

### III. IMPACT ON HOUSEHOLDS

The HIV/AIDS epidemic threatens the social fabric of the most affected countries. Of all units affected by the HIV/AIDS epidemic, individuals, households and families are the most affected. The evidence shows that the AIDS epidemic is having severe effects on households.

Many small-scale studies have documented those impacts. The first studies were conducted in Rakai, Uganda, one of the epicentres of the HIV epidemic in the 1980s. The present chapter presents a conceptual framework of the ways AIDS affects households and families and then reviews the available evidence regarding the economic and social impacts.

#### A. CONCEPTUAL FRAMEWORK FOR THE IMPACT OF HIV/AIDS ON HOUSEHOLDS

The household impact begins as soon as a member of a household starts suffering from HIV-related diseases. In addition to social and psychological consequences, three kinds of economic impacts can be distinguished. The first is the loss of the income of the family member, in particular if he or she is the breadwinner. The second impact is the increase in household expenditures to cover the medical costs. The third impact is the indirect cost resulting from the absenteeism of members of the family from work or school to care for the AIDS patient.

Figure 8 diagrams the processes through which the HIV-related illnesses or the AIDS death of one of its members affects the household economically and socially:

- The illness of a family breadwinner may result in his or her absence from work. The absenteeism may result in the loss of income. When the person dies, the temporary loss of income becomes a permanent loss.
- The medical costs to care for AIDS-related illnesses may increase. The house-

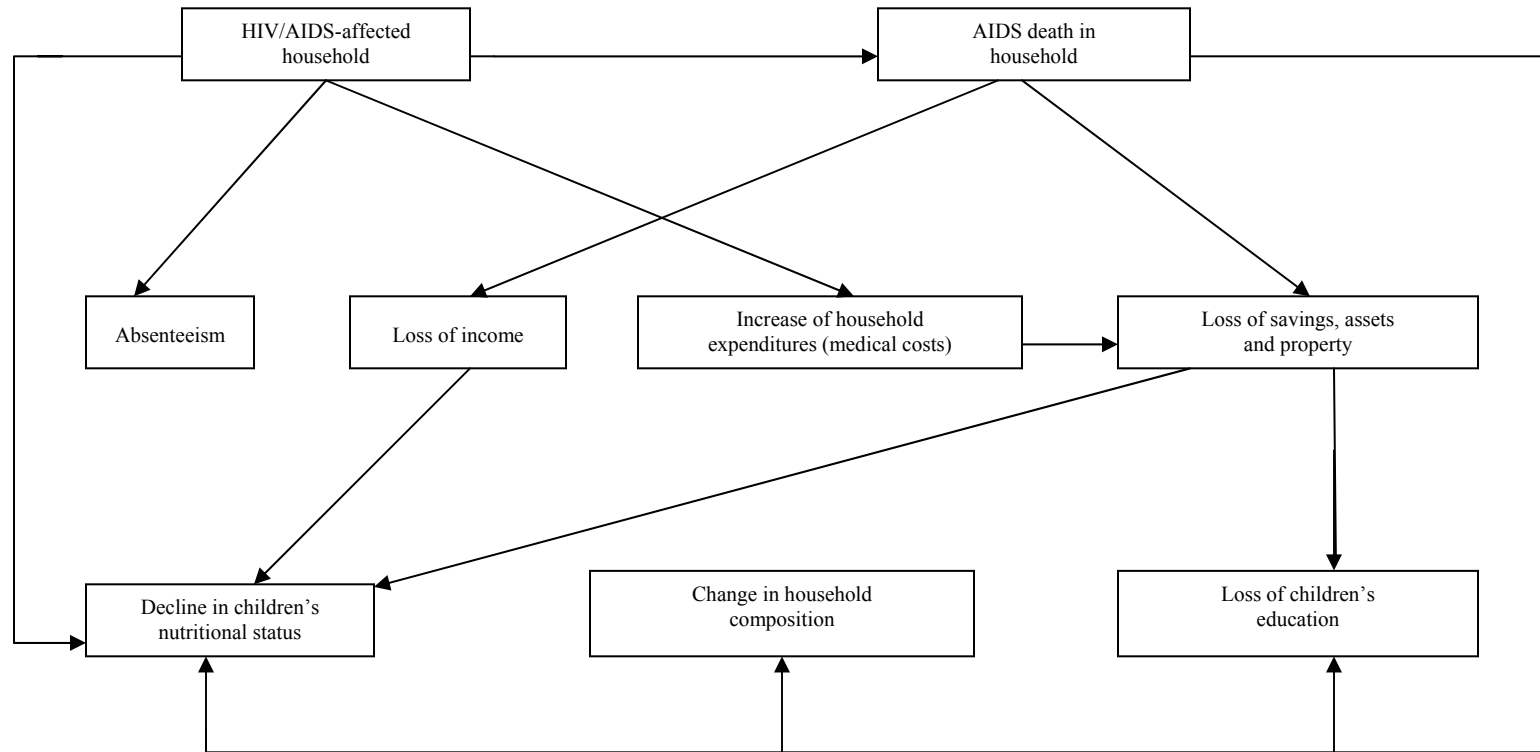
hold may exhaust its savings or sell its assets to cover the medical costs, resulting in a lower level of production and consumption. This could lead to a reduction in the nutritional intake of children and cause them to become malnourished.

- If a household member dies from the disease, the funeral, mourning and other costs may also add to the burden of the household. Mounting expenditures and loss of income of the AIDS patient may result in the impoverishment of the household.
- Poorer households may be more severely affected than better-off households. The relationship between poverty and the costs of AIDS to households can be visualized at two levels. First, AIDS can push households into poverty. Second, a household that was already poor may become further impoverished.

In addition to the economic impact that the HIV/AIDS epidemic may have on households and families, it may have social implications as well. The household is the first unit of socialization, and it may go through tremendous changes.

- The HIV/AIDS epidemic may lead to a change in household composition, with the gradual disappearance of the parental generation and children being cared for by grandparents and other relatives. In some cases, the older children may act as surrogate parents for their younger siblings, thus leading to an increase in one-generation households headed by the older children.
- An adult death may lead to the dislocation or dissolution of the household, and children may be sent to live with relatives. Some of the children may withdraw from school if the family can no longer afford

**Figure 8. Conceptual framework for the socio-economic impact of the HIV/AIDS epidemic on households**



Source: United Nations, Department of Economic and Social Affairs, Population Division.

to pay fees or buy supplies. Children may also drop out of school if they are needed at home, on the farm or in the marketplace.

- The number of impoverished female-headed households will increase when the male breadwinner of the household dies of AIDS. When the AIDS victim in the household is female, the impact of the HIV/AIDS epidemic on the household can be especially severe, especially for the welfare of children. In addition, the culturally determined position of women can affect the household impact of an illness such as AIDS in males.
- Community attitudes towards helping needy households will contribute either positively or negatively to the impact of the disease. Thus, in communities where social and financial support is available, HIV/AIDS-affected households may be able to cope more effectively with the epidemic than those in communities where a stigma is attached to those infected with the virus.

## B. EMPIRICAL EVIDENCE OF THE SOCIAL AND ECONOMIC IMPACT OF THE HIV/AIDS EPIDEMIC ON HOUSEHOLDS

### 1. *Treatment and other direct costs*

For households, perhaps the most direct costs of HIV/AIDS, and those that are usually measured by cost-of-illness studies, are the cost of treatment and the cost of lost work time, although there are also substantial secondary costs such as funeral expenses.

AIDS-affected households often make a rapid transition from relative wealth to relative poverty. Haworth and others' (1991) survey of AIDS-affected families in Zambia found that the shift into poverty was most visible in families in which the deceased father was both the breadwinner and tenant of a house provided through his job. Many such families were forced to move after the death

of the father, with a majority of those families reporting economic difficulties.

In the early 1990s, the International Children's Centre in Paris launched a multi-country field study of the socio-economic evolution of children and families affected by HIV/AIDS in three countries: Burundi, Côte d'Ivoire and Haiti. In each of the countries, about 100 households affected by HIV/AIDS were followed longitudinally for a year. In Côte d'Ivoire, the study showed that marked differences occurred in the economic activities of households, with a steady decline in the number of economically active household members throughout the course of the study (Béchu, 1997). In Haiti, the changes included an overall reduction in the number of household dependents, the cessation of paid employment, increased borrowing and the sale of possessions as the disease became more serious. In addition, it was found that HIV/AIDS-affected persons were seeking less care even in circumstances when care was available.

In another longitudinal study, conducted in Rakai, Uganda, between 1989 and 1992, the proportion of households owning a car, lorry, radio or bicycle decreased in households that experienced an adult AIDS death, while households in which there were no adult deaths saw an increase in ownership of durable goods (table 6). The authors concluded that HIV-related adult illness and burial costs imposed great financial burdens on households, leading to a depletion of economic resources (Menon and others, 1998).

Recently, Booyesen (2003) found similar results in South Africa. Households that had experienced illness or death in the recent past were more than twice as likely to be poor than non-affected households, and they were more likely to experience long-term poverty.

In a study in Delhi, India (Basu, Gupta and Krishna, 1997), the larger extended family or kin group provided the main cushion for absorbing a crisis such as an AIDS-related illness or death. Poor households bore proportionately more of the costs. The most common response to loss of income caused by an illness or death was to seek

TABLE 6. CHARACTERISTICS OF HOUSEHOLDS WITH AND WITHOUT AN ADULT (15-49 YEARS) DEATH DURING THE PANEL STUDY IN RAKAI, UGANDA 1989-1992

<i>Characteristics</i>	<i>Households without an adult death</i>	<i>Households with an adult death</i>	<i>All households</i>
<i>Car/lorry</i>			
First visit.....	1.1	1.6	1.1
Last visit.....	1.3	0.0	1.1
<i>Bicycle</i>			
First visit.....	33.9	38.6	34.4
Last visit.....	41.0	34.8	40.3
<i>Radio</i>			
First visit.....	29.7	39.7	30.8
Last visit.....	37.0	35.9	36.9

*Source:* Menon and others, "The economic impact of adult mortality on households in Rakai district, Uganda", in *Confronting Aids: Evidence from the Developing World*, M. Ainsworth, L. Fransen and M. Over, eds. (Brussels, European Commission and Washington, D.C., World Bank, 1998).

loans, as most households did not have enough savings or assets to cope with the costs, nor could they expect much help from government or employment benefits. In this setting, many women do not join the labour force after the death of a spouse because the society considers it inappropriate for a woman to work outside the home.

Two studies, one in Thailand and one in Sri Lanka, assessed the direct and indirect costs of an adult HIV/AIDS-related death on rural households. In the Thailand study, 116 households with an HIV/AIDS-related death were compared to 100 households with a non-HIV/AIDS-related death and to 108 households with no death (Pitayanon, Kongsin and Janjaroen, 1997). The study found that the economic impact of an HIV/AIDS-related death was substantial and generally greater than that for a non-HIV/AIDS-related death. The largest part of the economic cost was the loss of earnings of the deceased, but loss of household income from other sources was also important, as were decreases in household consumption. In order to cope with the loss of income resulting from the illness and death of a member of a household, households resorted to spending their savings, borrowing, and selling possessions including land, vehicles and livestock. The Sri Lanka study (Bloom and others, 1997) found that the direct costs per HIV/AIDS-related case were between

250 and 985 United States dollars (\$), depending on the treatment regimen, whereas indirect costs ranged from \$5,204 to \$17,695. The bulk of the direct costs in the case of Sri Lanka were borne by the public sector, whereas indirect costs were more likely to be borne by the persons living with HIV/AIDS and their families and caretakers.

Mushati and others (2003) studied the consequences for households of adult terminal illness and death in eastern Zimbabwe. Nearly 80 per cent of those who died were the primary income earners for their households, and 60 per cent lost their jobs during their illness. One in 7 caregivers gave up a job to care for the sick person. Most health-care costs were paid by the sick person and his or her spouse (42 per cent) and by other household members (41 per cent).

## *2. Impact on food consumption*

The HIV/AIDS epidemic has had an impact on food consumption in households. A study in Zimbabwe (Mutangadura, 2000) showed that households fostering maternal orphans had sold assets and switched from more expensive to cheaper commodities, and many households, especially in the urban area studied, reported decreased food consumption and switched to cheaper foods. The food security situation of the

surviving family was poorer after the death of an adult female. Some children (aged 10-15 years) in urban areas were forced to seek casual employment in order to buy food.

A Côte d'Ivoire study (Béchu, 1997) tracked 107 households with at least one adult AIDS victim. In contrast to households where the AIDS victim remained relatively free of symptoms, per capita consumption dropped in households where the AIDS victim either died or moved away.

However, average per capita consumption had partially recovered within 10 months after the death occurred in the AIDS-affected households. This time pattern of consumption demonstrates the resiliency of the average household to the impact of death (World Bank, 1999). It also shows that, to achieve an adequate understanding of household impacts, it is important for studies to extend the period of observation beyond the few months leading up to and following an AIDS-related death.

TABLE 7. PERCENTAGE OF HOUSEHOLDS INDICATING A DECREASE IN THE CONSUMPTION OF FOOD ITEMS AFTER A DEATH IN THE HOUSEHOLD IN ZIMBABWE, 2000

<i>Food item</i>	<i>Urban (101)</i>	<i>Rural (114)</i>
Maize meal.....	34	16
Meat.....	79	75
Bread.....	72	80
Milk.....	71	61
Kapenta fish.....	0	33
Cooking oil.....	50	64
Sugar.....	48	61
Vegetables.....	5	0
Eggs.....	70	65
Pulse.....	44	11

*Source:* G. Mutangadura, "Household welfare impacts of mortality of adult females in Zimbabwe: implications for policy and program development", paper presented at the AIDS and economics symposium organized by IAEN, Durban, South Africa, 7-8 July 2000.

Another study in Thailand (Janjaroen, 1997) found that the average expenditure per adult equivalent household member was lower in households with an adult death than in households without deaths, but the differences between the two classes of households were very small and not statistically significant. However, a regression analysis showed that AIDS deaths had a larger negative impact on consumption than did non-AIDS deaths. Furthermore, this was true even after controlling for the duration of the illness, which also had a strong negative effect.

A study conducted in Uganda (Topouzis, 1994) found that malnutrition had risen in the village of Guru, especially among children, and that

kwashiorkor was the main reason for child admissions in the hospital in the last three years. Prior to that period, few cases of malnutrition had been reported to the hospital. AIDS had also reduced the number of meals per day or limited the diet to one or two staple foods.

#### *Change in household composition and structure*

Most studies have found that the epidemic tends to increase the number of female-headed households and the number of households in which grandparents are caring for children. For instance, a study in Uganda (Topouzis, 1994) found that HIV/AIDS contributes to the rise of female-headed households. Compared to women

whose husbands die of other causes, AIDS widows tend to be younger and have dependent children who need to be looked after, which restricts their contributions to farm work and off-farm income-generating activities. A cohort study conducted in Uganda and covering 10,000 individuals in 15 villages (Mulder and others, 1995) found that the proportion of households headed by grandparents increased between the first and the sixth rounds. The households were characterized by a skipped generation structure, with missing adults in the economically active age groups. The skipped generation structures had the highest dependency ratio. A ten-year study in Malawi found that four out of five marriages in which one partner was HIV-positive at the baseline survey were no longer intact at follow-up (Floyd and others, 2003). Children with an HIV-positive parent at the time of the baseline survey were less likely to be alive and resident in the area and less likely to be living with either parent at the follow-up survey.

The loss of a breadwinner obviously tends to reduce the economic viability of the household that remains, and some households faced with this situation may disband, with the members dispersed to the homes of relatives. However, little is known about how frequently the situation occurs; most studies examine the current household configuration and are not designed to follow up households or household members who move out of the study area. In one study of rural South Africa, Hosegood, Herbst and Timaeus (2003) found that 5 per cent of households experienced at least one AIDS death during the one-year observation period and that those households were nearly three times as likely to dissolve as other households. Children aged under 15 in households with an adult death were more likely to migrate. A study in Uganda (Ntozi, 1997) inquired retrospectively about migration of the spouses of former household members who had died. The study also distinguished probable AIDS deaths from other causes of mortality. In total, 37 per cent of widows and 17 per cent of widowers had migrated from their original homes. For both sexes, migration was more common for younger spouses, and results suggested that those who were in worse health (possibly because of AIDS) were more likely to leave. In such a setting, it is not surprising that a higher proportion of women would

move away, since women are generally not entitled to inherit the husband's property, and the women's own kin are likely to live elsewhere.

Remarriage is potentially another way of coping with the economic as well as the emotional and social losses resulting from the death of a spouse. In some societies there are strong traditional expectations that widows will remarry. If the death was a result of AIDS, however, the surviving spouse is quite likely to be infected, and remarriage poses a grave risk of spreading the disease. Little is known, however, about how marriage practices are actually changing in the face of this risk. In parts of Africa, it was traditionally expected that a widow, especially one still of reproductive age, would be "inherited" by the husband's brother or another male relative, and it was through that union that she and her children would continue to have access to property and other means of support. Data from Uganda in the early 1990s indicated that people were aware of the risk of contracting HIV/AIDS from sexual intercourse, and the practice of widow inheritance was reported to be in decline. Households that had experienced the death of a married person were asked about the spouse's subsequent remarriage. About one fourth of widowed women and over half of men had remarried. Approximately half the reported deaths were believed to have been due to AIDS, but roughly three quarters of the surviving spouses were reported to be healthy. While the actual HIV infection status of those who remarried was not known, the results suggested that many people were basing their decisions about risks of remarriage on the appearance of health. However, many of those who appeared healthy were likely in fact to have been infected by HIV (Ntozi, 1997).

Households may also try to adjust to the loss of an adult by sending some members, particularly children, to live with other relatives, or by taking in working-age relatives. The feasibility of doing this probably varies greatly between societies, depending on long-standing social customs and, for individual households, on the availability of suitable kin. In some African societies, for example, there is frequent "circulation" of both children and adults between households, even in the absence of emergencies. A review of changes in

household structure based on three follow-up studies in areas heavily affected by HIV/AIDS found that, in the cases of Uganda and the United Republic of Tanzania, many households added a member after a death occurred, with the result that the average household size following an adult death declined by less than one member and the dependency ratio in affected households rose by only a modest amount. By contrast, in Thailand, where households were smaller to begin with than in the African cases, the households where an adult died remained one person smaller even two years after the death, and their dependency ratio nearly doubled (World Bank, 1999).

#### *4. Impact of AIDS on older persons*

As mentioned above, one effect of the disease is to change the structure and composition of households. In many affected regions in developing countries, more and more older persons are taking care of AIDS orphans. Older parents may also provide end-stage care to their adult children afflicted with AIDS. A study conducted in Zimbabwe showed that older caregivers were under serious financial, physical and emotional stress owing to their care-giving responsibilities (World Health Organization, 2002). Other studies conducted in Thailand reached the same conclusion (Knodel and Im-em, 2002; Knodel and others, 2002). The AIDS epidemic not only puts more stress on older persons, but it also impoverishes them at the very same time they themselves may need to be taken care of. This is especially true in societies where younger relatives are responsible for the care of older persons.

There have been many reports of the growing burden on older persons of providing for grandchildren who have been orphaned by AIDS and of a rapid increase in the number of “skipped-generation” households—households in which grandparents are caring for grandchildren in the absence of the middle generation (see HelpAge International and International HIV/AIDS Alliance, 2003). Recent survey data, presented below, confirm that orphaned children are more likely to

reside with grandparents than with other relatives or non-relatives. In addition, survey data confirm that substantial proportions of the older population of many countries are living in skipped-generation households and that such households tend to score lower than average on an index measuring quality of housing and household amenities (United Nations, forthcoming). Table 8 shows that in some African and Caribbean countries, 10-25 of all persons aged 60 or over are living in such households. For older women, the percentages are even higher, exceeding 30 per cent in the cases of Rwanda and Malawi (United Nations, forthcoming). Table 8 also provides support for the claim that the HIV/AIDS epidemic is responsible for a notable increase in the number of skipped-generation households. Even though most of the surveys represented in the table are less than 10 years apart, the percentage of older persons living in such households grew by 2.7 points on average in the countries where adult HIV prevalence was 10 per cent or more, while it increased by 1.5 points in countries with HIV prevalence of 2-9 per cent. By contrast, in most countries with lower HIV prevalence, there was little change or a decrease.

#### *5. Impact on children*

The education and well-being of children also suffer when AIDS strikes the household. A significant finding of a study in Zimbabwe (Mutangadura, 2000) was that children were unable to go to school after an adult death in the household, primarily as a result of a lack of money. In another study in Uganda, it was found that only one in every five children of AIDS-affected households in the village of Tororo remained in school. AIDS-affected families were often forced to take their children out of school as they either had no money for school fees or needed the children’s labour (Topouzis, 1994). That result was also confirmed by a study in Zimbabwe in both urban and rural areas, which showed that the percentage of children attending school decreased from 98 per cent to 80 per cent after the death of a mother in urban areas, and from 100 per cent to 93 per cent in rural areas (Mutangadura, 2000).

TABLE 8. PERCENTAGE OF OLDER PERSONS LIVING WITH GRANDCHILDREN WHOSE PARENTS ARE NOT PART OF THE HOUSEHOLD

<i>Prevalence of HIV in 2001 and country</i>	<i>Date</i>		<i>Percentage with grandchildren but not children</i>		
	<i>Earlier</i>	<i>Later</i>	<i>Earlier</i>	<i>Later</i>	<i>Difference later - earlier</i>
<b>HIV prevalence at least 10 per cent</b>					
Cameroon	1991	1998	7.2	8.3	1.1
Kenya	1993	1998	14.3	13.9	-0.4
Malawi	1992	2000	21.5	25.0	3.5
Zambia	1992	2001-2002	13.6	21.3	7.7
Zimbabwe	1994	1999	16.7	18.4	1.7
Average			14.7	17.4	2.7
<b>HIV prevalence 2.0-9.9 per cent</b>					
Benin	1996	2001	8.1	9.3	1.2
Burkina Faso	1992-1993	1998-1999	6.8	6.8	0.0
Côte d'Ivoire	1994	1998-1999	6.5	7.2	0.7
Dominican Republic	1975-1976	1999	11.7	13.8	2.1
Ghana	1993	1998	17.4	17.9	0.5
Haiti	1994-1995	2000	10.5	13.5	3.0
Nigeria	1990	1999	8.0	9.3	1.3
Rwanda	1992	2000	21.3	25.4	4.1
United Republic of Tanzania	1992	1999	11.9	12.4	0.5
Average			11.4	12.8	1.5
<b>HIV prevalence under 2 per cent</b>					
Bangladesh	1993-1994	1999-2000	1.6	1.7	0.1
Bolivia	1994	1998	8.2	7.4	-0.8
Colombia	1990	2000	5.5	5.2	-0.3
Costa Rica	1976	1984	6.3	3.6	-2.7
Egypt	1992	2000	0.8	1.5	0.7
Guatemala	1995	1998-1999	6.1	6.3	0.2
India	1992-1993	1998-1999	1.7	1.8	0.1
Indonesia	1974-1975	1997	7.2	6.1	-1.1
Kazakhstan	1995	1999	3.5	3.1	-0.4
Madagascar	1992	1997	14.8	16.4	1.6
Mali	1995-1996	2001	8.8	8.6	-0.2
Nepal	1996	2001	2.6	2.9	0.3
Niger <sup>a</sup>	1992	1998	10.6	14.0	3.4
Paraguay	1982	1990	6.8	6.8	0.0
Peru	1977-1978	2000	8.1	6.2	-1.9
Philippines	1993	1998	8.3	8.5	0.2
Senegal	1992-1993	1997	3.3	2.9	-0.4
Turkey	1978-1979	1998	3.0	1.4	-1.6
Venezuela	1977	1981	5.8	5.4	-0.4
Average			5.9	5.8	-0.2

*Source: Living Arrangements of Older Persons Around the World* (United Nations, Department of Economic and Social Affairs, Population Division, forthcoming).

NOTES: Based on tabulations of the living arrangements of the household population aged 60 years or over, from sample surveys (primarily Demographic and Health Surveys) and censuses. The skipped-generation households—without any children of the respondent but with one or more grandchildren—may contain other relatives and non-relatives. Adult HIV prevalence in 2001 is taken from table 2 and UNAIDS, *Report on the Global HIV/AIDS Epidemic* (Geneva, 2002).

<sup>a</sup> For Niger, UNAIDS (2002) did not provide an estimate of adult HIV prevalence; available data were insufficient.

The impact of HIV/AIDS on children's education may also depend on the socio-economic status of the household. Thus, the poorer the household, the more likely the household is to take children out of the school system.

The impact of AIDS is also gender dependent. An adult woman's death may have especially far-reaching consequences for the household since women are the main caregivers in families. Women also tend to manage household budgets in ways that enhance the food and nutrition security of the entire household and of children in particular (Haddad, 1999). A study in the United Republic of Tanzania (Ainsworth, 1993) found that children were less likely to be enrolled in school when the household had experienced the death of a woman aged 15-50 in the previous 12 months. There was no association between school enrolments and the death of a man aged 15-50. Upon the death of a woman, the children tended to replace her domestic roles in the short run and dropped out of school to do so (Ainsworth, 1993). In Indonesia, the loss of a father tended to have a larger impact on the economic situation of the family, whereas the loss of a mother had a larger effect on child mortality and health (Gertler, Levine and Martinez, 2003).

Many children in AIDS-affected households are sent to live with other relatives, who may be able to provide them with better nutritional and economic conditions than they would have experienced had they remained in their original homes. In order to obtain a full picture of the impacts on children, it is therefore necessary to widen the view beyond the original household. The impact of a parent's death on children, especially children's education, is explored further in the following section, which focuses on the status of orphans.

### 6. *Impact on orphans*

The HIV/AIDS pandemic has led to increased attention to the fate of the growing number of orphans. At the end of 2001, an estimated 14 million children under 15 years of age had lost one or both parents to HIV/AIDS, 11 million of whom lived in sub-Saharan Africa (UNAIDS, 2002); the number is forecast to nearly double by 2010. Sev-

eral recent studies have examined the relative welfare of orphans by comparing them to non-orphans in the same society with respect to levels of school enrolment, household economic status and, less frequently, nutritional and health status. A few studies have also tried to assess whether orphans' well-being differs depending on their living arrangements. Such large-scale, nationally representative studies have only recently begun to emerge, as information about the survival of children's parents has only recently begun to be gathered routinely in national-level surveys in developing countries. In most such studies it is not known whether particular children were orphaned as a result of HIV/AIDS, although, as would be expected, the percentage of children orphaned tends to be highest in the countries with the highest levels of HIV prevalence in the adult population (Bicego, Rutstein and Johnson, 2003). In 17 sub-Saharan African countries surveyed between 1995 and 2000, children under age 15 were, on average, more than twice as likely to have lost their father as their mother; about 10 per cent of those who had lost one parent had lost both (Bicego, Rutstein and Johnson, 2003).

#### a. *School attendance*

In all of the 44 countries for which information on school attendance was available by mid-2003, orphans who had lost both parents were less likely to be attending school than children with both parents alive and living with at least one biological parent. Moreover, in the limited number of countries with trend data, the gap between the two groups of children was widening. In sub-Saharan African countries, only 60 per cent of children aged 10-14 who lost both parents attended school, compared to 71 per cent of those with both parents still alive and living with at least one biological parent (United Nations, 2003b). In general, orphans who have lost only one parent have less consistently been found to be at an educational disadvantage, and when there is a disadvantage it is smaller than for children who have lost both parents (Monasch and Snoad, 2003; Bicego, Rutstein and Johnson, 2003; Ainsworth and Filmer, 2002; Case, Paxson and Ableidinger, 2003). Monasch and Snoad (2003), in a study of survey data in 40 sub-Saharan African countries, found that orphans' educational disadvantage tended to

be greatest in countries with low school attendance overall.

Girl children have a large educational disadvantage in many of the countries hard-hit by HIV/AIDS—does orphanhood have a disproportionate effect on the educational disadvantage of girls? Tentatively, the answer is no, in most cases. Although some studies have reported that girls were more likely than boys to be withdrawn from school because they were needed to help care for an AIDS victim or because there was a lack of funds, two studies based on national data for a large number of countries have found that the gender gap in enrolment for orphans was approximately the same as the gap for all children. Thus, orphanhood appears usually to produce a similar amount of educational disadvantage for children of both sexes (Ainsworth and Filmer, 2002; Case, Paxson and Ableidinger, 2003).

#### b. *Poverty*

Orphans are more likely than other children to be living in poor households and in female-headed households. An analysis of surveys in 28 countries (of which 23 were in sub-Saharan Africa) found considerable diversity in the degree to which orphans were found in poor households. However, in countries where there was a statistically significant difference, orphans were more likely than other children to live in poor households (Ainsworth and Filmer, 2002). Case, Paxson and Ableidinger (2003) found that it was mainly loss of the father alone that was associated with greater poverty.

Orphans are likely to be disadvantaged in areas besides education and household wealth, although this is less extensively documented. Studies in Burundi and the United Republic of Tanzania have found that the loss of a parent leads to higher prevalence of malnourishment in children (Ainsworth and Semali, 2000; Subbarao, Mattimore and Plangemann, 2001). In the Tanzanian study, a recent death of other adults in the household also increased malnutrition. However, for children with better access to health care, the adverse health effects were substantially reduced, showing that the ill effects can potentially be

countered by appropriate health and nutrition policies (Ainsworth and Semali, 2000).

#### c. *Living arrangements*

The large majority of orphans live with the surviving parent, if there is one, or with other relatives, especially grandparents (Case, Paxson and Ableidinger, 2003). Table 9 shows the living arrangements of orphaned and non-orphaned children aged 6-14, averaged for 10 sub-Saharan African countries. Of the double orphans (mother and father both deceased), 4 per cent were living in households headed by a non-relative, a situation that is associated with a large educational disadvantage (see below).

An increasing number of orphans are living in households headed by older persons. A recently released study (UNICEF, 2003) also shows that the proportion of orphans living with their grandparents increased from 44 per cent in 1992 to 61 per cent in 2000 in Zambia. Orphans also tend to live in larger households headed by older relatives. In Lesotho in 2000, for example, more than 65 per cent of double orphans were living in households headed by persons aged 55 years or older, whereas only 30 per cent of non-orphans children were living in such households.

Long before the appearance of HIV/AIDS, child fostering was common in many African societies, not just as a means of providing for orphaned children, but as a normal part of an extensive network of exchanges of material and emotional support among kin. Sending a child to live for a while with relatives (or, less commonly, non-relatives) can be a way of providing a child with better access to education or other training, a way of helping to balance the composition of different households according to the members' labour needs or a way of sheltering a child while also providing companionship, household assistance and the prospect of future support to an older relative who would otherwise be alone. In some cases living with relatives may be a preferred option for children whose parents have divorced and remarried.

TABLE 9. ORPHANHOOD AND THE RELATIONSHIP TO HOUSEHOLD HEAD

<i>Relationship to head</i>	<i>Non-orphans</i>	<i>Maternal orphans</i>	<i>Paternal orphans</i>	<i>Double orphans</i>
	<i>Percentage</i>			
Son/daughter .....	78	4	48	0
Grandchild.....	12	23	20	32
Sibling .....	1	4	6	9
Other relative.....	6	18	16	29
Adopted/foster child <sup>a</sup> .....	2	4	7	25
Non-relative.....	1	2	2	4
Total.....	100	100	100	100

*Source:* A. Case, C. Paxson and J. Ableidinger, "Orphans in Africa", working paper (Princeton, New Jersey, Princeton University, 2003).

NOTES: Based on 164,689 observations in DHS surveys for 10 African countries: Ghana, Kenya, Malawi, Mozambique, Namibia, Niger, Uganda, United Republic of Tanzania, Zambia and Zimbabwe. The data are for all children aged 6-14 whose orphan status could be determined. See data source for additional explanatory notes.

<sup>a</sup>Information about the biological relationship is not available for this group.

The consequences of fostering for the children involved, as well as for the receiving household, may vary with the circumstances that gave rise to leaving the parental home. Faced with the crisis of parents' illness or death, most children may have relatives who will willingly take them in, but some may not. Furthermore, foster children may continue to receive material support from parents who are living elsewhere, but orphans lack that additional support. It should also be noted that fostering of AIDS orphans in most of the affected societies is occurring within a context of widespread poverty. Frequently, even households whose members are spared by HIV/AIDS have trouble providing themselves with adequate nutrition and shelter and lack the resources necessary to obtain health care and schooling for children. If such households are the ones available to take in orphaned children, inadequate resources will be further strained.

Some researchers have presented an optimistic assessment of the extended family to care for children orphaned by HIV/AIDS in the areas that they studied (for example, Urassa and others, 1997), but others have found signs that the traditional system is coming under severe strain as the number of orphans continues to grow and that many children are receiving inadequate support (for instance, Ntozi and others, 1999).

In Uganda, national-level data showed that, between 1992 and 1999/2000, the percentage of households that included a foster child under age 14 increased from 17 per cent to 28 per cent. Taking in a foster child often represented a significant burden. "Fostering households consume less, save less and invest less, with serious macroeconomic impacts on aggregate savings and investment in the economy" (Deininger, Garcia and Subbarao, 2001, p. 1). The same study also found evidence suggesting that the Government's adoption of policies in accordance with the goals of the World Declaration on Education for All, adopted at Jomtien, Thailand in 1990, had decreased the amount of educational disadvantage faced by foster children during the 1990s. Nonetheless, during the same period access to health services such as vaccination deteriorated, and foster children had been particularly affected. The results support the idea that broad-based policies aimed at increasing access to basic education, health care and other services have the potential to counteract many of the disadvantages faced by orphaned children (Deininger, Garcia and Subbarao, 2001).

A number of questions relate to the consequences of child fostering for the children involved. One that is of concern for policy is whether the educational disadvantage of orphans outlined above results from their being in poorer

households, or whether an additional disadvantage can be attributed to orphanhood itself. If the problem is household poverty alone, then resources and support targeted to poor households could compensate for the current educational disadvantage of all poor children, and no additional intervention would be required for orphans. However, if orphans are also disadvantaged relative to other children in similar economic circumstances, then directing resources to poor households may not be enough.

A study using nationally representative data for 10 sub-Saharan countries (Case, Paxson and Ableidinger, 2003) found that greater household poverty did not completely account for orphans' lower school enrolment. In "blended" households that contained both orphaned and non-orphaned children, orphans were less likely to be in school than were other children in the same household; children aged 6-14 years who had lost either the mother or the father were on average about 5 percentage points less likely than non-orphans to be in school, and double orphans were 16 percentage points less likely to be in school. Household poverty led to substantially lower enrolment for all children, but orphanhood resulted in an educational disadvantage that was separate from that arising from poverty. The study also found a child's degree of relatedness to the household head had an effect on whether the child was in school. Living with a grandparent was associated with the least disadvantage, relative to being with a parent, and children living with more distant relatives were more disadvantaged. The small percentage of children living in a household headed by non-relatives were at an enormous disadvantage in terms of school enrolment, having an estimated average enrolment rate 46 percentage points lower than that of children whose parent was the head of household. In some countries very few of such children attended school (Case, Paxson and Ableidinger, 2003).

Concern has frequently been voiced that, as the AIDS crisis worsens, orphaned children will be left without any guardian. The situation certainly does occur, for there are numerous anecdotal reports. However, there is almost no evidence about what proportion of orphans is involved, how long such situations persist or how the children

fare over periods of several years. One study of a hard-hit area in Uganda found that 3 per cent of households had no resident adult aged 17 years or older (Nalugoda and others, 1997). Another study of Ugandan households that had experienced a death in the preceding 10 years reported that about one per cent were headed by children under age 18 in both 1992 and 1995 (Ntozi and Zirimenya, 1999). A small study in Zimbabwe investigated the circumstances that had led to the establishment of households headed by a child aged under 18 (27 households) or a young adult aged 18-24 (16 households). For 30 per cent of the households there was no known relative who could have taken care of the orphans, and in most of the others relatives were reported to be unwilling to take the orphans in. In a minority of cases the children also did not want to live with the relative. Although in many cases relatives provided material support and visited regularly, about one third of the households known to have living relatives did not receive material support from them (Foster and others, 1997). It should be noted that large-scale surveys do not, in general, provide a good basis for studying the phenomenon of child-headed households. The Demographic and Health Surveys, for example, require that an adult be available for interviewing, which means that child-headed households would tend to be missed (Bicego, Rutstein and Johnson, 2003).

There is also no reliable statistical information about trends in the number of children residing in orphanages in the AIDS-impacted developing countries. Orphanages are generally regarded as an undesirable option for providing shelter to the swelling population of AIDS orphans. Not only do most people in the developing countries affected view this as a culturally unacceptable arrangement, but orphanages are also viewed by experts on child-care as tending to provide a poor setting for child welfare and development. It is also very expensive to provide good-quality institutional care (see, for example, UNAIDS, 2002, pp. 133-135; UNAIDS, UNICEF and USAID, 2002, p. 12). Nonetheless, orphanages are a last resort for children who have no family that can take them in, and a number of studies reviewed for the present report mention community-based, religious or other non-governmental organization-supported orphanages or group homes as an aspect of local

responses to the problem (for instance, Phiri and Webb, 2002; UNICEF and UNAIDS, 1999; UNICEF, 2002; Ntozi and Nakayiwa, 1999).

In summary, recent studies have shown that orphans are at a substantial disadvantage. The amount of educational disadvantage is greatest for orphans that have lost both parents. The lower school enrolment among orphans is not entirely explained by the greater poverty of households where orphans live, although poverty itself confers a large disadvantage on orphans and non-orphans alike. Even though grandparent-headed households tend to be female-headed and poor, living with a grandparent is, on average, associated with higher educational enrolment for orphans than is living with other relatives, particularly more distant relatives. Orphans who live with a non-relative, though they are a small minority, are at an enormous educational disadvantage. Girl children have much lower enrolment ratios than boys in many of the countries impacted by HIV/AIDS; however, orphanhood by itself generally disadvantages boys and girls equally with respect to schooling. Available evidence also points to nutritional disadvantage for orphans. Taking in orphans represents a substantial economic burden for many of the receiving households as well. Although many orphans live in households that are relatively well-off economically, in many settings orphans are disproportionately living in poor households.

### C. CONCLUSIONS

The empirical evidence shows that the AIDS epidemic is having a huge impact on households. Indeed, households and families bear most of the burden since they are the primary units in which individuals cope with the disease.

- **Households affected by HIV/AIDS often move from relative affluence into poverty.** Studies in Burundi, Côte d'Ivoire, Haiti and Zambia showed that many changes occurred in the AIDS-affected households, including loss of paid employment, increasing borrowing and the sale of possessions. The decrease of revenue from loss of labour is an important impact of AIDS.
  - **Food consumption decreases in many HIV/AIDS-affected households.** The change in food intake leads to malnutrition, especially among children. In parts of Africa, households affected by HIV/AIDS tend to decrease their consumption and switch to cheaper goods. In Thailand, one third of households affected by HIV/AIDS reported an average decrease in household income of 48 per cent.
  - **Family structure and household composition are changing.** Increasing numbers of households are headed by grandparents or by women without husbands.
  - **AIDS adds stress to the lives of older persons.** It kills their adult children, who would have been responsible for their care in old age, and it thrusts them into the role of caregivers for their orphaned grandchildren.
  - **The impact of AIDS on households is also gender dependent.** Deaths of adult men tend to have a larger impact on household income, while a woman's death has especially severe consequences for children because women are the main caregivers in families.
  - **Children are leaving school prematurely** to care for ill parents and for economic reasons. Double orphans are much less likely than other children to be in school. Based on recent sample surveys, in sub-Saharan African coun-
- **Medical and health expenditures are increasing in HIV/AIDS-affected households.** Studies conducted in Sri Lanka, Thailand, Uganda and the United Republic of Tanzania, to name a few, showed that HIV/AIDS-related illnesses are putting a heavy financial burden on households affected by the epidemic.

tries only 60 per cent of children aged 10-14 who lost both parents attended school, compared to 71 per cent of those with both parents still alive and living with at least one biological parent.

- **Fostering orphans is a common cultural practice, especially in African societies, but the rapid rise in the number of orphans may overwhelm the traditional support system of the extended family.** Many of the households that are taking in orphans are themselves poor, and taking in

orphaned children represents a significant burden.

- **Orphans suffer disadvantages in education, nutritional status and well-being.** Households where orphans live are, in many settings, more likely than others to be poor, but orphanhood also leads to an educational disadvantage separate from that attributable to poverty alone. Orphans who live with non-relatives are at an enormous educational disadvantage. In some places—Burundi and the United Republic of Tanzania, for example—the loss of a parent is associated with a higher prevalence of malnutrition.