

AIDS Brief

for sectoral planners
and managers

Subsistence Agriculture Sector



The HIV/AIDS epidemic is a global crisis which demands urgent attention and committed, sustained action by alliances of individuals, organisations and sectors. The AIDS Brief series has been developed to support the conceptualisation and implementation of key sectoral responses. The subsistence agriculture sector has features which may result in increased susceptibility to HIV infection for those engaged in subsistence farming whilst at the same time being a sector which is particularly vulnerable to the epidemic.

BACKGROUND

Definition of Subsistence Agriculture

Subsistence agriculture describes farming and associated activities which together form a livelihood strategy, where the main output is consumed directly by the household, where there are few if any purchased inputs and where only a minor proportion of output is marketed.

Facts about subsistence agriculture

The subsistence sector is of considerable importance in most low income countries because as much as 60 per cent of the total population may depend upon it. Even though the specific level of national dependence varies, subsistence households are usually relatively poor, may be geographically remote and may be marginalised.

In contrast to commercial farming, where the organisation and running of the farm often approximates a business, subsistence farming is characterised by a very close relationship between the general activities of the household (for example child care and child rearing, recreation, support relations between adult members, home maintenance, food processing) and the production of crops and care of animals



farming activities bring people into contact with the wider economy and society, for example through marketing some of their farm produce or household handicrafts, purchasing inputs and consumer goods, and paying taxes. Household members may work for wages on an occasional or regular basis for shorter or longer periods.

It may therefore be more appropriate to speak of a range of "rural livelihood strategies" which enable rural people to combine a number of activities - the work of the home, the work of the farm, activities entered into outside the home and farm but within the local community (such as provision of craft skills to other local households) and activities entered into outside the local community (labour migration, long distance trading). Such a livelihood strategy enables individuals and households to "provision" themselves.

to feed the household.

Though this implies a "subsistence" sector, few people in the world today are entirely self-provisioning. In most cases, household and

IMPACT CHECKLIST

Susceptibility to the spread of infection

- ✓ Are multiple sexual partners common?
- ✓ Is there occasional or regular migration for wage work?
- ✓ Are there high levels of alcohol consumption?
- ✓ What is the proximity to transport or trading centres?
- ✓ Are there frequent interactions with market centres?
- ✓ Is the status of women low?
- ✓ Do women have limited economic independence?

- ✓ Are there major economic differentials between men and women?
- ✓ Are physically damaging sexual practices practised?
- ✓ Is there widespread exchange of cash or favours for sexual services?

Vulnerability to impact of increased illness and death

- ✓ Is the climate dry?
- ✓ Is the range of crops limited?
- ✓ Are there marked labour peaks in the agricultural cycle?

- ✓ Are there very labour intensive agricultural processes?
- ✓ Is the tradition of labour exchange between households present or absent?
- ✓ Are there existing pressures on the domestic-farm interface?
- ✓ To what extent is substitutability between existing labour intensive food crops and less labour demanding crops possible?
- ✓ Are food surpluses adequate or low?
- ✓ Are there opportunities for off-farm income?
- ✓ Is land tenure secure or insecure?

AIDS AND SUBSISTENCE AGRICULTURE

This section details the implications of HIV/AIDS for rural development in general, before focusing specifically on subsistence agriculture.

The implications of HIV/AIDS for rural development

Subsistence agriculture forms one component of rural livelihoods and also of rural life more generally. Some of the relationships between HIV/AIDS and rural life are summarised in Table 1 (after Topouzis, 1998):

Policy Programme Area	Factors contributing to increased susceptibility to HIV infection	Impact of AIDS related illness and death	Implications of HIV/AIDS for rural policies and programmes
Poverty Alleviation	How and why does poverty increase susceptibility to HIV? Examples: <ul style="list-style-type: none"> ■ gender inequality ■ livelihood insecurity ■ war / civil unrest ■ migration ■ environmental degradation 	What is the systemic impact of HIV/AIDS on the rural poor including: <ul style="list-style-type: none"> ■ smallholder farmers ■ nomadic pastoralists ■ female-headed households ■ displaced people / refugees What is the impact of adult death on social indicators such as child nutrition, schooling and poverty?	What are the implications of HIV/AIDS vulnerability and impact for poverty alleviation policies and planning? Which poor households are most susceptible to HIV- infection and vulnerable to the impact of excess illness and death? For example, how might epidemic illness deepen existing poverty or create newly poor individuals and households? What can be done to treat sexually transmitted infections, maintain better health and so reduce the rate of transmission?
Food Security and Sustainable Livelihoods	Food and livelihood insecurity may increase susceptibility to HIV infection by putting women in situations where they may trade sexual favours for benefits. This may also be the case for children who find themselves in poverty. Men who have to migrate or travel to make a living are more likely to change sexual partners frequently.	How do increased levels of illness and death in productive age groups affect food availability and accessibility for different groups in a community or region? What is the impact of increased illness and death on the nutritional status of pregnant/lactating women, children under five and on the elderly?	How might AIDS illness and death affect rural livelihood security? Which households are already food insecure and therefore most likely to be acutely affected by illness and/or death? What policies are necessary to enable people living with AIDS to continue to contribute to and play an active role in their households and communities for as long as possible?
Empowerment of Rural Women	In what ways does low socio-economic status of women increase their susceptibility to infection? Factors may include: <ul style="list-style-type: none"> ■ cultural norms ■ customary law ■ lack of access to productive resources 	How might AIDS illness and death affect rural women's access to: <ul style="list-style-type: none"> ■ productive resources? ■ support services (health, education, agricultural extension, credit)? 	Identify those households most susceptible to HIV infection and vulnerable to impact of death and illness. Do women face different problems in coping with illness and death than men? What are the special problems faced by women- headed households?
Labour	What makes rural employers and employees susceptible to HIV infection? Do employers expect sexual favours from employees? Do working conditions expose women and children to sexual abuse?	Does increased mortality and/or morbidity adversely affect availability of labour in the rural economy? Do increased mortality and/or morbidity adversely affect the quality of labour - its productivity, skill levels, knowledge levels?	

The implications of HIV/AIDS for subsistence agriculture

The impact of the epidemic may vary markedly between quite small areas within regions, and at least in the early stages of the epidemic, between wealthier and poorer households in the same community, as the former have more resources which enable them to cope.

Labour

HIV/AIDS is predominantly a sexually transmitted disease. By affecting the sexually active it simultaneously affects the most productive cohorts of a population (broadly speaking those aged between 15 and 50 years of age). Subsistence production depends very heavily on human labour. The social and economic impact of the epidemic on households and communities focuses on points where

domestic or farm labour supply may come under pressure. Diagram 1 below shows some of the ways that HIV/AIDS may affect a household and where labour constraints may become apparent. Each arrow in this diagram is a point at which interventions may be necessary and/or possible. As the epidemic takes hold, so the pressure on the interface between farm and domestic work becomes greater.

Labour is often a critical constraint in subsistence production. How critical it is may be closely related to climatic factors. Where rainfall is seasonal, demand for labour is likely to be concentrated into short periods of a few months, or even, in very dry places, a few weeks. Death and illness reduce labour availability, both directly through affecting productive members of the household and indirectly through diverting labour to caring for the sick. Both of these effects mean that during the rainy period - a period of

high labour demand for land preparation, sowing and weeding - farm work may have to be neglected as urgent domestic tasks are forced to take precedence. In places where rainfall is more evenly spread throughout the year, demand for labour will not be so peaked, and it is probable that the impact of illness and death on the domestic-farm labour interface will initially be less intense, as the more even spread of labour requirements over the year permits coping mechanisms to come into operation. These coping mechanisms might include: occasional assistance from relatives and neighbours, longer working hours, hiring labour. Even so, evidence from high rainfall areas in Africa indicates that as the epidemic takes hold and the numbers of ill people and deaths in individual households increase, we are more likely to see shortages of labour in some households. So, while rural livelihood systems in areas of low and markedly

seasonal rainfall are most likely to be sensitive to epidemic-related labour loss, even in high rainfall areas the epidemic can have marked impacts on the domestic-farm labour economy.

Farming System

In any rural livelihood strategy, the particular farming system is a major factor in determining the degree of stress which the epidemic will place on the domestic-farm economy. It is possible to classify farming systems roughly in terms of their relative vulnerability to loss of labour. In addition, different combinations of rainfall regime, soil type, and consequent extensive or restricted crop ranges, will be factors in determining a farming system's vulnerability to epidemic impact.

Livelihood strategies

The particular livelihood strategies (of which subsistence farming forms one component) practised in a community may have a role in increasing susceptibility to the epidemic and vulnerability to its social and economic impacts. Some examples are presented below to illustrate these points:

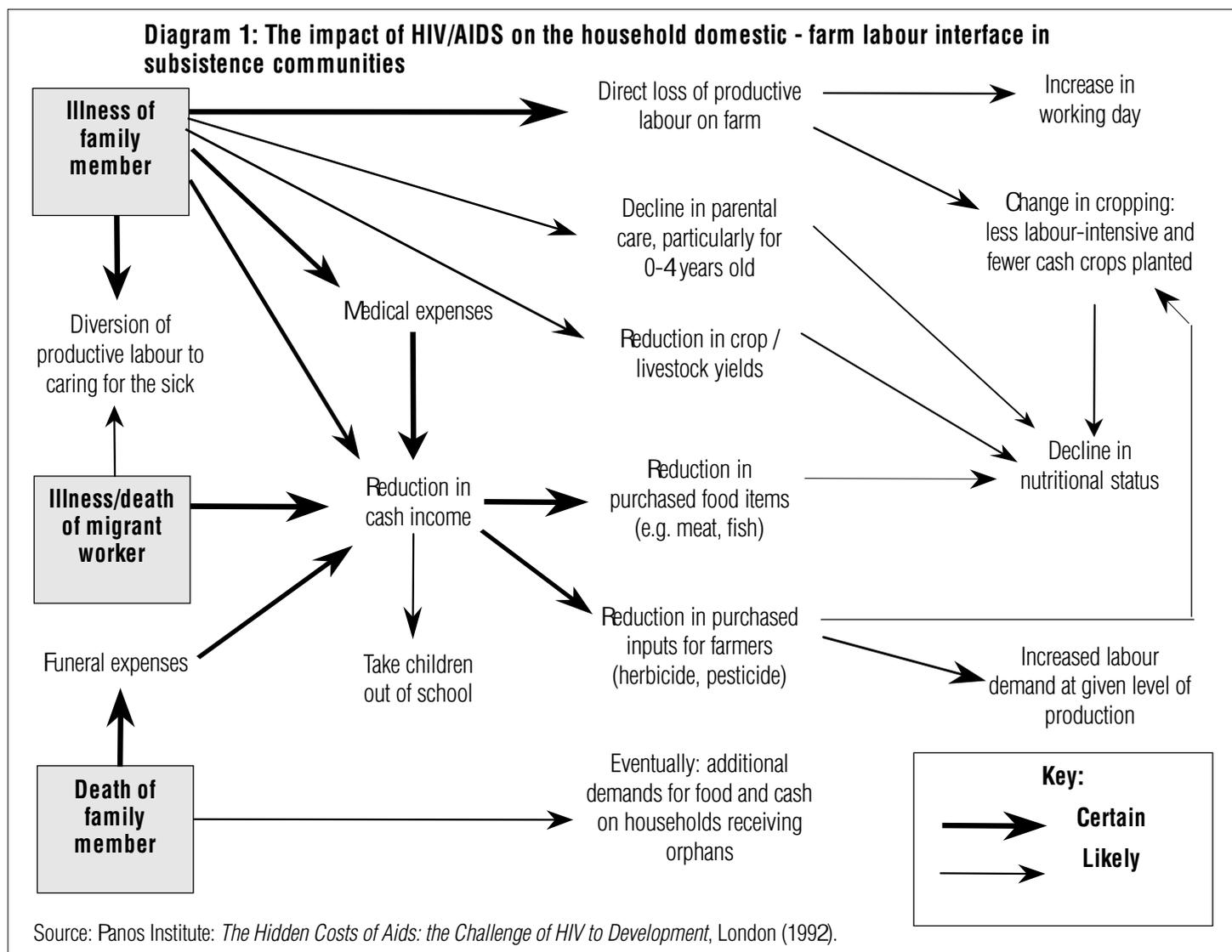
Susceptibility to infection: in some places it is quite common for people to spend some periods each year as labour migrants to large commercial farms or to urban areas. The inability of rural households to provision themselves without this additional income thus exposes people to infection, and the household and the community to the longer term social and economic effects of illness and subsequent deaths. In cultures where marriages are typically unstable, rates of infection are probably higher than among groups in the same country where marriages are of longer duration. Gender, age, and marital, family and household status are thus among the important factors determining how easily somebody will become infected. Therefore, legislation, custom and other cultural factors which affect these statuses may have to be taken into account in developing responses to the epidemic.

Vulnerability to impact: in parts of the world where nuclear households are the norm and where supportive links between such households are limited, death and illness are likely to have a more marked effect on food

production, child care, make up of diet, ability to send children to school, and care of orphans, than is the case in parts of the world where larger households or high levels of household interdependence are the norm. Even so, research suggests that when the epidemic becomes very intense, the levels of illness and death rapidly affect the ability of quite large domestic units to provision and care for themselves. Thus, existing coping mechanisms cease to cope when excess illness and death reaches such levels as have been seen in some rural communities affected by HIV/AIDS.

In summary, many of the points of interaction between the subsistence household and the wider economy and society may provide potential or actual conduits for the spread of infection into or out of local communities. In such instances, the impact of HIV/AIDS-related illness or death will not only affect labour inputs to "farm" production, but will also affect the balance of labour available to the household and the farm considered as one entity - the "domestic-farm interface".

Diagram 1: The impact of HIV/AIDS on the household domestic - farm labour interface in subsistence communities



Source: Panos Institute: *The Hidden Costs of Aids: the Challenge of HIV to Development*, London (1992).

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SECTORAL RESPONSE

In areas where many people are affected (and HIV infection rates of twenty to even forty per cent of some adult populations are not unknown), the epidemic may exacerbate existing general development problems such as poverty and food insecurity. For example pressure on a woman to nurse a sick household member may force her to make a choice between bringing another bucket of clean water for her children to drink, washing soiled bed sheets, or pruning a cash-crop one more time to ensure a good yield. Therefore, insofar as many of the problems arising from the epidemic are not specific to it, but reflect the additional pressure that it places upon populations which are already facing stress, responses should as far as possible be targeted at general development problems and be multi-sectoral and sustainable rather than being focused on HIV/AIDS alone.

In considering what types of response may be required, subsistence agriculture should be viewed in relation to the livelihood strategies of rural society as a whole with emphasis on:

- livelihood and food security;
- the point of interface between domestic and farm labour; and
- existing household and community coping mechanisms and their response to increased illness and deaths.

Interventions should enhance existing coping mechanisms. Such interventions may include:

- development of labour economising production technologies (such as intercropping, new varieties, hand tillers)
- labour economising domestic technologies (such as hullers, improved storage, better access to clean water)
- support for orphaned children and care of the

- elderly whose adult children have died
- inclusion of clear HIV/AIDS information in extension material and training of extension workers to deliver such messages
- planning of rural development projects to take account of HIV/AIDS impact and consequent recognition that while labour may not be a constraint in the sector now, it may become a constraint in the medium term.

In addition, it may be possible to develop policy responses which would also support existing coping mechanisms. For example, a policy decision to improve access to clean water will, in turn, cut down the time spent fetching water from a distant source and may have a marked effect on the amount of time a woman has for other activities in the home contributing to maintaining standards of child care, crop and/or animal care, and household maintenance.

ACTION CHECKLIST

- ✓ Classify farming systems in terms of potential vulnerability to the impact of increased illness and death
- ✓ Increase locally generated incomes and thus reduce the need to migrate for work
- ✓ Explore labour economising crop varieties
- ✓ Explore introduction of small stock to supplement protein intake
- ✓ Explore labour economising cultivation practices - for example development and improvement of existing inter-crops
- ✓ Encourage labour exchanges between households
- ✓ Explore ways of reducing women's work burden - for example labour economising methods of food preparation, water supply, fuel supplies
- ✓ Explore introduction of simple labour

- ✓ saving cultivation technologies - for example hand tillers or draught animals
- ✓ Explore ways of reducing post-harvest losses
- ✓ Encourage use of bicycles for local marketing purposes
- ✓ Introduce and improve poultry and small stock appropriate to local culture to improve diets
- ✓ Use paddocking for larger stock as a way of economising on labour used in herding
- ✓ Ensure that orphaned children receive adequate education in local farming techniques
- ✓ Install latrines - important not only for sanitary purposes but also for discreet disposal of condoms
- ✓ Develop support groups for women and men to discuss problems of sexual health

- ✓ Integrate information about the longer term impacts of HIV/AIDS on household income and welfare into extension programmes
- ✓ Integrate sexual health education with agricultural extension messages
- ✓ Encourage/support programmes on:
 - education on safer sexual behaviour
 - affordable, available and effective diagnosis and treatment of STDs
 - availability of affordable condoms
 - access to safe non-sexual recreations - particularly for adolescents
 - increasing the economic independence of women
 - reducing alcohol consumption
- ✓ Review land tenure arrangements to protect the occupancy and inheritance rights of widows and orphaned children

SUMMARY

Subsistence agriculture consists of a range of rural livelihood strategies. These strategies may increase susceptibility to HIV infection (for example through seasonal labour migration or through

trading activities) and are particularly vulnerable to the impact of AIDS (for examples through disruption of the domestic-farm labour interface). Responses must take account of general development problems

and seek to enhance existing household and community coping mechanisms. These responses should be developed at both the policy level as well as at the project level.

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Series Editor: Rose Smart
Layout: The Write Stuff, Durban

The individual authors of the AIDS Briefs series are wholly responsible in their private capacity for content and interpretation.

Funded by the USAID
Bureau for Africa,
Office of Sustainable
Development
Award No.
AOT-G-00-97-00375-00

