

The integration of support for HIV and AIDS and livelihood security: district level institutional analysis in southern Africa

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Abstract Livelihood insecurity, HIV and AIDS, and environmental change, including high climate variability, have negatively impacted the southern African region for the last decade. It is increasingly evident that there is a complex interplay of factors shaping rural livelihoods at various scales. Recognition of the varied impacts of HIV and AIDS has led to development of a conceptual framework that utilises the ‘AIDS Timeline’ or ‘Programming Matrix’, which enables differential intervention strategies to be adopted depending on the dominant impacts and trends on livelihoods. This paper presents this approach and links it to case study material from two districts in Malawi and South Africa. The evidence suggests that although there are some areas where HIV and AIDS are mainstreamed into livelihood security interventions, this is not sufficient, as holistic environmental and social approaches are not adopted. This paper reflects on the fieldwork findings to link to the AIDS Timeline in support of appropriate interventions. At the same time, we highlight the urgency in addressing the meso-scale and adopting a holistic framework that addresses livelihood security from a range of angles, including the implications for the chronically ill, interactions with environment and the capacity to implement change.

Keywords AIDS Timeline · HIV and AIDS · Livelihood security · Environment · Institutional support

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Introduction

Food insecurity, HIV and AIDS, and high climate variability have plagued the southern African region for the last decade (Loevinsohn and Gillespie 2003; Mano et al. 2003; Marsland 2004; Reid and Vogel 2006; Ziervogel et al. 2006). This complex interplay of factors suggests significant links between the environmental security and human health. Many more people now live ‘close to the edge’ than during the 1990s, and relatively minor shocks, such as a period of erratic rainfall at critical times during cropping season, can be enough to trigger widespread hunger (Maunder and Wiggins 2006).

Food security is an important outcome of livelihood strategies, and can be used as a measure of livelihood resilience in the face of shocks and stresses. Some of these shocks and stresses are directly related to environmental factors (such as high climate variability, flooding, land degradation) and others are linked to broader socio-economic factors (such as poor macro-economic policies, conflict and poor governance), yet these two groups of factors are often closely intertwined (FAO SOFI 2004; Leichenko and O’Brien 2002; Pingali et al. 2005; Tearfund 2006). In addition, HIV and AIDS has become an increasingly important issue when addressing food security in southern Africa. Although food security is only partly about food production, many households in southern Africa rely on rain-fed agriculture, exposing them to environmental stresses, including climate variability and land degradation (Downing and Lüdeke 2002; Eriksen 2001). The interaction of food insecurity, HIV and AIDS, and the environment is therefore a priority area that needs to be better understood in order to support livelihood resilience. Although food is consumed at the individual scale, the process of accessing food is embedded in a range of scales. The household and village scale need to be understood, but the linkages to the district scale require greater investigation, as it is these linkages that often provide poor people with basic needs and services.

This paper starts by outlining the relationships between HIV and AIDS, livelihoods, food security and the environment. It then presents a conceptual framework that helps to place responses to the AIDS epidemic in areas appropriate to the stage of the ‘AIDS Timeline’. Case study material from Malawi and South Africa is used to illustrate existing activities and interventions occurring at the village-district nexus. This material is analysed using the framework, which helps to identify where on the ‘AIDS Timeline’ interventions are occurring and hence where there are gaps. This type of analysis can be used to better support individuals, households and villages that are trying to secure their livelihoods despite the range of stresses they face. It is demonstrated that the ‘AIDS Timeline’, together with an environmental “lens”, can help target support that is sensitive and appropriate for the dominant stage of the epidemic in specific areas.

HIV/AIDS, the environment and livelihood insecurity

HIV and AIDS are now widely acknowledged as major drivers of livelihood insecurity across the region, although the emphasis is predictably localised

(Gillespie 2006; Maunder and Wiggins 2006). There is an increasing realisation that household and community livelihood insecurity in rural and urban southern Africa cannot be properly understood if the epidemic is not considered. Equally, HIV and AIDS are accepted as being fuelled by a range of factors, including behavioural, cultural, environment and economic characteristics. The HIV/environmental link is this paper's particular focus.

The impact of HIV and AIDS on rural livelihoods is insidious. For the most part it goes unnoticed as the seasons and natural rhythms that frame rural existence mean the pace of this long-wave event's impact will be slow (Barnett and Whiteside 2006). Each turn of the cultivating season will see a small, significant and usually negative change in farming, household relationships and the social fabric of the community (Gillespie and Kadiyala 2005). Although most change will be gradual there will be marked steps when, for example, the remaining parent in a household dies and the family unit is dissolved. Gradual changes include leaving fields uncultivated which might be easily reversible in the short-term but increasingly difficult as the bush encroaches or others lay claim to the land (Drimie 2003; Hunter et al. 2007). Property disputes may surface when there are opportunities to contest inheritance because institutions governing landholding are complex (Aliber et al. 2004; Izumi 2006).

Coupled with this, environmental factors can exacerbate the stress of food production, particularly when household members are ill. Land is needed to farm and if the quality is poor, harvests mirror this and less food is yielded (Ellis 2000). In sub-Saharan Africa, over 60% of the population depend on rain-fed rural economies, contributing in the range of 30–40% of country GDP (World Bank 1997). This renders farmers vulnerable to the high inter and intra-season rainfall variability that is characteristic of southern Africa (Nicholson 2000). Rainfall is often low and can result in failed harvests, but when rains are good, there will be no harvest if people have been too sick to work in their fields or must spend time caring for others. Projected climate change presents an even more daunting picture if temperatures continue to rise and rainfall patterns shift (IPCC 2007). Although there may be new agricultural opportunities, there may also be increased losses (Fischer et al. 2005; Mendelsohn et al. 2000; Schulze et al. 2001).

The compounding impact of multiple stressors such as HIV, AIDS and environmental factors has weakened community resilience across the region. Although HIV and AIDS targets individuals, there are significant impacts at the community level, through the health of community members, effects on demographic composition and structure of community, educational attainment, labour force and the quantity and quality of service providers (Mullins 2001). As has been emphasised by Wiggins (2003), some of the more damaging impacts for farm households and communities may be those arising from wider processes, including the likely reduction in public services to support agriculture and environmental management resulting from loss of key staff and pressure on budgets. This weakened government capacity obstructs its ability to not only meet its mandate, such as the provision of extension services and other agricultural support, but also to meet new kinds of demands that will be forthcoming from AIDS-affected communities (UN 2003). Critical examples include the growing numbers of orphans and vulnerable

children who require a range of services not least knowledge of environmental management and use; changing demographic patterns in communities that place more burdens on the elderly, children and, indeed, the fragile resource base; and increased disease burden. Finally, the impoverishing effect of AIDS on households simply heightens the services demanded of the state and its partners (UN 2003). These factors compound the fragile livelihood systems that characterise much of the region and which, by nature, are based on natural resource use.

HIV and AIDS results in a loss of productive adults who are key family providers, particularly through their understanding of and reliance on the land and broader environment, and shatters the social networks that provide households with community help and support (Barnett and Rugalema 2001; UN 2003). Particularly in rural areas, where public services may be weak, traditional community support systems are crucial for impoverished households (UN 2003). Anecdotal evidence indicates, however, that HIV and AIDS may be weakening this critical social and economic capital, as traditional knowledge may be gradually lost as working age adults die and leave children orphaned (Rugalema et al. 1999). Survivors are left with few relatives upon whom to depend sometimes compounded by gender and age, which are critical determinants of social exclusion in the face of AIDS (Barnett and Whiteside 2006). Orphans, widows, and the elderly find it particularly difficult to depend on other relatives for survival and the burden of caring for sick people and orphans may ultimately overwhelm the ability or willingness of households to do more. Households and communities with fewer adults have less surplus adult-time to help others, undermining community resilience (Rugalema et al. 1999). In rural areas, increasingly impoverished communities may receive fewer visits from traders, or suffer a reduced availability of services and consumer products (UN 2003). Just as AIDS-affected households may ultimately disintegrate, so too may AIDS-affected communities through the loss of significant numbers of their members, economic collapse and social breakdown. Not only does this further undermine the ability to withstand and adapt to environmental stresses, but the knowledge and ability to utilise the environment is lost.

Conceptual framework to enable suitable response to the stages of the AIDS epidemic as related to livelihood security

AIDS is more than a health problem. It is a phenomenon that is multidimensional and long term, and it impacts in a series of waves (Gillespie and Kadiyala 2005). The first wave is of HIV infection; the second is a wave of opportunistic infections such as tuberculosis. After some years, the third wave of AIDS illness and death strikes, orphaning thousands of children and taking away those people that are potentially the most productive members of society (Gillespie 2006). Finally, households, communities and nations are powerfully affected by a wave of social, economic and political destabilisation (De Waal and Whiteside 2003). This destabilisation undermines the livelihood systems on which people depend, which in turn increases the susceptibility of people to HIV and AIDS. These generalisations do, however, need to be contextualised when engaging with a national or more local

situation. Undoubtedly there are common features such as AIDS-related illness and death and the certainty of rainfall variation, but equally there are nationally specific components to this situation.

The nature of these waves is important to understand, as each wave has different characteristics in terms of the links to livelihood security and the environment as these livelihoods' basis. Understanding the links between HIV, AIDS, food production and access, and the environment should then determine the type of development programming required. This raises substantial challenges about re-thinking long-term development, which takes into account the negative two-way relationship between livelihoods and HIV and AIDS (Drimie and Mullins 2006). With multiple dimensions to the epidemic, it is clear that there is no simple solution. To ensure that responses are appropriate and effective and take into account the multitude of causes and impacts, responses must be long-term and be able to integrate all aspects of livelihood security. The risks and vulnerabilities vary over time:

- From the perspective of an individual or family, at each phase different people are affected in different ways and may require different types of support.
- At a given point in time, a community or even a single household may have people in different phases.

To emphasise this point, the needs of people living with HIV and/or AIDS are not static—they are dynamic, changing with time and eventual disease progression. Visualising those needs across a 'continuum of care' can assist planning of appropriate interventions in an integrative and holistic manner. A basic understanding of this reality is important. It can help one take a challenge that seems overwhelming, and make it manageable by breaking it down in to manageable segments. Rather than having to respond to the totality of the epidemic, staff and communities can start by analysing how livelihoods increase or decrease risk of new infections among specific people, and develop appropriate responses. They can move on to analyse in turn various situations: how to support positive living by people with HIV, how to facilitate access to and proper use of antiretroviral therapy (ART), and how to mitigate social and economic impacts.

Recognition of the varied impacts of HIV and AIDS, has led to development of a conceptual framework that utilises the 'AIDS Timeline'. The approach enables a coherent understanding of a "mainstreamed approach" to HIV and AIDS that enables differential intervention strategies to be adopted depending on the dominant impacts and trends. Table 1 notes just a few possible livelihood interventions, which could be undertaken by different organisations including community groups, to address specific people at various stages of the timeline. By looking at the stages as they unfold over time, programmers, policy makers, and community members can begin to identify the needs of particular target groups and understand how those needs evolve. If concerned with environmental issues and the links to HIV and AIDS, the AIDS Timeline can help to explore approaches relevant to the dominant wave in the area.

Table 1 Examples of program interventions at various stages of AIDS Timeline

	Before HIV infection	Asymptomatic	Symptomatic	Death	Survivors
Targetting	Teenage girls at risk	Women with HIV	PWHAs caregivers	Widow/er, orphans	Survivors
Objectives	Prevent new infections	Positive living	Care and support impact mitigation	Mitigation: protect assets	Prevention & mitigation
Interventions	Safe livelihood, skills	Nutrition, income (possibly from environmental resources)	Nutrition, income, food aid	Legal aid: inheritance, protecting land	Skills, utilising environment sustainably
Methodology	Girls' youth groups	Build in all livelihoods work	Targetted support	Target vulnerable HHs	Targetted support
Potential partners	Voluntary counseling and testing, IEC school	Support groups treatment literacy	Clinics, HBC, child care	HBC, child care, paralegals	Child care, Paralegals

Case studies: Vhembe district, South Africa and Chikwawa district, Malawi

The case studies enable the conceptual framework to be linked to empirical evidence, drawn from a study¹ that was undertaken for the Food and Agricultural Organization (FAO) of the United Nations. The aim was to feed information into the Priority Area for Inter-disciplinary Action (PAIA) 'Implications of HIV/AIDS on Food and Agriculture'. Local institution-building to cope with and adapt to HIV and AIDS in southern Africa was selected as a priority action area firstly because of the magnitude of the challenge to sustainable rural livelihoods posed by the epidemic and secondly because of the clear need for local institution-building to assist affected households and communities to cope with this growing crisis.

Vhembe district, in Limpopo Province, South Africa and Chikwawa district, Malawi were chosen as they provide different contexts to look at food security and HIV and AIDS. South Africa has stronger national institutions and has state support in the form of social grants. In Malawi, there is a strong presence of aid agencies dealing with food security, environmental issues and HIV and AIDS and therefore it was expected that there might be differences between the two countries in terms of the types of institutions operating at the district levels and the type of government and NGO support.

Semi-structured interviews were used as the primary research method. In both case studies, interviews were undertaken with organisational representatives (8 interviews in South Africa and 5 in Malawi at the district level and an additional 4 at the national level in Malawi) and with people involved in on the ground activities within the district (11 in South Africa and 6 in Malawi). Interviews with organisational representatives explored the nature of the organisation, its challenges and links to other organisations and policies. The research focused on district level activities and how they support existing and emerging strategies to deal with HIV and AIDS and food security. The type of organisations that might play a role at the district level include district AIDS focal points for Ministries of Agriculture, national and district-level extension services, community-based self-help groups, village headmen and associations of village chiefs, well-established faith-based organisations, groups of people living with HIV (PLWH) and charitable non-governmental organisations.

This section draws out how the conceptual framework might be used to identify appropriate interventions for different stages of HIV and AIDS impact, with particular reference to food and environmental security in the two case studies.

Results

An assessment of the types of organisations and their activities in the two districts, presented in Table 2, indicates where organisations were focusing in terms of addressing the different stages of the epidemic, as laid out in the conceptual

¹ Strengthening adaptive capacity of local institutions in response to the HIV/AIDS crisis in Southern Africa. Report to the FAO. 19 May 2004.

Table 2 Number of organisations involved in addressing different stages of the HIV/AIDS epidemic in Vhembe District, South Africa and Chikwawa district, Malawi

	Before HIV infection	Asymptomatic	Symptomatic	Death	Survivors
Vhembe district organisations (<i>n</i> = 8)	3	2	4	3	0
Chikwawa district organisations (<i>n</i> = 5)	1	3	4	2	0

Note: Some address more than 1 stage and are therefore presented twice

framework above. This table draws on the analysis of the interview transcripts that classified organisations according to whether they were involved in awareness-raising and in networks of communication around HIV and AIDS issues (which were then classified as focusing on the stage *Before HIV infection*), support for agriculture (classified as *Asymptomatic stage*), support for Home-based Care (HBC) and support for AIDS sufferers (classified as *Symptomatic stage*), support for orphans and vulnerable children (*Death stage*) and supporting survivors whose household members had died from AIDS in the last year (*Survivors*). Although organisations that support orphans and vulnerable children are classified here under death. They could be seen as also focusing on survivors, but support for survivors is classified here as support for adult household survivors.

It is clear that in both cases organisations were tending to focus on the symptomatic stage of AIDS, with little support for survivors. This has implications for the key findings and helps to provide some context for the support that was available at the time the research was undertaken.

Three key findings can be drawn from the case studies, related to the nature of institutional dynamics of district organisations undertaking activities related to HIV and AIDS, the environment and/or livelihood security. These lessons can be used to refocus policies, programmatic interventions and operations to be more sensitive to the increasing strain of HIV and AIDS at the same time as promoting environmental sustainability and food security. Below, the case study results provide evidence for each of the key findings and link to the stages of the framework where appropriate.

Intervention needs to adopt more integrated approaches

The national level does not adequately support local public and private sector processes that are attempting to respond to the additional stress of HIV and AIDS. In addition, local processes are not well integrated between different stakeholders to provide the suite of services and support necessary.

The coordination of activities and support in relation to HIV and AIDS issues needs to be better addressed at the district level. South African stakeholders requested that non-government organisations (NGOs), community based organisations (CBOs) and government should support only those in need and avoid duplication of services, which could be supported by improved collaboration between sectors and stakeholders. Although there is a District AIDS council in

Vhembe, it did not appear to include any of the NGOs that were interviewed. This is a glaring problem. The NGOs have come together and created a separate forum to address HIV and AIDS-related issues and they have included some government-level stakeholders. Functional networks or forums should be able to link organisations or villages with those organisations that can and do deal with environmental and food security issues.

In Malawi there is little government support to provide the key element of an integrated response. Community based organisations are emerging in response but require substantial support in terms of skills, capacity strengthening and finance. These CBOs, working together with NGOs, could provide the nucleus of a response that is sustainable and builds on the strengths of local livelihood strategies. Indeed, it is clear that institutions have adapted to build on the existing social network institutions and develop more types of collaborative efforts. These institutions have arisen in both vertical and horizontal linkages. The on-going increase in volunteers at all levels shows the acknowledgement of the demand that is needed from the village level. The constant increase in the number of HBC organisations suggests the growing need for caring for the chronically ill that are placing increasingly large burdens on households. District level organisations have promoted the support and formation of HBC to help in looking after those that are chronically ill. This is an example of where the district-level is supporting community-based organisations that have to be run at a village level. Existing NGOs could use this as a basis of locking in their support and to focus their interventions. There is a need for all organisations dealing in food security and agricultural production to identify strategies as to how they can better integrate HIV and AIDS issues in all their activities.

Integrating gender sensitive approaches is also critical. In both cases the links between gender, HIV and AIDS and livelihood support had not been adequately addressed. For example, in Chikwawa district, Cadecom had a programme exploring how firewood collection impacts women's time management and the options for alternative sources of fuel. There are direct links to environmental resources, as where there is deforestation, women often travel long distances in search of firewood which can also prevent involvement in agriculture and household chores. Poor health makes this an even more important issue, if women are not able to walk long distances. An increase in people at the symptomatic phase, could result in this becoming increasingly relevant when addressing gender, HIV and AIDS and livelihood support. Environmental programmes might be supporting natural resource utilisation activities and it is clear that these should be linked in to support for those at the symptomatic phase.

Local district and village level institutions need to be developed further to respond more sensitively to different stages of the epidemic

In both districts, support at the stage before HIV infection was limited. In South Africa, there seemed to be more awareness campaigns and places for HIV testing than Malawi. Voluntary Counselling and Testing points in Chikwawa were limited,

as the only place to go was the hospital at the time of the research. Improvement in the ease of getting tested should be a priority when there are high levels of infection and low disclosure. In both cases there were some village-based projects that focused on supporting people in the asymptomatic stage through income-generating projects and support groups.

In South Africa, although there was an articulated desire for more income-generating projects it was acknowledged that many had failed in the past. Despite this, people suggested there is a demand for projects such as broilers and piggeries that support livelihoods both for those in the asymptomatic stage and for survivors. It is important that these activities are undertaken in an environmentally sustainability manner, not compromising future resources. Renewable energy should be explored further, as it saves on fuel costs and can have low carbon emissions. Solar cookers were piloted by the Department of Agriculture, but people did not like the taste of food produced as they preferred the flavour from the potjie (3-legged black) pots. There was significant mention of the need for home gardens but not many suggestions as to how these might be effectively implemented, apart from seed and skills being provided. There was also demand for increased knowledge about locally available food. This should be supported as local produce is often more environmentally sustainable if it can grow in local climate and soil conditions and reduces the need to import food from outside the area, reducing costs and carbon emissions.

There is emerging evidence of interventions that are environmentally sensitive— at the same time as responding to food and nutrition requirements. For example, in Chikwawa, one of the agricultural support interventions was to provide seed multiplication of cassava and sweet potato that are also promoted as drought resistant, so suitable to low rainfall conditions and therefore appropriate if more frequent droughts are expected with climate change (IPCC 2007). Similarly soil and water conservation techniques were being taught, along with agro-forestry, crop diversification (to include different maize varieties suitable to local conditions), supporting nurseries for trees and training in improved agricultural techniques (food supplements are given in some cases to those who use improved techniques so that they have energy to cultivate). Households also rely on pest and insect control strategies that use locally available resources such as mthuthu (*Tephrosia vogelli*), an herb that repels pests. These strategies recognise environmental sensitivities at the same time as supporting food security. Interventions at different stages could be expanded so they were more environmentally sensitive.

Land tenure security is a concern for survivors. Support for this was absent in the two case studies. It was suggested that legal support for retaining or acquiring land should be coupled by skills building and training that provides farming skills as well. This is also likely to help survivors protect their environmental resources, as they are more likely to invest and care for them under secure tenure.

Responses have emerged from local institutions

Local level solidarity has been shown by the strong presence of religious organisations and support from considerable numbers of volunteers in caring for

the sick and support for orphans. The emergence of local organisations to deal with increasing impacts from HIV and AIDS can be singled out as one of the few positive results for future development purposes. Despite the emergence of local home-based care (HBC) organisations, it is clear that the local supply of support is not meeting the demand. The continual absorption of orphans within extended families has been impressive but despite this, there is often not enough support for these children, as family resources become more and more stressed. In some villages, there are orphanages but these are not prevalent. In general, OVC do not always get the attention they need in terms of schooling, health and psycho-social support.

In both South Africa and Malawi, village level organisations have emerged to support rural households through care, education and social or emotional support. In South Africa there is the additional support from government grants. Although these are not necessarily sustainable, they do enable households to choose what to spend money on, which enables them to respond to the stage of the epidemic they are facing, rather than relying on external intervention.

In Malawi the village communities, both kinship-based and other safety networks, have increased the combined as well as individual efforts to assist households that are affected. Significant increases in the number of communal kitchen or vegetable gardens can be observed. These gardens often aim to supply food for orphans or affected families as it is recognised that these groups have difficulty accessing the traditional means of food supply from fields. In the case where parents have passed away, orphans are often looked after by relatives that take them in to their homes. Members of village committees, in consultation with the village headmen, see to it that issues relating to the crop fields which their parents left behind are addressed (where labour has been lost). These members sometimes work for the orphans in the fields and sell the produce on behalf of the orphans, although it was mentioned that the orphans do not necessarily receive adequate emotional or material support from their new guardians, as the guardians are often over-burdened.

Across southern Africa, institutions have adapted to build on existing social network institutions and develop collaborative efforts. These institutions have arisen through both vertical and horizontal linkages. For example, in Chikwawa, district level organisations have promoted the support and formation of home-based care centres (HBC) to help in looking after those that are chronically ill, yet often bring together groups that have been initiated in a number of different villages. The national level has supported the district level in this, as it reduces the burden on the national health system. All of these responses have emerged from people at all levels highlighting the positive within a frequently overwhelming situation.

Conclusions

The case studies highlight that not only do some stages of the epidemic receive more support than others, but seldom are environmental factors consciously factored in to these responses. In southern Africa, where so many households depend on the climate, land and its resources, it should be commonplace to explore how

Table 3 Environmental support needed at different stages of the AIDS Timeline

	Before HIV infection	Asymptomatic	Symptomatic	Death	Survivors
Environmental support	Access to a wide range of natural resources to underpin a sustainable livelihood and offset risky livelihood activities. This is based upon a situational analysis of livelihoods system, focusing on the environment	Improve access to natural resources—water, medicines, wild foods, alternative fuel sources. This includes rights of access anticipating the symptomatic stage and physical access issues	Improve access to natural resources—water, medicines, wild foods, alternative fuel sources. Particular emphasis on illness associated with HIV and labour (ability to harvest the environment)	Rights to land alongside rights to other resources (water) for widow(ers) and children	Knowledge of and access to a wide range of natural resources to underpin a sustainable livelihood and offset risky livelihood activities

interventions can support environmental assets at the same time as supporting people at different stages of the AIDS Timeline. The type of environmental support that could be provided at different stages in relation to the matrix is illustrated in Table 3.

Addressing these environmental issues will require *new relationships between organisations, groups and individuals who might not have worked together in the past* yet can provide the necessary resources and expertise in many cases. For example, stakeholders working on issues such as natural resource access and utilisation and land rights might consider how their beneficiaries are impacted by HIV and AIDS at the same time as educating those involved in “HIV/AIDS responses” on the links and importance of approaches that are environmentally sustainable.

One example of improving environmental support through local institutions would be the *development and implementation of innovative capacity-building programmes for village chiefs and other traditional leaders*. Traditional leaders, particularly village chiefs, are the arbiters of local social and regulatory systems. These systems have a strong influence on local responses to HIV and AIDS, such as through initiation ceremonies, marriage, inheritance, and land tenure as well as on the environment, such as land allocation and securing grazing and water rights. In a number of instances, associations of village chiefs have already begun to reflect on ways in which they could adapt customary practices to take into account the realities of HIV and AIDS and its impacts. These chiefs are generally well aware of the dependence of their community on natural resources and could integrate environmental concerns into responses to HIV and AIDS. The nature of the capacity

building required will depend on local circumstances, but in general, the programmes should complement and extend the activities of local leaders. Of particular interest might be capacity-building programmes focusing on innovations in land tenure regimes and inheritance practices that chiefs might introduce to modify the increasingly common practice of stripping widows and orphans of productive assets (see Izumi 2006), thereby impoverishing them and their remaining household members, while often removing productive land from active cultivation.

Another area of improved support could be addressed through *extension reforms that emphasise service centres at the district level and provision of demand-driven technical support that addresses environmental concerns to community-based organisations* for assisting affected households to adapt livelihood strategies. As labour shortages begin to affect organisations that deliver rural services, a shift in the nature of institutional support to livelihood security will be required. A shift is already beginning to occur from centralised extension services to district and local service centres, providing support to a wide range of local organisations. Local workers in faith-based organisations and community-based groups are well-positioned to transmit simple extension messages on preservation and transfer of local agricultural knowledge and innovative ideas for labour saving technologies, or conservation of resources, but they often lack the skills to do this. A capacity-building programme could have immediate and high payoff.

It is clear that there needs to be improved *support for local institutions coping with HIV and AIDS* in emergency agricultural relief, environment and natural resource management and livelihood support programmes in southern Africa. There is still a deficiency in appropriate rural service delivery in AIDS-affected areas. This is partly because of a general breakdown in rural services for a variety of reasons, and partly because HIV and AIDS has generated a new client group that includes the female, elderly and orphaned household heads who were not traditionally the recipients of agricultural extension, but who now need to acquire agricultural skills and improved knowledge of the environment rapidly if they are to survive on the land. There is also still little incentive for local representatives of national ministries to embark on cross-sectoral activities, as they are not instructed to do this nor rewarded in any way for such efforts, although mainstreaming of HIV and AIDS is starting to permeate a wider range of activities. Support for improved facilitation of cross-sectoral dialogue among national and local stakeholders is therefore a priority. A focus on integrating support for different stages of the AIDS Timeline with environmental services and food production would be an ideal starting point as so many households in southern Africa rely on the environment and subsistence production as well as being impacted by the HIV and AIDS epidemic.

An institutional response that is coherent should take a *larger scale approach that makes use of identifying the “intensity” of where the epidemic is situated within a geographical area*. This requires organisations to evaluate whether their interventions are appropriate for the current “intensity” or whether different types of organisations or interventions are needed. Similarly, policies are needed to support this process. The evolution of the epidemic requires policy that supports dynamic responses. This is challenging as certain organisations have key competencies that are appropriate to certain stages of intervention but these

interventions will need to change over time. At the same time, in order to inform a coherent, integrated, “mainstreamed” response that builds and responds to the realities of a livelihoods crisis, is it necessary to support the response primarily through the links between AIDS, the environment and food insecurity. People’s livelihoods are threatened and innovative approaches are urgently needed in order to address the current crisis.

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