

AIDS Mortality and the Role of Natural Resources in Household Food Security in a Rural District of South Africa

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AIDS, Natural Resources, and Food Security

Although wild natural resources are a standard dietary component in southern Africa, little information exists on these resources' specific role in the maintenance of household food security among HIV-impacted households. In this context, the influence of cash savings or income generated through use or sale of natural resources (e.g., using fuelwood instead of electricity to be able to afford to buy food) is also not known. Indeed, to date the environmental dimensions of the AIDS epidemic remain little explored, despite the centrality of the natural environment in the livelihoods of the rural poor across Africa. Filling this information gap is important, given that Sub-Saharan Africa is generally typified by the interlinked phenomena of rapidly rising HIV prevalence rates, high levels of food insecurity, dependence on natural resources for rural livelihoods, climatic variability, and environmental degradation. Nowhere are associations between these phenomena more urgent than in southern Africa, which has the highest rates of HIV infection in the world.

Exploring the Linkages

Evidence shows that AIDS has worsened and exacerbated existing vulnerabilities to food insecurity. AIDS morbidity and mortality have significant impacts on household domestic labor, with potentially severe implications for food security in rural communities reliant on small-scale agriculture. In addition, illness and death of breadwinners greatly impact households' ability to buy food, particularly those lacking other income sources.

Rural households across Africa rely heavily on the natural environment for their livelihoods. Besides using the land for raising livestock and growing food and cash crops, rural communities also harvest natural resources such as fuelwood, edible wild herbs, wild fruit, edible insects, and bushmeat for basic provisioning and generating income. The use of wild foods is widespread, and in a recent review¹ of the use of non-timber forest products across 14 rural sites in South Africa, a mean of 96 percent of households were found to eat wild spinaches, 88 percent ate wild fruit, 54 percent ate edible insects (such as locusts), and 52 percent, bushmeat. In the face of difficult economic conditions, natural resources bring substantial value to the household economy, offering inexpensive alternatives to otherwise

purchased goods. Resources also present opportunities to generate income from trade in raw or processed natural products and, in this way, natural resources represent important buffers against poverty and household shocks. Including those due to AIDS. Indeed, past research by the authors suggests that increased reliance on wild foods may be a coping strategy pursued by some rural households that have lost a breadwinner. Against this backdrop, this study examined the association between household experience of an adult AIDS death, poverty, use of natural resources, and food security in a random stratified sample of 290 rural households in the MRC/Wits Agincourt Health and Demographic Surveillance Site, South Africa. The households were differentiated by their experience of a prime-age (15–49 years) adult mortality (AIDS death (n = 109), non-AIDS sudden death (n = 71) and no death (n = 110). Food security and use of natural resources were quantified using a survey questionnaire. Food security was measured in terms of a) dietary diversity, b) experience of hunger, and c) short-term coping strategies. Use of natural resources focused on domestic consumption, purchasing and selling of wild food and non-food natural products. Household demographic and socio-economic data were provided by the Agincourt health and demographic surveillance system. Qualitative interviews were also conducted in 16 of the mortality households.

Results

There is a high level of reliance on wild foods in the Agincourt field site. For example, the vast majority of households make use of wild spinach at least weekly. Households that make dietary use of wild foods more often are not necessarily more food secure. This lack of variation in food security and use of wild foods as coping strategies is likely due to the overall high levels of wild food consumption.

Also, households affected by adult mortality are not more likely to use wild vegetables as compared to their non-mortality counterparts. In general, however, food security is lower among households affected by prime-age adult mortality, as reflected by their more frequent worrying about food, running out of food, and/or recent experience with hunger. Mortality-affected households are also more likely to have had to eat unenjoyable food due to shortage. Mortality households are also more likely to turn to natural

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¹ Shackleton, C., and S. Shackleton. 2004. The importance of non-timber forest products in rural livelihood security and as safety nets: A review of evidence from South Africa. *South African Journal of Science* 100 (11/12): 658–664.

resources as cost-saving substitutes. As examples, mortality-impacted households are far more likely to use insects, fruit, and fuelwood specifically because they are less expensive than alternatives. In addition, although few households sell products made from natural resources to make money, those that do are predominantly households recently affected by adult mortality. As to the unique nature of mortality related to AIDS, we actually find that households experiencing a sudden death from other causes (e.g., motor vehicle accident) experience lesser food security. This may perhaps suggest the development of household coping strategies during the protracted period of illness that often accompanies an AIDS-related mortality.

Implications and Policy Recommendations

These results highlight the centrality of the natural environment in local diets, as well as the importance of

natural resources in coping strategies of mortality-affected households. In particular, the use of natural resources allows for cost savings and, in some cases, additional income, which could translate into funds available for food.

In light of these insights, policies and programs aimed at sustainable natural resource use and management in rural areas are needed. These include strengthening local resource management institutions and exploring possibilities for domestication or intensification of wild foods, such as wild vegetables and indigenous fruits. Our findings show that AIDS mortality is not necessarily a unique household shock with regard to its impact on household food security. This suggests that policies and interventions should target vulnerable households more broadly. However, AIDS is already the leading cause of death among prime-age adults and therefore plays a central role in mortality trends and household vulnerability across southern Africa.



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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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