not occurring, do not have such a member and are frequently destitute. These households are often headed by women or the elderly, or have working-age adult(s) with AIDS. These households do not benefit from public works schemes. To ensure that these households, which are unable to participate have their food needs met, supplementary programs will be required. However, in many poor rural areas, it is older women with children who participate in public works programs [5]. There will also be a need to adapt relief and short-term development strategies to the situation AIDS has created. A failure to plan policies for AIDS-affected and other destitute households will only lead to a significant decline in human and social capital in the future resources necessary for long-term development. Other programs such as free food aid will have to accompany public works schemes so that destitute households are able to survive.

Labor-intensive employment projects could be conducted by the private sector as well. Larger agents in the private sector might be encouraged to implement employment programs for the poor. These private actors would be from the commercial agricultural sector. During periods when food prices are high and farm incomes decline due to drought or floods, the government could provide large farmers with incentives to temporarily employ poor rural households. In Malawi, these large farmers would be in the estate sector involved in tobacco production. In Zambia and Zimbabwe, they would be in the commercial farming sector. Between May and September, large farms could provide nonfarm employment, and from September to March during the growing season, they could provide agricultural work. If food prices are high, these private agents could facilitate food availability to poor households by purchasing staple grains from the public sector and providing food for work.

In addition to employment schemes, partnerships between the public and private sectors could be developed to make food more available. Taking the first steps out of famine requires government involvement and cannot be left to the market alone. However, policies that encourage greater private sector participation in food supply and distribution could help alleviate local food shortages. Although transport infrastructure between the regions in each of the larger southern African countries is generally inadequate, thus preventing food supply from food-surplus to food-deficit regions, the greater availability of food within regions and the reduction in prices could be achieved through increasing private sector participation which currently is fairly low.

Necessary for involving the private sector will be the development of an information system on prices and markets. A specific proposal suggested here is for government food marketing systems, such as Malawi's ADMARC, to create an arrangement with private sellers whereby the latter supply government-purchased grain in areas not served by the public system. The development of the private sector in food distribution and partnership between this sector and the government would also be a step towards preventing famines and ensuring food security in the long run.

Labor-intensive employment programs and increased food availability through private sector involvement could help significantly to ease a country out of famine, and at the same time lay some of the important groundwork for food security in the long-term. Yet in an overall famine mitigation strategy, these programs should be regarded as intermediate steps. On the spectrum of interventions, what are required after some stability has been achieved are short-term agricultural development measures. Some of the main areas in which measures should be taken are technology, macrolevel policy and institutions. Only through short-term development policies which also bring long-term benefits can the present threat of severe hunger be eliminated.

# SHORT-TERM DEVELOPMENT: BUILDING FOUNDATIONS THROUGH TECHNOLOGY, POLICY AND INSTITUTIONS

Perhaps the most important short-term development measure to be adopted, which will lead directly to improving food security, is the provision of agricultural inputs to small farmers. By providing these inputs, farmers will be able to utilize the next growing season and generate an increased supply of staple crops. Improving staple crop yields in the next season would help significantly to bring a country out of a famine since a large number of people depend on these foods, while providing basic agricultural technology in the form of inputs to small farmers is the path by which to obtain agricultural production increases in the near future. These inputs can be in the form of fertilizer, seed or equipment [5].

What has been responsible in large part for the vulnerability of the southern African countries to food shortages and famines is low agricultural productivity. Much of the problem of low crop-output in Africa stems from soil degradation and the low application of fertilizer [5]. In fact, if measures are not taken to increase maize production in the region, it is estimated that in Malawi there will be a shortfall of 600,000 metric tonnes next year on a projected yield of 1.4 million metric tonnes. It is expected that the gaps between supply and demand in the other countries will also either increase or remain the same next year unless

steps are taken to address the underlying problems [2]. To rapidly boost production, the governments of the region could distribute free "starter packs" of seed, legume and fertilizer to all farmers, as was done in Malawi in 1998-99. The starter-pack program was responsible to a large degree for the maize harvest bounty the country experienced in the following year. Malawian small farmers could benefit significantly from the expansion of their country's currently limited program. Small farmers in Zimbabwe and Zambia, who have been lacking improved seed and fertilizer [5], could gain as well if their respective countries launched a similar program. The countries of the region periodically experience drought, but otherwise are able to grow crops in normal times. Preparing to obtain the maximum returns possible from the next agricultural season, the prospects for which appear to be reasonable at this point, is therefore crucial. This step should hence be regarded not only as a long-term mitigation measure, but also as one for short- and long-term development: achieving food security and preventing famines will depend on agricultural technology transfers now and in subsequent years.

Technology transfers, especially during famine recovery periods, must be appropriate to the time of agricultural season, agro-ecological conditions, existing farming practices and household knowledge, skills and labor available in order for them to be successful. These were the conclusions generated from IFPRI's studies in Ethiopia. Technology or asset transfers could be unproductive if they are made when the planting or harvest season has passed, or is already underway. Transfer schemes should also be designed to meet unforeseen conditions and be flexible. example, a seed distribution scheme in Ethiopia was only moderately successful because dry spells occurred during the rainy season, after farmers had already planted all their seeds. Had seed been distributed in installments, or available after the rains resumed, the scheme could have ensured that farmers obtained good yields [7]. New technologies or assets should be easy to use or require little training and need little maintenance. This is especially vital if they are provided during the more difficult periods of a famine.

Accompanying agricultural technology transfers, policies at the macrolevel that encourage farmers, particularly smaller ones, to produce staple food crops in the next and future seasons are needed. If small farmers believe that growing staple food crops for the coming year will be risky and that commercial crops will bring higher incomes, they may choose not to plant staple crops in a particular season. If this occurs, food shortages will likely continue in the following year and the need for food aid will remain. The appropriate macro-level policies should, therefore be implemented, which provide an incentive for small farmers to grow staple crops but

at the same time are cost-effective for the public sector.

The third component for short-term agricultural development consists of institution-building in the private and public sectors. Indeed, measures in this area are required to improve the access of farmers to new technologies and assets, and to help them maximize the use of these new tools. Regarding the private sector, the participation of private agents in the trade and retail marketing of agricultural inputs should be fostered. Building the institution of the private market would help meet the demand of small farmers for inputs, reduce the administrative responsibility of the public sector in input supply, and create the basis for long-term agricultural development.

With regard to the public sector, the governments should design institutions that make formal credit affordable and accessible to the rural poor, where informal and inexpensive borrowing does not exist, and allow informal and affordable credit lending to occur where it does take place. The informal credit system that had existed in Malawi in the early 1990s was an example of the latter. Low-income households could use the credit to purchase agricultural inputs or simply purchase food to survive during times of food shortage. Credit could also be used to replenish assets. During famines, households are often forced to sell their assets, such as livestock, at very low prices to secure money for food. This loss of assets not only reduces food consumption but also affects future food security [5, 7]. Livestock sales have been occurring at high levels in Malawi, Mozambique, and Zambia [9]. The other public sphere in which institution-building is vitally needed is agricultural extension. Improved and expanded institutions in this field would help small farmers to use the technological and credit inputs available as productively and efficiently as possible.

# PURSUING THE OPTIMAL COMBINATION AND SEQUENCE OF INTERVENTIONS

Each intervention discussed above has a certain impact on famine mitigation and prevention in terms of immediacy on the one hand, and magnitude and sustainability on the other. Generally, the more immediate the effect of an intervention is, the less are the magnitude of the effect and the sustainability of the intervention over time [5]. The figure on page 28 illustrates this.

What is vital to keep in mind for famine mitigation is that no one type of intervention will be sufficient for achieving all or any of the objectives: relief, recovery and development. Some combination and sequence of programs will be required. Moreover, the combination and sequence adopted for a country will depend on its specific context and how well recovery is proceeding.

Private food Agricultural technology Food Employment Price Credit marketing policies & institutions hia programs stabilization **Short-Term** Recovery Relief Development Delayed Impact Immediate Impact High-magnitude Low-magnitude High-sustainability Low-sustainability

Figure 1: Spectrum of Interventions for Famine Mitigation

A combination of programs might also be needed in a single area to reach different types of households. The question that needs to be considered when designing a famine mitigation strategy then is: what is the optimal combination of interventions at a given time? [5]

In addition to determining the appropriate combination of programs needed at a given time, policy planners must consider how interventions should be sequenced. Relief programs can be terminated too soon and recovery and development programs initiated when the conditions are not yet right. For example, if technology or asset transfers occur while hunger is still severe and without an accompanying food aid program, seed could be consumed and assets sold [7]. For maximum effectiveness and because the resources available in a famine-stricken country are generally low, attention should be given to how interventions in each phase relief, recovery and short-term development - can contribute to efforts in the later phases. The approach must be to combine and sequence immediate relief projects with short-term development projects in mutually reinforcing ways to generate multiplier effects [5]. Conflict may appear to exist between different programs. The overriding goals, however, to determine the combination and sequence should be ensuring that no individual is starving and that the package and order of interventions are cost-effective.

## OVERARCHING ISSUES IN FAMINE MITIGATION AND LONG-TERM FOOD SECURITY

While specific programs are being designed for famine mitigation, certain broader issues also need to be considered for both mitigation and prevention. These are: monitoring and evaluation of interventions; the relations between the government, NGOs, the private sector and donors; and governance and policies for long-term food security and famine prevention.

To guarantee that the needs of the most severely affected households are being met, famine mitigation

measures, both immediate relief and short-term development schemes should be monitored and evaluated. Evaluation ought to be done in terms of private and social cost-effectiveness, and the efficiency with which food is made available. Assessing the performance of interventions during famine periods can be difficult and may not be possible, especially during the initial crisis stages. However, even estimates would be helpful for both the present and the future. For the future, the capacity to design and implement monitoring and evaluation systems needs to be developed.

For effective famine prevention and relief, the cooperation between governments, NGOs, the private sector and donors must be strengthened. Each stakeholder has different capacities and it is important that all of these are drawn upon and integrated in overall plans for mitigation and long-term development. Within a country, coordination between the different public agencies should be enhanced.

Without responsible governance, transparency and accountability, investments in growth, development and food security are likely to have little impact. A will must exist on the part of the governments in the southern Africa region to ensure food security and protection from famines regardless of the political and social changes that a country undergoes. If governments allow wars, civil unrest, corruption and poor policies to continue, vulnerability to famines will persist. Indeed, to prevent famines in the future, the governments of southern Africa will have to adopt the well-being of their respective people as their goal.

Famines are caused by the failure of institutions, organizations and policies. Famines occur when poverty is endemic, either because agricultural productivity is low or other employment opportunities do not exist, when markets are undeveloped, the natural resource base is poor, and prevention mechanisms are lacking [6]. While various programs can minimize the impact of famines and lay the groundwork for future

development, policies for famine prevention and long-term food security are imperative. What is needed are policies that encourage the growth of the agricultural sector and provide small farmers with the benefits, infrastructure development, environmental rehabilitation and more effective markets. For famine prevention, well developed early warning systems and the proper management of buffer grain stocks are among the program components needed. The capacity to design and implement appropriate food policies and programs clearly needs to be developed at all levels.

### CONCLUSION

In spite of decades of continued efforts to attain food security, several countries in sub-Saharan Africa continue to remain under the threat of famine. This has been due basically to poorly designed policies and illequipped institutions. Unfortunately, the current situation in southern Africa is rather typical. The goal of this paper has been to briefly discuss the causes of famines in general and the specific factors that led to the southern Africa crisis, and the policy measures for mitigation that IFPRI research on the subject suggests. The paper argues that famine mitigation should be seen in terms of three stages: immediate relief, recovery and short-term, or the initiation of development. What is equally important is that interventions must be selected and designed to lay the foundations for future food security. Through an effective mitigation strategy, which involves inter-organizational cooperation, good governance and steps for long-term development, famines in the future can be prevented.

What must be understood as organizations address the current famine, is that as little as a decade ago, many of the nations of southern Africa had the capacity for famine prevention. The droughts of 1991-92, which were viewed as the worst in the preceding fifty years in terms of production shortfalls did not result in famine. Well-organized regional and national early warning systems, adequate capacity to design and implement famine responses, and government and donor resources for quick importation of food and food aid were some of the factors that had protected southern Africans from mass starvation at the time. Since then, however, the capacities of the governments in the region to deal with food shortages have eroded, the resources for designing and implementing emergency famine responses are lacking, and the countries do not have

effective institutions at the national and local levels to organize relief and development efforts. The experience of mitigating famine in1991-92 shows clearly that there is a need to build the capacity of institutions in emergency relief, recovery, development and monitoring for early warning on impending food shortages. For building this capacity, the contribution of good governance, and cooperation between government agencies, non-government agencies, the private sector and the donor community cannot be overemphasized.

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Table 1
Policy Choices for Famine Mitigation

	Phase		
	Relief	Recovery	Short-term Development
Policy Area			
Production and Supply	-Food aid -Food imports	-Public and private food-for-work employment programs	-Agricultural inputs -Macroeconomic policies favoring staple crops -Private sector input marketing -Agricultural extension
Markets & Accesibility	-Macroeconomic policies (price stabilization)	-Public and private cash-for-work employment programs -Credit for purchases -Public/Private marketing partnership	-Credit systems for inputs & assets -Public/Private marketing partnership
Human Capital	-Investments in services	-Investments in services	-Agricutural extension