Natural Resource perspectives

Number 98, March 2005

RESPONDING TO HIV/AIDS IN AGRICULTURE AND RELATED ACTIVITIES

Rachel Slater and Steve Wiggins

HIV/AIDS has multiple impacts on agriculture and the livelihoods of rural households which are only slowly being understood. This will gradually help in identifying the kinds of agricultural policy instrument that could offer appropriate support to HIV/AIDS-affected households. At the same time, responses are also urgently required to ensure that hard-won gains in poverty reduction are not eroded by the pandemic's effect on agricultural growth. This NRP explores the challenges posed for agriculture by the pandemic and considers a range of policy options.

Policy conclusions

- HIV/AIDS creates an additional and heavy, but uneven, stress on rural societies already often faced by widespread vulnerability and chronic poverty. While the consequences for individuals and their households are most visible, entire sectors such as agriculture are also affected.
- The challenges presented by the epidemic to agriculture and related activities invite consideration of options that would be positive in any case, but are made all the more important by the need to mitigate the impacts of the epidemic. In other words, for agriculture the response for the most part implies redoubling existing efforts for development. The following are key concerns:
  - Household financial capital is being diverted to respond to the disease, underlining the need to make best use of savings and learn from innovations in rural finance.
  - For households losing labour to illness and caring, labour-saving technology – especially for women – will be particularly valuable. This may be in farming itself, but it may be more pressing and feasible to reduce time taken on other tasks, such as drawing water. Ideally, extension services need to be able to provide additional options appropriate for affected households;
  - Education and training need to be stepped up to compensate for loss of labour and skills. This applies to all sectors, not just agriculture;
  - For some households, labour loss may be so severe that farming is no longer an option. Strengthening the rights of women and orphans to land worked by the household would allow them to retain a key asset, and derive income from renting out or share-cropping the land; and
  - Little attention has been paid to the threat to supply chains from the disease. They need to be made to function better, and become less reliant on personalised contacts with key players.
- In addition, the epidemic raises acute questions of social protection. The impacts of HIV/AIDS are uneven: some households directly affected will face deep poverty and destitution, and some will disintegrate, leaving orphans, widows and widowers. Devising social protection schemes for such households and individuals that are effective and affordable, and that avoid the dangers of stigmatising the beneficiaries, becomes all the more important.
- A particular concern is to protect the future of young orphans, to ensure they get the nutrition, education, and care that will give them equal chances with other children. Another, and perhaps more difficult issue, is protecting the rights of other members of the household to property on the death of household heads, especially when the head was male.

Introduction

The human cost of HIV/AIDS is high. In 2003 it was estimated that in southern Africa, where the highest rates of HIV prevalence can be found, as many as 1.2 million people died out of more than 14 million persons infected with the virus (UNAIDS, 2004).

In addition, the epidemic undermines household economies, often pushing those directly affected into poverty, and reducing the incomes of all so that not only those living with HIV/AIDS, but also many of the individuals and households not directly affected, may see their incomes fall. In regions such as southern Africa, where more than half the population already live in poverty, the consequences of economic setbacks can be severe. It already seems likely that in the most affected countries, the epidemic means that many of the Millennium Development Goals will not be achieved.

Early outbreaks of the disease occurred predominantly in urban areas, but subsequently increasing prevalence rates in rural areas, and a tendency for those showing symptoms of AIDS to return to their villages, mean that the majority of people living with HIV/AIDS are now in rural areas. The focus of policy is therefore shifting, both spatially, from urban to rural; and sectorally – while initial early responses focused heavily on health and education, it is now clear that the economic effects will be large, including on agriculture and related activities. Thus, supporting rural households affected by HIV/AIDS, and making efforts to ensure that gains made in agricultural growth and poverty reduction over recent decades are not lost, are high on the rural development policy agenda.

At the same time, the ways in which chronic and persistent poverty may inhibit economic growth and lock households into poverty and vulnerability are increasingly recognised. The World Bank concept of 'social risk management' (Holzmann and Jørgensen, 2000) examines such linkages and tries to expand the remit of social protection – that is, '(largely reactive) public measures to provide income security' – from a narrow focus on safety nets to measures that allow people to escape poverty and vulnerability. The shift in perspective has encouraged the search for interventions that enable synergies between protecting and promoting people's livelihoods (Devereux, 2001; Farrington et al., 2004).

The sheer scale and severity of the HIV/AIDS pandemic presents urgent questions about how to respond to challenges that apply to individuals, households, communities, and the wider economy.

Impacts on agriculture and rural livelihoods

HIV/AIDS affects agriculture both directly and indirectly at the household level, changing supplies of labour, assets, patterns of farming and other activities; as well as affecting communities as whole and the wider economy; and some of these changes come back to affect farming households (Table 1).

DFID Department for International Development

This series is published by ODI, an independent non-profit policy research institute, with financial support from the Department for International Development. Opinions expressed do not necessarily reflect the views of either ODI or DFID.

Table 1 Impacts of HIV/AIDS within farming communities

Immediate effects	Responses by households	Consequences for agriculture and other rural activity
• Loss of labour – from death, sickness and caring; attendance at funerals and in mourning; loss of motivation to trauma; loss of energy from malnutrition	• Take children from school, esp. girls, so they can work or help with care • Recruit additional labour e.g., widowers may remarry; youths may be adopted from the extended family • To hire workers is an option only for those with cash	• Leave fields uncultivated • Shift to crops less intensive in labour • Reduce the range and diversity of crops grown • Move from cash to subsistence crops to assure domestic food supplies • Spend less time on land conservation • Shift to less physically demanding jobs, e.g. petty trading
	• Less participation in community organisations	• Inability to join and participate in co-operatives can mean less access to e.g. credit, or farm input supplies
• Cash costs of medical bills, transport to health centres, alternative diets, home care supplies, funeral expenses	• Savings liquidated • Assets sold off – consumer goods and household effects, livestock, tools, land (probably in this order, with land sale the last resort) • Go into debt	• Less spending on farm inputs such as seed and fertiliser, more extensive cultivation
	• Undertake additional work to earn extra income – crafts, brewing, etc. May include migration to find work.	• Migration to find better-paid work may deprive farming of labour
• Increased dependency ratios as adults in their prime die, leaving the old and orphaned children	• Adults, especially women, have to spend more time on care of young • Increased cost of schooling orphans – may lead to orphans being taken out of school	• Less time to farm or earn income • Less cash to invest
• Loss of knowledge and skills as adults die before passing on their learning to their children	• Not known	• Young and orphaned farmers lack farming skills • Reduction in diversity of crops grown
• Loss of access to land by widows on death of husband	• Conflicts within extended families over inheritance of land and property	• Widows left destitute, possibly having to resort to commercial sex work

Main sources: DESA, 2003; Jayne et al., 2004; Mather et al., 2004; Mutangadura et al., 1999.

Labour for agriculture

Labour shortages in HIV/AIDS-affected households arise through loss of labour when people become unable to work through illness, and when they ultimately die, as well as through labour being shifted from agricultural activities and into caring for household members who are sick.

These losses of labour are severe because of the demography of HIV/AIDS. It affects prime-age, economically-active adults far more than other groups, leaving only the elderly and children to replace the labour lost to agriculture. It also exacerbates the gender divisions of labour. Women are more likely to be infected with HIV than men, owing to their physiology and their weaker control over preventative methods. However, husbands with the virus tend to develop AIDS-associated illnesses and die before their wives. This increases the number of female-headed households. Women take on most caring roles and attempt to compensate for the missing labour of their sick husbands.

Assets for agriculture

Faced by additional costs of medicine, fees to doctors or traditional healers, transport to health facilities and other items for the care of the sick, and often by lower incomes from loss of labour, affected households usually have to draw down on their assets.

Savings and financial assets are usually the first to be depleted after the onset of AIDS. After this, non-productive assets, such as furniture, cooking utensils and clothes follow. Finally households may have to sell off productive assets such as tools, draught animals, and land – although in systems of communal tenure land sales may not be an option.

Households are thus likely to have less working capital to finance their farming, and may well also see their fixed capital eroded. When male heads of household die, widows may come under pressure to leave the fields to the late husband's family. In some cases they may be obliged to return to their home village.

Changing agricultural activities

With less labour and working capital, and in some cases having sold off tools and livestock, affected households often have to modify their farming. Less land may be tilled, leaving parts of the farm in fallow. Cropping patterns may switch towards food crops to assure survival, and towards crops for which there are lower peak demands for labour – for example, from maize to cassava and sweet potato. Cash crops are particularly likely to be abandoned when adult males fall sick, since they typically attend such crops and have the contacts to market the produce.

Households may sell off large livestock, such as cattle, and use smaller stock units, such as goats or chickens, that can be reared closer to the homestead, and that can be sold off in small quantities to release cash for purchases of medicines for the sick or for basic needs where regular sources of income are lost

Agricultural systems may also become simplified because, when people die from AIDS, agricultural knowledge and skills that are crucial for production are not passed down to the next generation (Gillespie and Loevinsohn, 2003). Furthermore, the context-specific, local knowledge that people use to respond to risks is also lost, as is understanding of local plant varieties.

It is easy to see how the impact of the disease on affected households is cumulative, cutting incomes, depriving them of assets, undermining coping mechanisms and leaving them ever more vulnerable. Poverty, if not outright destitution, and food insecurity seem the fate of many affected households. This has led to warnings of a worst-case scenario: 'New Variant Famine', in which coping strategies in response to a shock such as harvest failure are overwhelmed, and large numbers face destitution and famine (de Waal, 2003).

Effects on farming communities

In addition, the disease affects the wider community. Mutual

support networks that offer some protection against calamity to individuals and households, may wither in the face of an epidemic that creates heavier additional demands than the unaffected population can meet.

Prominent community members, such as school teachers, may be particularly prone to infection – thanks largely to their mobility and relative wealth. Their loss can undermine the working of community organisations and institutions. For example, community-based management of natural resources depends on both effective leadership in the village, and on people having the time to participate in discussions – premises that are less plausible in the presence of HIV/AIDS. Less tangibly, the epidemic may sap morale, encourage despair, and thus undermine local community initiatives.

HIV/AIDS, the wider economy and the effect on agriculture

Rural households and communities may also suffer from the impacts that the disease has on the wider economy. For example:

- Government services may be diminished as staff are hit by sickness and death, or by the need to care for family members or attend funerals, and as budgets are strained by the costs of the epidemic (Box 1);
- Sickness and death in household members living in urban areas can lead to loss of remittances, but impose additional costs of caring if the person returns to the village for the final stages of their illness. In either case, capital is likely to be transferred out of agriculture.
- Supply chains for inputs and marketing may depend heavily for their functioning on the knowledge, skills and contacts of a few key intermediaries. Contacts within the chain may be highly personalised, with knowledge remaining uncodified. Sickness and death among these key players may thus have disproportionate impacts on all involved in the chain.
- Demand for farm surpluses may be reduced: in countries most affected by the disease, gross domestic product per capita may fall over the next two decades and the proportion living in poverty rise. In moderately affected countries, economic growth is likely to slow down. The outcome is likely to be a severe curb on domestic demand for farm produce, depressed prices, and a reduced incentive to produce marketable surplus.

Hence, agriculture may be deprived of capital – although not necessarily of labour,[1] with weakened supply chains and fewer government services, and faced by lower demand for marketed surplus. The likely outcome would be a move to extensive production primarily for local subsistence, with a depressed rural economy and weakened prospects for poverty reduction.

Principles and lessons for agricultural policy

Undoubtedly, the main priority has to be to arrest the spread of the disease, and provide curative and palliative treatment for patients, through health, education and nutrition programmes. But general principles for reducing or reversing the negative consequences for agriculture and other natural resource-based activity also need to be identified, thus:

1. The impacts of HIV/AIDS have to be seen within a context of widespread chronic poverty and vulnerability. While the scale of the epidemic is unprecedented in recent history, the way that it strikes at individuals and their households is similar to that seen in accidents, violence, alcoholism, and some other diseases.
2. Setting HIV/AIDS in this context can help avoid the dangers of AIDS 'exceptionalism', whereby affected households are granted provisions unavailable to other households that may face similar difficulties from other causes. Making a special case out of affected households can also lead both to damaging stigma, and perverse behavioural incentives inconsistent with prevention.
3. Responses need to differentiate between different phases of impact (Table 2). In the earlier phases of the pandemic this means a focus on health and education, including nutrition. Responses in agriculture become more important when impact levels are higher (stages 3 and 4) to help households mitigate and recover from the agricultural implications of morbidity and mortality.
4. Interventions need to fit within public sector capacity, as well as within typical sectoral divisions of action, even if there may be co-ordinating bodies to maintain coherence across sectors. Public capacity itself, of course, is threatened by the disease (Box 1).

Policy options fall into three categories:

- those that would be positive in any case, but which also help mitigate the impact of HIV/AIDS – for example, measures that encourage economic growth and poverty alleviation, those that redress gender imbalance, and, more specifically, investments and innovations that reduce the time spent in drudgery – long trips to collect water, for example. Progress in these realms would reduce the spread of the epidemic and its impact (Boxes 2 and 3).
- those that HIV/AIDS makes ever more pressing – for example, social protection for those in danger of falling into destitution. But the opportunity costs of any such measures need to be considered, in terms, for instance of reduced capacity to invest in growth; and,
- those that possibly deflect from long-term development, or may offer only marginal returns. For instance, efforts to reduce migration may slow the spread of the disease but also considerably reduce earning possibilities (Jayne et

Box 1 Reduced capacity to deliver agricultural and HIV/AIDS policy responses

HIV/AIDS affects the capacity of governments and civil society to respond to the epidemic in two main ways:

- It reduces the financial capacity of the state itself as HIV/AIDS reduces economic growth and taxation revenues. Thus, funds available to spend on socially protecting measures (insurance, transfers, micro-credit) decrease just as the need for them rises;
- At the same time, HIV/AIDS strikes at the human resource capacity of government. Loss of working days to illness, caring and mourning; and the costs of training replacements as others die from AIDS affect all public sectors, including health, education and agriculture.

The FAO cites a study showing that as much as 50% of agricultural extension staff time may be lost to HIV/AIDS in sub-Saharan Africa.

Sources: Slater, (2004) and www.fao.org/docrep/x0259e/x0259e08.htm

Table 2 HIV/AIDS prevalence rates, impact levels and priorities for social protection

AIDS impact level	HIV/AIDS adult prevalence rates	
	LOW	HIGH
LOW	Phase 1: Low prevalence, very low impact Focus on: **Reduction of vulnerability to HIV infection**	Phase 2: High prevalence, still low impact Focus on: **Reduction of vulnerability to AIDS impact and preparedness**
HIGH	Phase 4: Declining prevalence, high impact Focus on: **Rehabilitation**	Phase 3: High prevalence, high impact Focus on: **Impact alleviation**

Source: Topouzis (2003)

al., 2004). A better policy may be to reduce the health dangers from migration, for example, by allowing seasonal workers to move with their families, by education on risks and their reduction, and by measures to improve the rights of women migrant workers. Similarly, the merits of crops more nutritious for the sick have to be set against any income foregone from reduced cultivation of marketable crops.

Instruments for supporting HIV/AIDS-affected, agriculture-dependent households

Countering effects on agriculture and other rural economic activity

One concern is to redress losses of **human capital and skills**, a need relevant to agriculture as it is other activities. The epidemic not only deprives communities of people and their abilities, but it also makes it more difficult for those affected to keep the children in their care at school. That the epidemic might reverse the hard-won gains of the last few decades in getting girls to school is a particular concern. Education is a major goal in itself – as reflected in the MDGs – as well as a key instrument for economic development. The implication is clear: more education will be needed at all levels, but above all in basic learning and vocational skills, to counteract losses to the epidemic.

A specific issue for farming households affected by HIV/AIDS is ensuring that children can attend school, and are not withdrawn to provide farm labour, release others from domestic tasks to work on the fields, or for caring. School meals are one incentive, bursaries may be another.

A second concern is to reverse the **losses of capital** to agriculture and the rural economy, owing to spending on medication and care. Some cushioning may take place as unproductive savings are liquidated – cash stored under mattresses, some cattle perhaps, jewellery – but productive capital will in many cases also be depleted.

What can be done to remedy this? A minimal response would be to focus more effort on improving rural financial systems, to mobilise savings currently locked in unproductive forms, to reduce the cost of capital, and to encourage forms of insurance such as burial societies. Considerable effort has gone into making rural financial intermediation more effective, and lessons need to be adapted to HIV/AIDS contexts.

This challenge is made all the more acute, since HIV/AIDS tends to undermine the sustainability of current, often informal institutions. Evidence from South Africa suggests that savings groups, such as rotating credit associations, and insurance groups, especially burial societies, become unsustainable as increased AIDS-related sickness and death lead more people to draw down on them. Moreover, community-based insurance and savings depend on trust and balanced reciprocity, and households already affected by HIV/AIDS in some way are more likely to be stigmatised than welcomed into these groups.

Evidence on credit, insurance and savings is fragmentary – they can play an important role in prevention and mitigation activities, but risks are also involved (Box 4).

Third, devising and disseminating **appropriate technology** for AIDS-affected households is a common suggestion – above all, recommending labour-saving technology for farming. This makes sense: raising labour productivity is critical to development and poverty alleviation.

That said, farm tasks may not be as amenable to labour-saving practices as, for instance, the collection of water. Increased labour demands from the epidemic tend to fall on women, who are in many societies expected to collect water.

Box 2 HIV/AIDS as a stress that reveals vulnerability

Accounts of the impacts of the epidemic show how the disease produces severe stress that leads to fractures and lines of cleavage when it strikes the vulnerable.

Examples include:

- The status of women. In matters such as the uncertain rights of widows to the land and other property of their deceased husbands, or customary marriages of widows to brothers of deceased husbands, the epidemic exposes the inequalities between men and women;
- The withdrawal of poor children from school, since parents cannot afford the costs of schooling, or children are needed back in the home for domestic work, caring or agricultural tasks;
- The bottlenecks in labour supply that some farming systems encounter, when operations have to be carried out in short order owing to the short seasons available for growing;
- The heavy demands on labour in rural households, above all those of women's time. Caring for the sick is added to the already back-breaking round of domestic chores, most of which are seen as women's work;
- The lack of social protection for those who have suffered from disease or its effects, and the vulnerability of local mutual solidarity to risks that affect large numbers at once;
- The functioning of supply chains that depend on a few key actors, with tacit knowledge and personal networks; and
- The ability of public services to fulfil their mandate with stretched budgets, and their limited ability to offer differentiated services – as for, example, with extension messages that cater for farmers in diverse circumstances.

None of these conditions is novel: it is just that the disease as a severe stress, in common with factors such as drought, civil unrest, or rampant inflation, reveals sharply the vulnerability of the poor, and in particular women, to shocks and stresses.

Box 3 Links from rural poverty to the evolution of the epidemic

Much has been made of the of the vicious circles from poverty to HIV/AIDS infection to deeper poverty. Processes cited include:

- The higher susceptibility of malnourished individuals to infection by HIV, and (probably) their faster progression to full-blown AIDS;
- The engagement by poor people in risky activities that leave them more prone to infection. Commercial sex work is the clearest example. Migration for work by unaccompanied individuals is another; and,
- The high personal vulnerability of the poor to abuse, including sexual abuse. There are, for example, accounts of food aid rations in West African refugee camps only being handed out in return for sexual favours. Similar reports have surfaced in Southern Africa in respect of current efforts to relieve the food crisis that broke out in 2001/02.

The disease clearly exacerbates poverty and vulnerability, but in turn feeds off these. Measures to counter the effects the disease thus also contribute to arresting its spread.

Box 4 Lessons for HIV/AIDS from micro-finance in Africa

Some argue that HIV/AIDS-affected clients of micro-finance institutions may need a wider range of financial services than others. However, Baylies (2002), drawing on evidence from Africa, questions whether the sustainability of HIV/AIDS-affected households depends, in part, on their fuller integration into the market economy: 'micro-credit has clear limits where high levels of morbidity and mortality undermine the economic arena within which the logic of microfinance schemes is nested' (625).

Various community-based savings and insurance institutions are playing important roles in preventing and mitigating HIV/AIDS impacts. In Ethiopia, for example, members of community groups to which people pay subscriptions to meet mourning and funeral costs are being trained for HIV/AIDS-related work. However, there is other evidence from South Africa that points to increased infection amongst savings clubs, particularly amongst young people.

In addition, those caring for the sick, and again the majority tend to be women, need extra supplies of water for washing. Gathering wood for fuel, another time-consuming chore, may also be a candidate for finding ways to reduce time spent.

Nor is it clear that farm extension services can devise and deliver messages for those short of labour. Extension services have long been expected to offer messages that are appropriate for a range of farmers, not just the better-resourced or more innovative – and in particular to women farmers. But extension services in most cases seem capable only of delivering standardised messages. And agricultural researchers, with honourable exceptions, are loath to divert their focus from 'advanced' technology that raises output per hectare or per animal.

Distribution of seeds and fertilisers to affected households may help increase productivity through improved varieties and greater fertiliser use, contributing to increased availability of food and lower prices for net consumers, and providing a safety net for vulnerable households.[2] New seed – for example, pest-resistant or drought tolerant varieties, can also reduce the variance around income streams.

Other options for agricultural support adapted to the labour constraints of HIV/AIDS-affected households include support to cottage or homestead gardening (Box 5).

Ironically, new dietary demands associated with the disease also offer some, probably limited, opportunities within agriculture. Improved nutrition can prevent infection, lengthen the time between infection and seroconversion, and enable people who have developed AIDS to maintain weight.[3] There are examples, therefore, of where farmers are able to respond to opportunities that emerge in agriculture because of HIV/AIDS. One example in this regard is honey: beekeeping is both an important income-generating strategy for HIV/AIDS-affected households, and provides an important food in combating opportunistic infections.

In some cases technical innovation may not be the priority. The widow with little labour who still controls land, may prefer to rent out the land to neighbours, than struggle to use the land albeit with labour-saving techniques.

This leads on to a fourth concernt: **strengthening the rights of women and orphans to household land** seen as the male head's personal property is important, not just to ensure that the remaining household members have the use of the land, but also that they have the option to rent it out or possibly sell it.

Practical measures here will be highly context specific, requiring perhaps in some cases enabling legislation, but in all cases painstaking work with the local institutions that determine the application of tenure norms and the resolution of disputes. Simply raising awareness and understanding of the issues amongst community leaders and elders would be a step forward. The emergence of new sharecropping arrangements in Lesotho is one example that could guide better land administration (Box 5).

A final concern is over **effects originating in the wider economy** – debilitated supply chains, weakened national demand, and impoverished public services. These may be more important than factors arising within the affected communities, but some, particularly weakened service delivery, are highly intractable.

In HIV/AIDS contects, efforts to **improve the working of supply chains** need to ensure that they are robust to the sickness and death of key players. Scope for public action here is limited since most supply chain activity is private. But measures such as training in business skills, ensuring access to working capital, underwriting innovative schemes for marketing and input supply, fostering farmer associations, and public provision of market information are all candidates for renewed efforts.

Box 5 HIV/AIDS and homestead gardening: The case of the Livelihoods Recovery Through Agriculture Programme (LRAP), Lesotho

In Lesotho, where HIV prevalence rates had reached 29% among adults by the end of 2003, agricultural support is increasingly focused on HIV/AIDS-affected households with limited labour or capital, or both. LRAP is a joint project between the Ministry of Agriculture and Food Security and CARE that supports homestead vegetable production through the provision of inputs, extension and marketing support. Homestead vegetable production is less physically demanding than maize production in distant fields (which e.g. requires draught power). It also provides a wider range of foods for consumption.

Whilst HIV/AIDS-affected households are moving away from labour-intensive maize production, others are taking on lands left fallow. However, there is no evidence that vulnerable households are losing land. Instead they are entering into sharecropping arrangements with households with more labour or capital.

Social protection for AIDS-affected households dependent on agriculture

Transfers

Transfers can help to safeguard existing productive assets which otherwise might be drawn down to meet basic household needs as part of a vicious cycle of coping.

Food is a common transfer in countries with high HIV prevalence rates, partly since international donors can often offer food aid, and partly from concerns to boost the diets of the sero-positive. Food may be the most appropriate form of transfer, particularly in areas where cash transfers would be inflationary owing to food shortages. However, these conditions are unusual. Large-scale food transfers may lower considerably the price of food in the market, and undercut efforts to stimulate more local food production.

Notwithstanding concerns about inflationary effects, ***cash transfers*** are increasingly recognised as being more cost-effective, having lower transactions costs, allowing greater beneficiary choice, and stimulating local markets (Harvey et al., 2005). Drawing on evidence from India, Farrington et al. (2003) note that through a combination of logistics costs and corruption, one rupee of food costs some two rupees to acquire and deliver. Cash transfers via, for instance, pensions, cost only a fraction of this to administer. Partly as a result of HIV/AIDS, in Southern Africa new experiences with cash are emerging apace.

Public Works Programmes

Labour shortages in HIV/AIDS affected households make public works programmes unlikely to be of great relevance to them. Where the HIV/AIDS-affected *can* participate, public works programmes might usefully include education and training interventions in an attempt to overcome the loss of knowledge about local agro-biodiversity and skills in indigenous agricultural systems.

Safeguarding the rights of those directly affected by the disease

The uneven impacts of the disease leave two sets of persons particularly at risk of deep poverty and destitution: orphaned children, and those adults surviving the death of heads of households, especially where a male head has died.

Both groups risk losing access to household property claimed by relatives of the deceased male heads, an issue discussed above in relation to land but which may also apply to housing and livestock.

Orphans face the additional hazard that they may get less nutrition, care and education than other children. Households

that take in orphans are often already living in poverty. Providing food packages, probably dry rations, for children under five years of age at risk of malnutrition is one possibility. Regarding education, bursaries and waivers of fees and other charges for children from poor households are indicated, although testing the means of their parents and carers is onerous both administratively and socially.

Conclusion

Evidence on the impacts of HIV/AIDS on productive sectors is still limited. Many of the arguments presented here are, inevitably, based on experience of responding to other manifestations of vulnerability, not least food insecurity. Further evidence on the effects of HIV/AIDS on supply chains and of sector-wide impacts would be useful.

HIV/AIDS represents a serious challenge to agricultural development. An intensification of current development efforts, whether through economic growth, poverty alleviation, improvement of social indicators in education, health, water and sanitation, and redressing gender imbalances, may generate advances that *in aggregate* outweigh the damage from the epidemic. But the types of development effort particularly relevant to HIV/AIDS-affected households are few. Examples include modifications to modalities of migration, and strengthening the land rights of women and minors.

On the other hand, it is important to avoid AIDS-exceptionalism. The danger is that, in focusing attention on HIV/AIDS, other sources of risk – including other diseases – are ignored and not given the policy attention they deserve. Furthermore, by focusing on HIV/AIDS, we risk increasing stigma which in itself can result in damaging changes of behaviour. The central principle is, therefore, that interventions should focus on addressing household and individual vulnerability, of which HIV/AIDS-effects are one, but not the sole manifestation.

Beyond these measures lies the major question of social protection: what can be done, with the scarce resources available, to assist those affected by an epidemic whose impacts are brutally uneven? The question of what to do for those marginalised by economic growth and liberalisation is far from new: but in the case of HIV/AIDS it is written more acutely and on a much wider scale. The need for more learning about effective and affordable social protection has never been greater.

References

Baylies, C. (2002) 'The impact of AIDS on rural households in Africa: a shock like any other?' *Development & Change*, 33 (4), 611–632.

de Waal, A. (2003) 'New Variant Famine': hypothesis, evidence and implications' *Humanitarian Exchange* 23, March: 20–22.

DESA, UN, (2003) The Impact of AIDS, Population Division, Department of Economic and Social Affairs. Available at: www.un.org/esa/population/publications/AIDSimpact/AIDSWebAnnounce.htm

Devereux, S. (2001) 'Livelihood insecurity and social protection: A re-emerging issue in rural development' *Development Policy Review* 19(4): 507–519.

Farrington, J., Saxena, N.C., Barton, T. and Nayak, R. (2003) 'Post offices, pensions and computers: New opportunities for combining growth and social protection in weakly integrated rural areas?' *Natural Resource Perspectives* 87, London: ODI.

Farrington, J., Slater, R. and Holmes, R. (2004) 'The Search for Synergies between Social Protection and the Productive Sectors: the Agriculture Case' *ODI Working Paper* 232, London: ODI.

Harvey, P., Slater, R. and Farrington, J. (2005) 'Cash transfers – mere 'Gadaffi syndrome', or serious potential for rural rehabilitation and development?' *Natural Resource Perspectives* 97. London: ODI.

Holzmann, R. and Jørgensen, S. (2000) 'Social Risk Management: A New Conceptual Framework for Social Protection and Beyond', *Social Protection Discussion Paper Series* No. 6. Washington D.C.: World Bank.

Jayne, T. S., Villarreal, M., Pingali, P. and Hemrich, G. (2004) 'Interactions between the Agricultural Sector and the HIV/AIDS Pandemic: Implications for Agricultural Policy', *ESA Working Paper* No. 04–06, March 2004, Agricultural and Development Economics Division, The Food and Agriculture Organization of the United Nations, Rome.

Mather, D., Donovan, C., Jayne, T.S., Weber, M., Mazhangara, E., Bailey, L., Yoo, K., Yamano, T. and Mghenyi, E. (2004) 'A cross-country analysis of household responses to adult mortality in rural Sub-Saharan Africa: implications for HIV/AIDS mitigation and rural development policies', *MSU International Development Working Paper* 82, East Lansing, Michigan: Department of Agricultural Economics, Michigan State University.

Mutangadura, G., Mukurazita, D. and Jackson, H. (1999) A review of household and community responses to the HIV/AIDS epidemic in the rural areas of sub-Saharan Africa, Best Practice Collection, UNAIDS, Geneva, Switzerland 1999.

Slater, R. (2004) *The implications of HIV/AIDS for social protection*, ODI, London. http://www.odi.org.uk/publications/web_papers/slater_sept04.pdf.

Topouzis, D. (2003) 'Mitigating the impact of HIV/AIDS: A review of response and concepts' Paper presented at the workshop on Mitigating of HIV/AIDS: Impacts through agriculture and rural development, Human Sciences Research Council, Pretoria, 27–29th May 2003, www.sarpn.org.za/mitigation_of_HIV_AIDS/m0023/Daphne_Topouzis.ppt

UNAIDS (2004) Table of country-specific HIV and AIDS estimates and data, end 2003 (UNAIDS, July 2004), available at: www.unaids.org/html/pub/Global-Reports/Barcelona/TableEstimatesEnd2001_en_xls.xls.

Endnotes

1 Labour loss for individual households may be severe, but even in countries with high prevalence rates such as Zimbabwe, rural populations are still expected to rise over the next few decades, so that labour supply to the sector as a whole may not decline.

2 Whilst each of these outcomes is possible in theory, there may be trade-offs between them and the success of each depends on appropriate targeting.

3 Though the specifics of nutrition – HIV/AIDS relationships are not clear, including the importance of micronutrients, it is known that the calorific requirements of those infected with HIV are greater – by about 10% for those sero-positive, and by 20–30% for those showing symptoms of AIDS.

Rachel Slater and Steve Wiggins are Research Fellows of the Overseas Development Institute.
Email: r.slater@odi.org.uk and s.wiggins@odi.org.uk

ISSN: 1356–9228

See *www.odi.org.uk/nrp/* for papers in this series.

Series Editor: John Farrington Administrative Editor: Alana Coyle