

## **Abstract**

### **Topic: Towards Identifying Possible Impacts of HIV/AIDS on Food Security in Rural Zimbabwe**

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#### **1.0 Background and Introduction**

HIV/AIDS continues to be the most crippling disease throughout the world (Musita et al, 2009). According to the United Nations Development Programme report (2004) , between 36 and 43 million people were living with HIV/AIDS in the world , of whom 25.4million were estimated to be living in sub-Saharan Africa. It is now widely understood that the HIV/AIDS epidemic has a debilitating impact on rural farming households and their livelihoods in sub-Saharan Africa. In Southern Africa where the HIV prevalence rates continue to be the highest in the world, the HIV/AIDS epidemic has been singled out to be aggravating food insecurity and negatively impacting rural livelihoods (Economic Commission for Africa, 2006). Zimbabwe is one of the countries in Sub-Saharan Africa that have been worst affected by the HIV and AIDS epidemic with an estimated 1, 187, 822 adults and children living with HIV and AIDS in 2009 (Zimbabwe Country Report, United Nations General Assembly Special Report 2008-09). The estimated HIV prevalence among adults 15 years and above was 14.3% according to the National HIV Estimates of 2010.

More than 70% of Zimbabwe's population resides in the rural areas and depend on smallholder agriculture as their major source of livelihoods. Mutangadura, Mukurazita and Jackson (1999) found that HIV/AIDS is a major threat to agriculture and food security because it reduces agricultural productivity and diminishes the availability of food through direct loss of family labour, reduction in time allocated to farming, sales of farm assets and marginalization of surviving widow from land ownership by customary land tenure system. Another study done for the UN Population division shows that "HIV/AIDS can affect food security in different ways in that death and illness reduce the availability of labour, both directly through affecting the productive members of the household, and indirectly through the diversion of labour for caring for the sick (UN Population Division). A whole chain of possible events may unfold as the household tries to adjust after the HIV/AIDS shock and

these include: a reduction of the area of land under cultivation and decline in yields thus resulting in reduced food crop production and food insecurity, loss of labour or loss in the quality of labour can also lead to decline in crop variety whereby affected households turn to less labour intensive cropping systems that are usually of low value, prolonged illness and the subsequent death of a household member may force households to sell their productive assets such as draught animals to meet medical and or funeral expenses. Death of a parent results in orphans and these may be adopted by other families and depending on the socio-economic status of the host households, the net impact of orphans on ratio between household production and consumption will vary according to several factors such as age and sex of the orphans. Loss of farming knowledge may occur when family members are struck by the disease and are unable to pass on the traditional farming know-how to subsequent generations. Given all the challenges that the household faces due to HIV/AIDS, the overall outcome is food insecurity that is caused by the reduction of production and loss of income from household members employed in the agricultural sector. The same sentiments are also echoed in Gandure and Drimie (2005) desk review study in which they argue that HIV/AIDS firstly reduces farm production and incomes, as labour is lost to sickness, caring and death, which in turn erodes the capital base of affected households and forces them to plant smaller areas under less intensive techniques (Drimie and Gandure, 2005). They also argue that HIV and AIDS erodes the households' resilience and ability to cope with other shocks, particularly as the asset base is eroded and livelihood options are reduced (Drimie and Gandure, 2005).

Following the same arguments in which HIV and AIDS have been shown to affect a household's livelihood, this study makes use of food security data collected in rural areas to map out the possible impacts of HIV/AIDS on food security of affected households and those not affected using empirical livelihoods data collected in the rural areas of Zimbabwe. The remaining parts of the paper addresses study design, data sets and methods, results and discussion, and conclusion and recommendations.

## **2.0 Study Design**

The data set from the rural livelihoods assessment was not designed specifically to analyze the relationship between HIV and AIDS and food security. However, it is still possible to utilize the proxy variables in the assessment to explore some of the relationships. Using a proxy variable approach, the rural data set was analyzed to explore key questions. The questions included what is the magnitude of difference between agricultural production and

incomes for households that are likely to have been affected by HIV and AIDS, compared to other households; what is the difference in livestock ownership. These types of questions were addressed using the conceptual framework that recognizes food security in terms of household access to available food. The key components in this approach are assets or wealth, economic access to food, physical availability of food, household coping strategies and food security (consumption) outcomes. The basic analytical approach was to take classes of households exhibiting certain demographic, morbidity and/or mortality characteristics and compare their food security status and performance against households without these characteristics. Identification of the proxy indicators for data analysis was informed by the HIV timeline which shows a progression of the impact on livelihoods from the onset of infection to chronic illness, AIDS death and support of orphans.

### **3.0 Description of Data Sets and Methods**

Primary data collected in May 2010 rural assessment in all 60 rural districts of Zimbabwe was used. Proportional and purposive sampling of wards in each livelihood zone was done so as to get representation of each zone. Data was collected from 4157 households across the country and the data set has enough information to relate HIV/AIDS proxy variables to components and measures of household food security. The responses from the household questionnaire were analyzed for the purpose of writing this report.

This study seeks to detect associations between HIV/AIDS proxy variables with components and measures of household food security. Affected households in this study are defined as those households that exhibited the following morbidity or mortality indicators such as the presence of a chronically ill active adult, the presence of orphans, recent death of a member and widowhood. Non affected households were defined as those households exhibiting none of the proxy indicators. From the data set 2064 (49.6%) interviewed households were defined as affected whilst 2096 (50.4%) were non-affected households. The following section presents a comparison of demographic characteristics between affected and non affected households.

### **4.0 Major Findings**

The results clearly demonstrate that HIV/AIDS negatively affects the food security status of most households by reducing the production yield levels of households as productive time and labor are lost due to sickness or death of a household member. Technologies that require less labour could mitigate the possible impacts of HIV/AIDS on food security. These include high

yielding varieties, lighter tools/ small machinery, minimum or zero tillage techniques and varieties demanding less weeding labor. Information sharing should also be encouraged among communities to prevent the loss of knowledge in the event of sickness or death of household members.