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REVIEW ARTICLE

Community-based safety-nets and strategies to reduce vulnerability to drought, crop losses and market crises

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ABSTRACT

African countries particularly vulnerable to drought. The region has been frequently hit by drought and other natural disasters. Catastrophic droughts ravaged the Sahel Sub-region in 1974-75, Ethiopia 1984-85, Southern Africa 1992-93 and the Horn of Africa 2002-2003. Millions of lives were lost, many millions of persons displaced and livelihoods of entire communities and nations disrupted as a result of the food emergencies that followed. African governments have not established nor implemented strategies that would reduce vulnerability of populations to drought induced food emergencies. 16 African countries are facing serious food shortages in 2006. High levels of chronic under-nourishment increase vulnerability of populations to food emergencies induced by drought, other natural and man made disasters and market disruptions. Vulnerability reduction strategies should include establishment of early waning systems, emergency food security reserves, water management schemes, promotion of drought tolerant crops, breeding drought resistant crop varieties, improvement of post harvest food storage, improvement or road and other communications infrastructure, promotion of intra-regional trade and long-term soil and environmental conservation. Most of these strategies can be implemented through programmes that provide safety-nets to communities. Community based safety-net schemes would include community nutrition, school feeding, food entitlement programmes for the poorest 10 to 20 per cent of the population and labour intensive food assisted special works programmes to rehabilitate and construct essential infrastructure such as farm to market roads and small-scale irrigation systems that could be expanded to respond to food emergencies.

Key words: Food, safety-nets, drought, Africa.

INTRODUCTION

The African region is prone to frequent and serious drought-induced food emergencies. The region has been hit by at least one catastrophic drought induced food emergency each decade since 1970. In 1972- 74 the Sahel and Horn of Africa sub-regions were devastated by major droughts. The food emergency that followed resulted in the loss of many thousands of lives and the displacement of hundreds of thousands of persons. In 1984-85 twenty-five African countries were hit by drought. In Ethiopia hundreds of thousands of persons died and many more were displaced, several hundred thousands of whom were forcibly moved to resettlement camps (1). In 1992-93 the Southern Africa subregion was hit by the worst drought on record and at least 8 million lives were at risk. In 2000-2001 the Horn of Africa faced yet another serious drought induced food emergency. The Ethiopian food crisis of 2002-2003 affected 13 million persons.

In addition to natural causes of food shortages, human factors including conflicts and disruption of market forces have provoked serious food emergencies in the region Recently, the United Nations Food and Agriculture Organization (FAO) has identified over 15 African countries that are facing serious food shortages (2). Many of these countries (Angola. Burundi Chad. Democratic Republic of Congo, Somalia. Sudan, Uganda) are in conflict that have ravaged Angola, the Democratic Republic of Congo, Mozambique, the Sudan and Somalia have led to deaths by starvation of millions of Africans. The current food crisis in the Darfur region of Sudan and in Eastern Chad is the direct result of the ongoing conflict in Western Sudan. Mozambique that was so much devastated by food emergencies during the liberation struggle is today largely self-reliant. The steady economic growth that the country has made as a result of peace and good governance has greatly contributed to stabilizing access to food. Conflicts are major causes of food emergencies in Africa.

The number of deaths from the devastating 1984-85 drought in Ethiopia and the extent of population displacement would have been much

Table 1: Under-nourishment and population affected by drought and natural disasters in 15 selected African countries.

COUNTRY	Under-nourished Population (percent)		Population affected by (Average 1000)	
	1990-1992	2000-2002	1990-1999	2000-2004
Burundi	48	68	26	338
Chad	58	34	93	67
Eritrea	-	73	162	856
Ethiopia		46	3478	8239
Kenya	44	33	1324	2003
Madagascar	35	37	272	819
Malawi	50	33	1919	760
Mozambique	66	47	724	802
Niger	41	34	194	743
Somalia		-	165	. 578
South Africa		-	37	3043
Sudan		27	1574	. 647
Tanzania	. 37	. 44	786	678
Zambia			•	
Zimbabwe	45	44	2016	1404

^{*}Mostly drought except for Mozambique and Niger that had significant floods.

Source: Adapted from tables 5 and 6 in Collection: La Faim dans Ie monde, (2006), WFP

less had the government not placed unreasonable and unnecessary restrictions on the movement of food and functioning of food markets. The current serious food situation in Zimbabwe is the direct result of political and economic decisions by the government that have impacted negatively on food production and marketing.

Many African countries are reluctant to recognise impending food emergencies. This attitude is due to the lack of credible early warning systems and the feeling that governments in recognising such food emergencies would be accepting failure. More often than not local and international NGOs and international humanitarian organizations have had to shame governments into declaring food emergencies and requesting for assistance.

The very high percentage of under-nourishment is an indication of chronic inability to access food while the variations are largely as a result of drought and other natural catastrophes. The extremely high rates of under-nourishment in Eritrea, Ethiopia in 2600-2002 were also influenced by conflict. The period 1990-1992 was one of intense conflict and drought in Mozambique.

Strategies and Policy Options to Reduce Vulnerability to Droughts.

African governments could implement a number of strategies and policy measures that would reduce the vulnerability of their populations to drought and drought induced food emergencies. Policy decisions and programmes that would lead to sustainable food production, facilitate marketing at 1 increase the economic access of the population to food would contribute immensely to food security in Africa. Many of the strategies presented below were discussed at the world food summit held in Rome in 1996 and the follow-up summit in 2002 (3).

Irrigation.

Only a small fraction of Africa's food production, less than 15 per cent, is on irrigated land. This makes the region particularly vuinerable to drought. Small-scale irrigation systems that can

be managed at farm and community levels would contribute to stabilizing food production except in conditions of extreme drought lasting several years.

Drought tolerant crops and varieties.

The identification and promotion of traditional drought tolerant crops and the use of modem technology to breed more drought resistant crop varieties would contribute to the expansion of agricultural land and contribute to stabilizing production.

Access to markets.

Physical access to markets through improved road and other communication systems would reduce the need for general food distributions and limit population displacement when droughts do occur. Roads in most African countries are in a deplorable state. Evacuation of farm produce to markets is difficult and costly and thus discourages production. Road improvement programmes, especially farm to market roads, would boost production and increase marketable surpluses that could be stored and used to meet food shortages when droughts and other emergencies occur.

The unnecessary interference of governments in food markets through pricing and manipulation of farmers' cooperatives does impact on the flow of food from farms to markets. Their elimination would increase farmer confidence to produce for the market. Availability of market information would also facilitate trade in food commodities and the flow if food from food surplus parts of a country to deficit areas affected by drought.

Intra-regional trade

Made in food commodities within Africa is poorly developed. Intra-regional trade in food would make a major contribution to fighting drought induced food emergencies in Africa. Drought does not affect all countries in a sub-region at the same time and to the same degree. There is thus scope for the movement of food from a food surplus country to another affected by drought. Increasingly much of the food aid used by WFP to respond to food crises in Africa is purchased in

the region! Improved trade within the region would recilitate a market response to food shortages in the region and reduce emergency caseloads (4).

Emergency food security reserves.

Many Affican countries have disbanded their food security reserves in response to advice from international financial institutions and major bilateral donors. Experience has shown that reliance on financial reserves has not worked as most governments are so cash poor that they are unable to import food when emergencies occur, even with adequate warning from slow setting thought induced emergencies. Policies governing the establishment of food security reserves would need to be reviewed.

Post harvest losses.
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developed.

Governments in their focus of production, developing and policy measures to increase walkering and policy measures to increase economic access to food do need to pay attention to the foles of communities. Communities and community based or gain and to have major to play in ensuring that people, especially the economically based or gain and the policy in ensuring that people, especially the economically based or gain and the policy in ensuring that people, especially the economically dead wantaged, have access to the food they need for their survival. Many food based safety-net programmes can be successfully managed by communities.

COMMUNITY BASED SAFETY-NETS
Communities in Africa and other parts of the world have managed safety-nets and contributed to reducing vulnerability of populations to drought induced food emergencies. Modalities that have been used for the management of community based safety-nets include the following:

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Extended Family System

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Village Grain Reserves

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Village grain reserves serve a very useful purpose in meeting the gross food needs of community members during periods of food shortages. However, even during more normal times, many community members, especially pregnant women, nursing mothers and young children have special food needs that are not met by village grain

reserves. Community nutrition programmes to address the special needs of pregnant women, nutsing mothers and children under five would contribute to enhancing food security in the region and reduce to drought induced food emergencies (5).

COMMUNITY of BASED TO THE PROPERTY OF THE PROP

The main advantage of a community based food management system is that the members of a community know they seem to that the members of a community know those who are in need and how they can be reached. Although pressure to ensure equity may result in the inclusion of persons who are not really needly, community structures that handle food, especially if they are led by women to ensure that food gets to those in need. One of the main advantages of food assisted programmes is that the food can be managed by communities.

Even the illiterate can count bags of food, tins thus more difficult to divert food it it is handled by community structures. It is thus more difficult to divert food as the handled of the main advantages of food assisted programmes is that the food can be managed by communities.

Even the illiterate can count bags of food, tins or bottles of oil and other food containers. It is thus more difficult to divert food it it is handled by community structures. The food can be from national of extensial sources community based food aid distributions of the management is the programment of the containers of the containe

Community based food distribution systems can also be used food distribution systems can also be used food coupport school feeding programmes, where they exist, or start temporary programmes in a saving a solution of the couple of the coupl

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research centres that provide long-term job Community based food management systems gangte be used to create short-term job opportunities that re also actias a safety net. The acute phases of inemergencies during which free food distribution ni is needed normally would last for a few months and In the post acute phase, special labour intensive an works programmes can be developed for the repair, rehabilitation and construction of essentialion infrastructure that would reduce the vulnerability of communities to future emergencies. Farm to market roads, markets small-scale our igations 1/1 systems, protection of water satchments and soil it conservation works and resortestation programmes can be undertaken by food aid beneficiaries on atoo food for work basis. Schemes such as these have an contributed greatly to improving food sequitive inlies large parts of Ethiopia Butkina Faso for manyala years implemented community based food assisted ord schemed tettingspenden reitstelling schemes contributed to expanding the irrigated area in that II country and enhanced its food security Countries on in East and South Asia Bangladesh, Chinail Indianuv Vietnam) have expanded itrigation schemes ni constructed roads re-forested millions of have test fragile lands through community based labout qoq intensive food assisted projects that are designed iten to accommodate increased food needs during iten new interest has developed over the causalian developed

national reserves. Better focus and management of national reserves would engended greater for supple supple for the supple fo

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structured, positly funded and qualified staff rotations are very rapid. Early warning systems should be established and adequately funded. Location in institutions such as Universities and research centres that provide long-term job stability for qualified professionals should be preferred over location in line ministries or interministerial committees. Training of professionals in vulnerability mapping and analysis would improve the quality of information for decision making. CILSS has established a sub-regional early warning system for the Sahel that has contributed positively reducing vulnerability to drought induced food shortages in the sub-region.

National food security reserves.

Although national in scope and scale, the reserve management system should be decentralised and communities afforded the opportunity of managing community based structures such as village grain reserves. Food security reserves can also be used to support and expand school feeding programmes and other community nutrition schemes during period of food emergencies. Ethiopia's expanded and improved emergency food reserve has contributed to the reduction of vulnerability. Increased community participation in the management of the resources of the reserve has increased confidence in the population and donors. The establishment of national food reserves is controversial and many national reserves have been disbanded. However, new interest has developed over the question of national reserves. Better focus and management of national reseves would engender greater support from the international community.

National food entitlement programmes.

With exceptions such as South Africa, African countries do not have food entitlement programmes for their populations. Food entitlement safety-net programmes that guarantee a minimum level of nutrition for poor and vulnerable groups of the population can be expanded during food emergencies. Where they do not exist, it becomes more difficult to reach those in need. China has managed food entitlement programmes that assured populations

of adequate food intakes and encouraged them to engage in development activities of medium to long-term duration that have helped China become a major food producer and economic power.

Safety-net programmes can be developed with the full participation of communities. This would ensure more transparent and accountable management. Such programmes, if well targeted, do not need to constitute a major drain on national budgets. On the contrary, they have been shown to contribute to enhancing productivity and national growth through the stabilization of populations, skills development, infrastructure rehabilitation schemes and support to productive programmes in agriculture and environmental management. This has been fully demonstrated in countries of East and South Asia.

In the medium to long-term, African governments have to undertake major investments in water and environmental management programmes (6). Although conflicts do contribute significantly to food emergencies in Afiica, recurring droughts are the major cause of food emergencies in the region. Droughts have ravaged the region in the past and will continue to occur in future. Water management is thus key to tackling recurring drought in Africa and reducing vulnerability. A combination of major irrigation schemes such as the proposed diversion of water from the Congo to the Lake Chad basin and community developed and managed small-scale irrigation schemes would be needed. Bangladesh, India and Pakistan have increased their irrigated agricultural land from about 6 per cent in 1947 to approximately 40 per cent. This has assured increased stability in food production and reduced vulnerability to drought. These long standing programmes in Asia have been expanded during recurring periods of drought to respond to increased food needs.

CONCLUSION

African governments should recognise the vulnerability of their countries and the region as a whole to droughts and prepare adequately for their occurrence. Credible early warning systems

supported by vulnerability mapping and analysis capacity within institutions such as universities and research centres should be established. Lack of adequate funding and the frequent transfers of highly trained personnel in this specialized area is harmful to the management of food emergencies.

Early warning indicators should be developed to warn national leaders of impending conflicts and mechanisms set-up to manage pre-crisis situations. In many countries indicators of problems were available several years before the full blown conflict but these were ignored by national and international leaders. Conflict induced massive population displacements like refugees and internally displaced persons increase vulnerability to drought and drought provoked food shortages.

Most African governments are over centralized. This slows decision making when food emergencies occur. Decentralization and empowerment of local governments and communities would facilitate decision making and response to food emergencies.

African governments should establish specific programmes that respond to drought induced food emergencies. National food security reserves should be reviewed to make them more focused and better managed. Management structures that rely on local communities, including the constitution and management of village grain reserves would improve greatly the handling of food emergencies in the region and reduce the vulnerability of populations.

Programmes providing food entitlements for the poorest and more vulnerable portions of the population should be developed and implemented. Such programmes could be targeted to the poorest 10 to 20 per cent of the population principally through special labour intensive public works programmes. Community

based nutrition programmes, including school feeding that could be expanded when the need arises, would also serve as effective safety-nets during periods of drought or other food related emergencies.

Medium to long-term policies and programmes aimed at promoting better water and environmental management through community based structures that provide safety-nets in times of food emergencies need to be developed and implemented. Much of the work required to establish and expand irrigation systems to mitigate the impact of drought should have in-built flexibility to expand and serve as safety-nets for community members when serious food shortages occur.

The international community should work with and assist African governments to establish and adequately fund community based safety-net programmes that would ensure effective protection of the population in periods of food emergencies. Funds increasingly available through Highly Indebted Poor Country Initiative (HIPIC) could be used to initiate and sustain such programmes for up to five years pending the development and implementation of long-term programmes aimed at reducing vulnerability to drought on a more sustainable basis.

Notes

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