

Global Environmental Change and AIDS

Assessing Effectiveness of Food Security Interventions to Multiple Stresses in Zimbabwe

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Introduction

Global environmental change in Zimbabwe is intertwined with a challenging political environment, excessive economic decline, the depletion of scarce skills, and a generalized AIDS epidemic. Against this background, a development initiative known as the Protracted Relief Programme (PRP), led by the Food and Agricultural Organization of the United Nations (FAO) working with nongovernmental organizations (NGOs) and supported by the Department for International Development (DFID), sought to build on and support existing livelihoods. This response was in contrast to the dominant form of external intervention—the distribution of food aid and the development of farming input schemes. The PRP targeted poor households by boosting their food production through promoting community gardens, conservation agriculture, seed multiplication, improving access to water, and providing care to the chronically ill.

The purpose of the study was twofold: to understand the interaction of multiple stresses, in particular global environmental change and HIV, as well as to assess the role of interventions in contributing to household food security and mitigating the impacts of the AIDS epidemic. Taking place in 2006 and 2007 across three districts, namely Chivi, Tsholotsho and Uzumba-Maramba-Pfungwe, a total of 60 households were chosen per study site from AIDS-affected households. These sites were selected in consultation with the Zimbabwe Vulnerability Assessment Committee and the FAO Agricultural Coordination Working Group using the sampling criteria of frequency of food insecurity, high prevalence of HIV, diversity of interventions and NGO representation, and different agro-ecological zones. A combination of qualitative and quantitative methods was used including key informant interviews, focus group discussions with key members of each village, transect walks, community mapping followed by an in-depth survey of the 180 households. Follow up discussions and feedback sessions were facilitated in all three sites.

Key Issues

Global environmental changes due to human activities are altering both societal and biophysical systems. Some consequences of human activities have resulted in global changes in climate that have translated to global, regional, and local environmental changes. For Southern Africa, the link

between climate variability and food security is clear and the impacts are more pronounced because of the underlying influence of other socioeconomic drivers. The most severe impacts on food security do not come from climate stress alone but result from an interaction of multiple stresses. Indeed, the macro-economic challenges in countries like Zimbabwe are causing unprecedented levels of suffering for many people and reducing their capacity to cope. Similarly, the AIDS epidemic is significant in that it is making people more vulnerable to the impacts of climate change.

Study Results

The study revealed that communities were experiencing exceptional increases in the frequency and magnitude of droughts and floods, which may be attributable to global environmental change, which refers to changes in variability and average state of climatic conditions over time. These impacts were compounded by the AIDS epidemic as study respondents referred to increased adult mortality (due to HIV-related illnesses) as undercutting livelihoods. This had led to a weakening of the resilience of communities in Zimbabwe, as natural resource-based coping strategies were increasingly under threat. According to respondents, external responses implemented by NGOs under the auspices of the PRP attempted achieved limited success in securing sustainable livelihoods.

In terms of specific results, it was found that Tsholotsho District benefited from a frequent remittance flow from South Africa, which underpinned the livelihoods of many people. However, because remittances were received in South African currency, local economic activities were either transacted in this currency or services were charged at extremely high costs in Zimbabwe dollars. As a result, remittances had become a source of vulnerability for poor households that were not receiving external support or a money flow from South Africa by pushing up the cost of commodities and services. At the same time, families that were receiving these remittances were far more resilient than those that were not, thus exacerbating inequality within communities.

Tsholotsho experienced frequent droughts and floods that have contributed to high levels of migration, an increase in human and livestock diseases, and a loss of livestock and property. As a result of several years of underinvestment by the state, the impact of livestock disease, which severely undermined the dominant livelihood strategy, plus the more

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recent interaction of poor local economic factors, high HIV prevalence, and drought, placed many households in a situation of extreme vulnerability to ongoing shocks and stresses. In general, households in Tsholotsho had access to a lower variety of food, were more food insecure, and experienced more hunger the previous year than the other two districts.

In Chivi District, a range of different stressors were affecting livelihoods. These include limited employment opportunities, climate variability, and increasingly adverse macro-economic conditions. A high death rate, an increasing number of orphans, lack of draught power, and lack of farming inputs, were also identified as major factors. All households interviewed indicated that their major source of income and food was from gardening, followed by informal work. Gardening has a long history in Chivi and has been sustained by continued NGO support for this activity. HIV affected women and children more in both illness and deaths.

Water access in rivers, dams, boreholes, or wells in Chivi is highly related to climate. The community indicated that during droughts, the issue of water availability and access is more problematic. However, the installation of water pumps by NGOs has significantly improved availability of safe drinking water in the sampled communities. The challenge remains to ensure constant availability of water for agricultural activities. In general, there was no change in food security status in Chivi compared to the period before the project.

Economic activities in UMP were based mainly on horticulture, crop and livestock farming, and gold panning in northern Pfungwe. Informal employment, such as weeding and harvesting in other people's fields, herding cattle, and building huts and granaries, is a major occupation for most households. It emerged that prime-age deaths had led

to reduced labor quality and quantity. In the case of AIDS-related deaths, focus group discussions outlined a number of response strategies that were adopted, including reduced areas under cultivation, reduced crop diversity, and selling of assets, especially livestock. Further, reduced yields were caused by expenditure switching in which, for example, money reserved for inputs was used partly for medications. In addition, low and erratic rainfall patterns were common in UMP; this results in variations in water availability and access as well as food security challenges for the district.

Implications and Policy Recommendations

The main argument of the paper is that global environmental change manifests itself in very different ways at the local level, largely as a result of its interaction with a range of other stresses, including HIV and AIDS. Such local manifestation has reduced the resilience of affected communities in Zimbabwe as the increased variability in weather and the frequency of shocks has undermined the ability of communities to recover. External responses implemented by NGOs have attempted to facilitate adaptation to these multiple stressors by seeking to secure sustainable livelihoods. Through the three in-depth case studies of livelihood security programmes in different localities in Zimbabwe, it is demonstrated that such programmes should build on existing livelihood systems, should be flexible, and should actively take the local manifestation of GEC into account. The PRP partly achieved some of these things. The paper also confirms that AIDS epidemics (as well as climate change impacts) are uneven and differentiated. As such, it is important to recognize that context matters when it comes to understanding consequences and drivers.



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About RENEWAL

Facilitated by the International Food Policy Research Institute, RENEWAL is a regional "network-of-networks" in Sub-Saharan Africa. Currently active in five "hub" countries (Malawi, Uganda, Zambia, South Africa, and Kenya), RENEWAL comprises national networks of food and nutrition-relevant organizations (public, private, and nongovernmental) together with partners in AIDS and public health research. RENEWAL aims to enhance understanding of the worsening interactions between HIV, food security, and nutrition, and facilitate a comprehensive response to these interactions. RENEWAL is grateful for support, at present, from Irish Aid, the Swedish International Development Cooperation Agency (SIDA), the International Development Research Centre (IDRC, Canada), and the United States Agency for International Development (USAID).

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