

HIV/AIDS Mitigation: Using What We Already Know

Patricia Bonnard

The HIV/AIDS pandemic has serious implications for household and community food security. Households affected by HIV/AIDS resort to many of the same coping strategies that they use in response to food security shocks – natural or man-made disasters or personal hardship. Households affected by HIV/AIDS suffer the loss of productive labor, income and food reserves. Savings are diverted and assets are depleted to meet healthcare and funeral costs. More and more households and individuals are forced to seek support from the broader community. These mounting demands rapidly erode existing social capital as well as threaten long-standing local institutions. In response to the proliferation of these devastating consequences, HIV/AIDS has become a focal point of development strategies and programs in nearly every sector (e.g., health, agriculture, education and commerce). A question repeatedly raised, yet not sufficiently addressed to date, is how can we effectively mitigate the numerous, wide-ranging socio-economic impacts of HIV/AIDS?

One approach is to use what we already know. The development community has a wealth of experience in improving food security. We can draw from this experience to address the new challenges posed by the HIV/AIDS pandemic. This technical note provides a summary of the literature on the impacts of HIV/AIDS on household and community food security and livelihood strategies in rural areas. It also presents a range of promising practices derived from the broader food-security and development experience that can be applied to HIV/AIDS-mitigation efforts. The information presented orients program staff about the critical socioeconomic impacts and constraints most likely experienced in HIV/AIDS-affected environments, and suggests appropriate program designs and modifications to mitigate the socioeconomic impacts of HIV/AIDS. This technical note is also intended for the wider development community to encourage multisectoral approaches to development programs in an HIV/AIDS context.

Impacts of HIV/AIDS on Food Security and Livelihood Strategies

This technical note focuses on how HIV/AIDS affects the primary factors that significantly contribute to rural livelihoods and household food security, such as labor, assets, cash resources, knowledge and institutions. It describes the breadth of HIV/AIDS impacts experienced over the progression of the disease. However, it should not be considered an exhaustive description. No attempt is made here to gauge the prevalence or severity of these impacts. Table I summarizes the effects of the HIV/AIDS pandemic on labor resources, cash resources, assets, knowledge transfer and local institutions.

Labor resources are mainly affected when a family member falls ill, especially an income earner. The HIV/AIDS-infected household member is more prone to opportunistic infections and increasingly unable to work as often and productively as s(he) had worked in the past. This not only affects the household because the individual is no longer able to contribute to household production and income as s(he) once did, but also other family members must compensate for the reduction in labor productivity and provide care for the sick. When the individual ultimately dies, the household loses access to his/her labor and perhaps access to land and other productive assets (depending on the local law and

Both formal and informal local institutions, such as traditional customs relating to land tenure, child adoption and local governance of natural resources, are weakened when so many productive members of a community become affected with HIV/AIDS and desperate households increasingly erode public resources.

customs). As a consequence, the household may be forced to develop new livelihood strategies. Sometimes these new strategies expose surviving household members to greater risks of infection (e.g., transactional sex, prostitution). Some poor households rely heavily on cash and in-kind wage labor. Families of laborers stricken with HIV/AIDS can lose access to housing, health care and other

services in situations where the employer was providing basic amenities.

With the progression of HIV/AIDS, cash resources become increasingly constrained as incomes decline and medical costs rise. A household may no longer be able to afford purchased seed, fertilizer, more expensive nutritious foods, school supplies and other basic household items. There is some evidence that expenditures on non-food items drop more precipitously than food expenditures. Because cash crops as compared to food crops¹ often require more cash resources and are more expensive to grow, there is a tendency to concentrate on food crop production, which reduces the cash income of the household. Wealthier households might reduce the number of laborers employed, which in turn threatens the livelihoods of the recently unemployed agricultural laborers' households.

As with cash resources, assets are often depleted in order to meet the rising costs. First, non-essential, and then productive, assets are sold. The latter action compromises future earning capacity and food security. The transfer of knowledge and skills is disrupted when

children lose their parents or guardians or are unable to attend school. Severance in the inter-generational transfer of knowledge compromises the food security of

future generations. Both formal and informal local institutions, such as traditional customs relating to land tenure, child adoption and local governance of natural resources, are weakened when so many productive members of a community become affected with HIV/AIDS and desperate households increasingly erode public resources.

¹ Cash crop refers to a crop produced predominantly, but not necessarily exclusively, for the market (e.g., cashew nuts are largely produced for the market, but households reserve some production for household consumption). Food crop refers to a crop produced predominantly, but not necessarily exclusively, for household consumption (e.g., maize is a staple food, but households usually sell a portion of their production).

Table 1. HIV/AIDS Effect on Productive Factors Underlying Rural Livelihoods and Food Security ²

<p>Labor Resources</p>	<ul style="list-style-type: none"> • Morbidity causes interruptions in work and reduces productivity. • Morbidity causes reductions in other important household and care activities. • The available labor is not consistent with needs based on traditional division of labor. • Seasonal fluctuations in labor and production are exacerbated. • Care-giving requirements escalate and become overwhelming. • An increase in the dependency ratio increases laborers' burden. • Migration for alternative work opportunities increases. • Increased risky behaviors (e.g., transactional sex, prostitution and child labor) are carried out. • Mortality permanently reduces the size of the labor force and the earning capacity of household.
<p>Cash Resources</p>	<ul style="list-style-type: none"> • Use of purchased inputs (e.g., seed, fertilizer) are reduced. • HIV/AIDS-related health care expenditures replace household basic needs expenditures. • Hired labor or animal traction rental decrease, which reduces productivity. • School fees are unpaid and children are withdrawn from schools. • Cash demands result in more time devoted to earning cash income at expense of other activities. • Greater portion of agricultural output sold than stored for future consumption. • Poorer quality foods are substituted for better quality foods. • Food consumption by some or all household members is reduced. • Inadequate diets increase vulnerability to other food-security shocks.
<p>Assets</p>	<ul style="list-style-type: none"> • Savings and liquid assets become depleted from HIV/AIDS-related expenses. • Household assets (e.g., roofing, household items) are not maintained or replaced when needed. • Productive assets (e.g., irrigation system, grain storage) are not maintained. • Household assets are sold. • Productive assets (e.g., draught animal, plow) are sold. • Asset divestment increases vulnerability to other food-security shocks (e.g., drought). • Asset divestment constrains recovery from food-security shocks (e.g., drought, conflict).
<p>Knowledge</p>	<ul style="list-style-type: none"> • Children have less opportunity to gain knowledge from their parents. • There is greater school absenteeism as children assume more household responsibilities. • Children are forced to leave school due to non-payment of school fees and new demands on their time. • Survivors assume new responsibilities but lack appropriate skills, and social norms act as hindrances to change. • Traditional agricultural practices and knowledge are less suitable within the HIV/AIDS context. • Current livelihood is no longer feasible or lucrative, but alternative skills are limited. • Migration increases as individuals search for new livelihood opportunities.
<p>Local Institutions</p>	<ul style="list-style-type: none"> • Traditional safety nets (e.g., community grain storage) become overburdened. • Savings club and group lending scheme defaults stress and devastate local credit options. • Traditional customs governing remittances are overburdened or break down. • Traditional child adoption customs are overburdened. • There is an inability to fulfill customary roles related to other food-security shocks (e.g., drought, fire). • Traditions are adjusted or transformed (e.g., elimination of funeral rights). • Land tenure is inadequate to address needs of survivors (e.g., women, orphans). • Households are dissolved.

² Food security is a state or condition whereby individuals have at all times both adequate physical and economic access to sufficient food to meet their dietary needs for a productive and healthy life. Livelihoods are the means by which individuals and households attain food security.

How HIV/AIDS-Induced Food Security Shocks Differ From Other Shocks

Similar to natural and man-made disasters, the HIV/AIDS pandemic has serious implications for household and community food security. Households and communities resort to comparable coping strategies in times of crisis, whether the crisis stems from drought or HIV/AIDS. However, it is important to recognize that the HIV/AIDS pandemic is different from other typical food security shocks in a number of important ways. Recovery scenarios also differ from those resulting from droughts and other natural disasters.

Differences include:

- Unlike natural disasters, the HIV/AIDS pandemic is not cyclical or limited in duration. It is prolonged, dynamic and progressive.
- The magnitude and persistence of the effects of HIV/AIDS on a household are such that in order to address the mounting impacts, households are forced to radically and permanently alter their livelihood strategies. In a growing number of cases, households disintegrate or dissolve.
- The loss of knowledge transfer and loss of educational opportunities have long-term, multi-generation impacts.
- Stigmatization associated with HIV/AIDS makes it more difficult for people to seek assistance and impedes much needed community support and action.
- The HIV/AIDS pandemic eventually becomes a social issue as large numbers of households within a community are simultaneously affected and the community is compelled to deal with the increased social burden associated with household destitution and dissolution.
- HIV/AIDS affects both formal and informal institutions and, thus, erodes the traditional mechanisms employed to respond to food security shocks.

Interventions for HIV/AIDS Mitigation

Interventions derived from food security and development programming can be adopted to mitigate the negative socio-economic impacts and livelihood threats from the HIV/AIDS pandemic. Table 2 illustrates the breadth of available interventions. The information is grouped according to the primary productive factor that the intervention supports: labor resources, cash resources, knowledge and local institutions. The contents of Table 2 are illustrative rather than exhaustive.

When labor resources are affected, the introduction of less labor-intensive crops and cultural practices is immediately considered as an appropriate solution. But a change in crop choice, such as cultivating cassava in place of maize, can imply increased labor in food processing and displace specific nutrients in the diet. One alternative is to consider a wider range of options for reducing the overall demand for labor, both in field production and other household activities, such as food preparation and child rearing. Some options are to introduce appropriate processing technology or sharing childcare responsibilities and production-related tasks. Freeing up labor used in one activity increases the availability for

Different strategies and interventions are relevant to different scenarios of how the disease is spreading and affecting a community. Therefore, the design of an appropriate mitigation strategy should begin with an assessment.

another. Numerous proven labor-saving technologies and practices are not widely disseminated or promoted, but could be more broadly applied to labor-constrained HIV/AIDS environments.

Small loans expand cash resources and help households manage their cash needs such as purchases of agricultural inputs, food and medicine. Improved post-harvest technology and handling extends food stocks and reduces the need for food purchases. The provision of small loans can help maintain, repair and restock both household and productive assets. Support for community ownership of plows or animal traction can reduce a household's financial burden while safeguarding access to an important input to agricultural production.

Agricultural extension as well as managerial and vocational training for widows and orphans help bridge the knowledge gap and expand employment opportunities. HIV/AIDS training (e.g., problem assessment and program design) for agricultural extension staff and the incorporation of well-designed prevention and care messages into farmer field school programs can increase farmer awareness of the broader socioeconomic impacts of HIV/AIDS as well as how to reduce the risk of infection and transmission. Furthermore, these actions can build the capacity of formal and informal local institutions to respond to the HIV/AIDS pandemic. Joint production schemes and community grain stocks increase a community's capacity to provide support to HIV/AIDS-affected individuals and households. Modifications to social customs such as funerals can limit costs to the financial burden and stigmatization of HIV/AIDS-related deaths.

Table 2: Interventions to Mitigate the Effects of HIV/AIDS on Rural Livelihoods and Food Security

<p>Labor Resources</p>	<ul style="list-style-type: none"> • Introduce agricultural practices that reduce labor use or bottlenecks (e.g., no-tillage). • Diversify production to reduce labor use or bottlenecks. • Introduce small-scale, labor-saving food-processing technology, fuel-efficient stoves and water pumps. • Introduce shared childcare, daycare and care-taking of HIV/AIDS-infected people. • Intensify or promote new labor-sharing schemes. • Introduce less labor-intensive livelihood strategies. • Provide cash for hired labor. • Encourage balanced diets, ARVs³ and proper care to reduce morbidity and delay mortality. • Introduce workplace policies and programs.
<p>Cash Resources</p>	<ul style="list-style-type: none"> • Introduce low external (i.e., purchased) input technologies and practices. • Emphasize crops requiring few or fewer external (i.e., purchased) input needs. • Emphasize appropriate substitute local wild foods. • Provide grants for draught animal purchase or rental, hired labor or other inputs. • Provide microfinance for operating expenses (e.g., draught animals, inputs, hired labor). • Introduce improved food storage and preservation to maintain quality and quantity of food stocks. • Use cash-for-work as opposed to food-for-work. • Support market development for local products to expand income-earning opportunities.
<p>Assets</p>	<ul style="list-style-type: none"> • Provide grants for asset protection and restocking. • Provide repair service for productive and household assets. • Provide grants or loans for land rental. • Provide microfinance to increase or diversify incomes. • Replant community woodlots and forests. • Introduce small animal husbandry. • Invest in community-owned assets (e.g., plows, draught animals).
<p>Knowledge</p>	<ul style="list-style-type: none"> • Disseminate new agricultural technologies and practices for the HIV/AIDS context. • Introduce HIV/AIDS prevention and care into extension messages. • Provide agricultural extension for widows, orphans and other survivors. • Encourage communities to share practical experience (e.g., agricultural knowledge) with widows, orphans and other survivors. • Encourage sharing knowledge and experience of HIV/AIDS-affected households. • Incorporate agricultural training into school curriculum. • Introduce incentives to school attendance to reduce the rate of absenteeism and attrition. • Provide business and management training for women, orphans and other survivors. • Provide training for the community in problem diagnosis, planning and organizational management. • Provide training in new marketable skills.
<p>Local Institutions</p>	<ul style="list-style-type: none"> • Encourage communal food and cash crop production. • Build community grain stocks. • Encourage community works to repair assets and structures. • Improve social infrastructure (e.g., access to water, sanitation and health posts) to reduce morbidity. • Create/support HIV/AIDS networks and community organizations. • Modify costly customs (e.g., funerals, marriages). • Modify land tenure to meet needs of women, orphans and other survivors. • Provide legal aid to widows, orphans and other survivors. • Include HIV/AIDS-prevention training for staff of NGOs, ministries, etc. • Strengthen community links to NGOs, government institutions, etc.

³ ARVs are antiretroviral drugs.

Selecting the Right Intervention

Different strategies and interventions should respond to different scenarios of how the disease is spreading and affecting a community. Therefore, the design of an appropriate mitigation strategy should begin with an assessment. A community-level assessment examines the incidence of HIV/AIDS within a community, the underlying causes, the effects on household food security and the ability of both households and the communities to cope with the evolving shocks and impacts.

The impacts of HIV/AIDS on a household and community evolve over time, and each household and community possesses its own constraints and opportunities for coping. Therefore, the process of identifying, designing and implementing interventions should involve the affected households and community at every stage. A participatory process serves to establish a relationship between development workers and the community and initiates immediately a process of community empowerment that builds a community's confidence, initiative and self-reliance.

To design appropriate mitigation strategies and interventions, it is important to recognize where the community is within the progression of the HIV/AIDS pandemic. A community with a low incidence of HIV/AIDS infection but a high concentration of risk factors might require a strategy that emphasizes prevention, such as introduction of HIV/AIDS messages into the agricultural extension program, promotion of alternative risk-reducing livelihood strategies or community-based contingency planning. Another community with a high incidence of infection, morbidity and mortality might best benefit from the formation of community work groups or new skills training for HIV/AIDS-affected households.

Appropriate interventions to mitigate the impacts of HIV/AIDS will likely be multidisciplinary in nature and dynamic, adjusting along with the progression of the disease within the household and community. They are likely to involve both infected and affected individuals and households. Unlike the traditional development projects that target households, HIV/AIDS interventions will likely target the community as well as individuals (e.g., women, orphans and other survivors). Specific solutions will likely be as diverse as the characteristics of the epidemic in different localities as well as different households. They are inclined to encompass both elements of self-reliance and safety-net programming even within a single community. Using what we already know and sharing lessons learned from experience are critical actions for increasing the number of options available for mitigating the negative food-security impacts of HIV/AIDS.

Selected References on HIV/AIDS Mitigation

Desmond, Chris; Karen Michael and Jeff Gow. *The Hidden Battle: HIV/AIDS in the Family and Community*. Durban: University of Natal, Health Economics & HIV/AIDS Research Division (HEARD), 2000.

Food and Agriculture Organization of the United Nations (FAO). *The Effects of HIV/AIDS on Agricultural Production Systems and Rural Livelihoods in Eastern Africa (Tanzania, Zambia and Uganda)*. Rome: FAO, 1995.

Michiels, Sabine Isable. *Strategic Approaches to HIV Prevention and AIDS Mitigation in Rural Communities and Households in Sub-Saharan Africa*. Rome: FAO, April 2001.

Mutangadura, Gladys; Duduzile Mukurazita; and Helen Jackson. *A Review of Household and Community Responses to the HIV/AIDS Epidemic in the Rural Areas of Sub-Saharan Africa*. Geneva: UNAIDS, June 1999.

Rugalema, Gabriel. *Coping or Struggling? A Journey into the Impact of HIV/AIDS on Rural Livelihood in Southern Africa*. De Nieuwlanden, Wageningen University and Research Centre, Technology and Agrarian Research Group, 2002.

Silva-Barbeau, Irma; Joseph Collins; and Nduhura Dennis Mwebaze. *Food Security, Food Aid and HIV/AIDS Study*. Kampala: WFP, November/December 2000.

Skeldon, Ronald. "Subregional Mobility Systems and the Diffusion of HIV/AIDS." In *The Impacts of Mapping Assessments on Population Movement and HIV Vulnerability in South East Asia*, Lee-Nah Hsu et al. New York: UNDP, South East Asia HIV and Development Project, September 2001.

Topouzis, Daphone and Jacques du Guerny. "Sustainable Agricultural/Rural Development and Vulnerability to the AIDS Epidemic." Rome: FAO/UNAIDS, December 1999.

White, Joanna and Elizabeth Robinson. "HIV/AIDS and Rural Livelihoods in Sub-Saharan Africa." Greenwich: University of Greenwich, Natural Resources Institute, Policy Series 6, 2000.



Food and Nutrition
Technical Assistance Project
Academy for Educational
Development
1825 Connecticut Ave., NW
Washington, DC 20009-5721
Tel: 202-884-8000
Fax: 202-884-8432
E-mail: fanta@aed.org
<http://www.fantaproject.org>

This publication was made possible through the support provided to the Food and Nutrition Technical Assistance (FANTA) Project by the Office of Health, Infectious Disease and Nutrition of the Bureau for Global Health at the U.S. Agency for International Development, under terms of agreement No. HRN-A-00-98-00046-00 awarded to the Academy for Educational Development (AED). The opinions expressed herein are those of the author(s) and do not necessarily reflect the views of the U.S. Agency for International Development.

Recommended citation:
Bonnard, Patricia. *HIV/AIDS Mitigation: Using What We Already Know*. Washington, DC: Food and Nutrition Technical Assistance Project, Academy for Educational Development, 2002.