

**HIV/AIDS, ADULT MORTALITY AND HOUSEHOLD  
COMPOSITION IN RURAL TANZANIA**

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**ABSTRACT**

The aim of this article is to explore the role of adult mortality in household formation, fragmentation and dissolution. It is argued that in times of high adult mortality, as is presently the case in communities heavily affected by the HIV epidemic in Africa, household demography undergoes rapid change and results into other forms of households that cannot be explained within the framework of the 'normative demographic cycle.' Even though household studies have proliferated throughout the good part of this century, the role of adult mortality in household formation and dissolution has scarcely attracted any attention. However, discussion in this paper reveals that adult mortality is a significant cause of household instability. Premature death of an adult member of a household (notably husband and/or wife) implies a change in household composition by the sheer fact that a member is lost. But such death has a knock-on effect on membership of a household befallen by death as well as other households which, given the prevailing social institutions, may be required to absorb or provide for the survivors. Indeed the extent to which people can move from one household to another depends on the existing social arrangements for caring for survivors. Adult mortality thus results not only in fragmentation and dissolution of households, it also leads to emergence of new types of households of which orphan-headed households are increasingly becoming common.

*Keywords: HIV/AIDS, adult mortality, household composition, orphans, rural Tanzania.*

**INTRODUCTION**

Relationship between premature adult mortality and household demography is scantily explored (Rugalema, 1999a). Studies have mostly focused on fertility (and nuptiality) as demographic events that determine household composition and economic activity (cf. Chayanov, 1986; Barlett 1989). Chayanov's seminal work on domestic groups and economic activity remains influential. Yet the closest Chayanov came to acknowledge the effect of premature adult mortality on household development cycle is when he observed that:

At some moment in its development, for some internal reasons, the family that has matured meets with catastrophe and splits into two or more families. Each of these young families

then begins afresh to pass through the phases of family development we have described, if they have not already passed through one of them still in the paternal patriarchal family (Chayanov, 1986: 60).

Although Chayanov was much aware that household composition is key to the economic activity of a household, to him it was fertility rather than mortality, that determines household composition and economic activity (Krishnaji 1995). Chayanov gave a blind eye to the role of young adult mortality and observed that any household befallen by such a crisis would regroup and re-organize its economic activity. More recently, Krishnaji (1995) has argued that mortality is a key determinant of household size and the volume and complexity of household livelihood. He observes for example that in rural India households of poor peasants and agricultural laborers a small in size (and perennially poor) largely due to high mortality (infant, child, and maternal) so common among poor households of rural India.

The HIV epidemic that is currently devastating much of the East and Southern African countries has led to high mortality of young adults (age 15-60). The majority of those who are falling ill and dying of AIDS are producers, reproducers, and providers of their households. In heavily affected communities the epidemic is fundamentally altering the composition of households. This raises the question: Is prime-age adult mortality a minor turbulence in the otherwise stable domestic cycle as Chayanov and his adherents would have us believe? This article is based on the year-long case study undertaken by the author in 1996 in a village located in Bukoba district, north-western Tanzania. The analysis shows that premature adult mortality due to AIDS has led to a significant change in household demography among afflicted and affected households in the study area. It is also shown that premature adult mortality due to AIDS is leading into child-headed households partly because the disease diminishes the capacity of affected household to absorb survivors.

This paper begins by setting out a brief theoretical context in which the effects of adult mortality on household size and composition is theorized. I then present the data based on the case study undertaken in a village in Bukoba district, north-western Tanzania. I examine how death of a key household member (adult husband/father and/or wife/mother) affects the viability of afflicted households particularly the lives of survivors, notably children and elderly dependants.

Households are the primary social and economic units among the Bahaya.<sup>1</sup> They are the archetype of Buhaya fertility and success. Buhaya households are normally nuclear, composed of a couple and their children. A household is normally established when a son acquires a wife. At this stage the father would carve a plot of land from the "larger" family land upon which the son would build a house and him, his wife, and later their children would establish a more or less independent living.

The beginning of the household development cycle is therefore the point at which a son gets married and, together with his nuclear family, establishes an independent living. Usually the man is the head of household and his tenure persists as long as he lives. Even in cases where the man lives away from his wife and children for an extended period of time, he remains head of household and often an important decision-maker. Save for events such as divorce, male headship of the household lasts till the death of the husband in old age. When a male head of household dies of old age, he normally leaves behind grown-up children most of whom would be leading (or capable of leading) an independent life. Such has been the view of the Buhaya household and social organization (Reining 1970). But what if the patriarch dies young? What if his death is soon followed by that of his wife? How does such death(s) affect household composition? These intricate questions have rarely been addressed. This paper is an attempt to come to grips with these questions and to provide an explanation about the behavior of households under situations of high adult mortality, in this case, due to HIV-related illness and death.

My analysis is premised on the argument that in the rural African context, prime-age adult mortality is a demographic factor that has a profound effect on household size and composition. This is a theoretical line emanating from the empirical data analysed in Rugalema (1999a) in which I analysed the effects of the HIV epidemic on household livelihood. Although some demographers have long acknowledged that prime-age adult mortality leads to truncation of households (Levy 1965), only a few studies have provided an in-depth view of how truncation of one household affects the demographic composition of other households (Segalen 1986). Thus the need to analyse how household truncation due to premature death of adults bears on the composition of afflicted and affected households cannot be overemphasised. In sum, it is of theoretical and policy relevance to analyze what happens when households are stricken by prime-age adult mortality.

Theoretically, premature adult mortality due to HIV/AIDS sets in motion a variety of consequences that have implications for survivors and their households. Death of a householder and/or his wife may force some or all members of a household to move out and join other households or even become detached (Over *et al.* 1992, Tibaijuka and Kaijage 1995). In the case where all survivors move out of the afflicted household, the household dissolves as a result of loss of a key provider. In cases where a few members move out of an afflicted household to join another household, the donor household is further fragmented and this process has demographic implications for both donor and recipient households. Increased adult mortality due to AIDS would set in motion the twin processes of household fragmentation and reconstitution.

Prime-age adult mortality is therefore a major cause of demographic instability in domestic groups. This is so because premature adult mortality leads into rapid changes in household composition not only of the afflicted households but also of the affected ones. In order to maintain a balance between producers and consumers, households faced with high adult mortality constantly fragment and reconstitute. Reconstitution is a process through which households absorb new members in the quest to maintain 'a domestic group identical with the unit of production' (Segalen 1986). The most obvious case would be of a widower acquiring a new wife or, a widow being remarried. Household reconstitution has historical antecedents. For example, Segalen (1986) has observed that the pre-nineteenth century European family was constantly threatened by premature death of either or both adult partners. However, widowers tended to re-marry more frequently and faster than widows because 'a widower had no one to look after the children, do the cooking or help in the fields' (p. 33). Failure to reconstitute would burden the lone surviving partner. The two types of reconstitution and their implications for household survival are aptly summarised by Segalen (1986), thus:

Thus, to maintain a domestic group identical with the unit of production, a multiplicity of unions was formed. Such remarriages affirmed the primacy of the economic over family organisation. The domestic group was constantly threatened by the dangers of mortality, and its instability chiefly affected the children it cared for or entrusted to the kinship system. Grandparents, brothers and sisters of the deceased would perhaps take them in, acting within the framework of a traditional and tightly knit group that had a place for those on the margins of the society, namely the old, the mentally defective, and the orphaned (Segalen 1986: p36).

This perspective of constant household truncation and reconstitution depicts the situation of HIV-related adult mortality that is currently unfolding in many of the countries of sub-Saharan Africa.

As noted above, age and gender are key factors in analysing the consequence of adult mortality on household composition. Because women and men occupy different social and economic space, it matters whether the one who contracts HIV and dies of AIDS is a man or a woman. Similarly the ability of the survivors to reorganize their household as a viable demographic, social and economic

unit depends on whether the survivor is a man or woman. This is not a matter of individuals as men or women but a product of prevailing institutions. Households are more than the sum of their individual members, institutions such as kinship, inheritance and access to agrarian assets, gender roles and hence ability to claim from wider social networks are important in their viability. Thus death of a prime-age adult in the household does not only alter household composition it also alters the institutions upon which household viability is partly built. In sum, it matters whether mortality hits a male or a female parent, since institutions pertaining to household reconstitution, inheritance of assets, and land use are gender specific.

Similarly, the age-specific impact of HIV/AIDS matters because it hits people who are the most active part of the labor force, parents of dependent children and providers of the elderly. Thus the impact of adult death is not distributed uniformly to all members. Children or rather orphans, because of their tender age, lack of resources and life skills, are more likely to be severely impacted. Orphans are therefore likely to be relocated from afflicted households and fostered in the wider kinship system (particularly by their grandparents) or in extreme cases orphans may be left to fend for themselves (Ayieko 1997).

### **HIV ADULT MORTALITY IN TANZANIA: AN OVERVIEW**

In the years since the diagnosis of the first three cases of AIDS in Bukoba district in 1983 the epidemic has jumped from a few isolated pockets to a general population and has grown from an insignificant disease to a leading killer among young adult in Tanzania (URT, 1997). Most recent estimates indicate that about ten percent of the Tanzania adult population is infected with HIV (Fimbo 1999). It is also estimated that since 1983 slightly more than half a million Tanzanians have contracted AIDS of which more than half have already died from AIDS-related illnesses (Fimbo 1999). Despite an improvement in surveillance methods, the Ministry of Health emphasizes that available statistics are a gross underestimation of the problem of HIV and AIDS in Tanzania. Only one out of 4-6 cases of AIDS in Tanzania is officially recorded (NACP 1996).

Despite that HIV infection is now generalized, still there are sharp disparities between different geographical locations. Of the twenty administrative regions of Tanzania, only five carry the biggest burden of HIV infection and AIDS cases. These are Kagera, Mbeya, Kilimanjaro, Coast and Dar-es-Salaam (NACP 1997). In these five regions the AIDS case rate<sup>2</sup> is estimated at between 445 to 859. These colossal figures are useful to know but they do little to help us visualize the sheer impact of the epidemic on social and economic life of households and communities hardest-hit by the epidemic. I have analyzed some of these issues somewhere else (Rugalema 1999a, 1999b). The issue I want to explore here is the impact of the epidemic on household demography and the dynamics of households in the face of the epidemic. I now turn to the case study I undertook in 1996 in a village in Bukoba district, Tanzania.

### **HIV EPIDEMIC IN THE VILLAGE AND ITS EFFECTS ON HOUSEHOLDS**

#### **Methodology**

There were no specific village HIV incidence or sero-prevalence data upon which the choice of the village could have objectively been based. However, a population-based study by Killewo *et al.* (1993) found that the prevalence of HIV was high in and around Bukoba town and declined markedly with increasing distance from the town. The town and villages closer to it were found to have the highest HIV prevalence. According to the categorization by Killewo *et al.* (1993) the village in which the present study was conducted lies in the geographical zone in which HIV-prevalence is

estimated at 24.2%.

Besides the study by Killewo and his co-workers, I was also aware that in this village, as in other neighboring ones, young adults had died and others were still falling ill and dying of AIDS or *silimu* (local slang for AIDS). I had spent some six months of fieldwork in the area in 1991 and attended a number of AIDS funerals (see Rugalema 1992). In the present study I stayed in the village from early February till December 1996. The first task was to carry out a household census. This was intended to enumerate all households in the village and all household members residing in each household. The household census enumerated household demography and other household assets such as land plots, cattle, bicycles, radio, and standard of housing. Respondents were also asked about any absentee members who contributed to the household budget. At the time of the study the village had 164 households and a total population of 631 inhabitants.

During the *household census* respondents were asked if their household membership had changed in the last five years and if so to identify members who had joined and those who had departed and main reasons for entry and departure. Respondents were also asked if they had or have had someone chronically sick between 1990 and 1996 and if so what was the major cause of illness, what kind of treatment was sought, and who were the major care givers.

I categorized household depending on their AIDS-related status.<sup>3</sup> This was defined as a categorical variable and households were placed in three categories based on their AIDS status, namely:

- Afflicted: if the household has suffered from AIDS, i.e. a household has directly experienced HIV-related illness and/or death of its members
- Affected: if the household has not directly experienced HIV-related illness and/or death or illness but has had to provide for the sick and survivors. Such support could be in terms of provision of occasional labor to care for the sick, fostering of orphans, supplying money or food to the afflicted household. In all cases affected households were those of relatives of afflicted households.
- Unaffected: if the household has neither been afflicted nor affected by AIDS.

### **HIV/AIDS in the Village**

AIDS entered the case study village in 1987 some four years after the first three cases were diagnosed in the district. The first victim was a woman with an unstable marriage who worked as part-time commercial sex worker at Rwamishenye (a suburb of Bukoba town). She went back to the village after she had been weakened by opportunistic infections and she died shortly afterwards. Since then the incidence of AIDS in the village has risen steadily with a matching increase in the number of deaths. The distribution of AIDS deaths by adult-age group is summarized in Table 1. Sixty adult deaths were reported in the village. These were AIDS deaths that had occurred in the village in the sense that those who died were actually buried there. Indeed some of the deceased that were buried in the village had lived and worked outside the district but such cases were enumerated because they had direct and indirect effects on some of the households in the village.

Table 1. Reported AIDS deaths by adult age group in the village.

Age Group	Male	Female	Total
19-29	10	11	21
30-55	26	8	34
56+	5	0	5
Total	41	19	60

Source: Author's household census data.

Categorized by AIDS status, there were three broad categories of households in the village. These are, afflicted, affected, and unaffected. I enumerated a total of 52 afflicted households (i.e. 32% of households in the village). These were households that had experienced direct illness and/or death of one or more of their members. A total of 48 households (29% of the village households) were affected in the sense that although they had not experienced direct death or illness of a household member from AIDS, they had experienced *ripple effects* from the illness and/or death of a relative in an afflicted household. Such ripple effects include having to foster orphans, provision of labor and/or cash for caring of a sick person and providing for survivors in an afflicted household. The rest of the households in the village were not affected but only in the sense that, until the time the study was conducted, they had not experienced illness or death of a member or close kin.<sup>4</sup> Six households had dissolved under the pressure of AIDS-related deaths. In these households a total of 16 survivors left to join other households. Reasons given for dissolving households were mainly economic (inability of survivors to provide for themselves without the support of the deceased) and emotional (feeling a grave sense of loss and hence loss of interest to stay on the land holding).

The distribution of households by AIDS status is summarized in Table 2. The table shows that HIV morbidity and mortality has directly affected two-thirds of the households in the village. A notable feature is the emergence of households headed by teenage orphans. This is a new development. Orphan-headed households were not common in the area before the advent of HIV/AIDS. Orphans would normally be fostered within the wider kinship system. Today, partly due to the disruption wrought by AIDS on families and kin groups, orphans are being left to fend for themselves. Teenage orphans were the major providers in their households. The emergence of orphan-headed households is increasingly no longer a surprise in rural areas hard hit by HIV (see for example, Ayieko 1997). All orphan-headed households were a consequence of death of both parents. In one case, the dying parent insisted that he would like his children to grow together preferably on his land. The other case was due to the disappearance of the clan. AIDS had disproportionately affected relatives of one of the orphan-headed households to the extent that there were no surviving relatives to foster the orphans. Majority of the cases of orphan-headed households can be explained partly by the preference of surviving relatives to maintain some sort of continuity in afflicted households. Respondents claimed that leaving orphans on their ancestral land is the best way to secure the property, maintain continuity and to prepare orphans for the agrarian life ahead.

Clearly Table 2 shows that HIV-related adult mortality is increasing the prevalence of households headed by young women, particularly AIDS widows. Before 1998 about 17% of the

households in the village were headed by women whereas today about 38% of households are headed by women. By the time I completed fieldwork AIDS widows were heading some two-thirds of the afflicted households in the village. Even though AIDS has claimed the lives of many men as Table 2. Extent of AIDS Affliction by Type of Household in the Village

Household head	Household AIDS Status			
	Afflicted	Affected	Unaffected	Total
Man	13	25	55	93
Woman	31	22	9	62
Teenage (Orphan)	8	1	0	9
Total	52	48	62	164
Percent	32	29	39	100

Source: Author's household census data.

compared to women, another explanation for a high number of widow-headed households is the inability of most widows, particularly those with children, to remarry. To the contrary, I found that AIDS widowers could easily remarry and indeed some have remarried. As a consequence of death of parents the village had 80 orphans (children below the age of 16 who had lost one or both of their parents. These included orphans who had been retained in the village and those who had been fostered from other areas. Moreover there were six elderly people left without support largely due to the fact that the children who were major providers had succumbed to the disease.

### **Consequences of AIDS-related deaths on household composition**

The foregoing description shows that adult mortality alters household composition and may change the gender and age of the household head. In this section I explore in more detail the relationship between adult mortality and household composition and how gender and age of survivors mediate such a relationships.

Figure 1 summarizes the main features of the households in the village in respect to AIDS status and household size. It shows that affected households are large in size than either afflicted or unaffected households.

The figure reveals that affected households are larger than the rest of the households mainly because most of them have had to absorb survivors of AIDS victims from the afflicted households. A majority of the affected households had fostered one or more orphans and in some cases elderly people too. In general affected households have reconstituted by absorbing new members, mainly children, and hence large household size. Beyond the general picture a closer scrutiny of this category of households shows that affected male-headed households are larger in size than their female-headed counterparts. A clearer picture is portrayed in figure 2 in which household size is summarized in

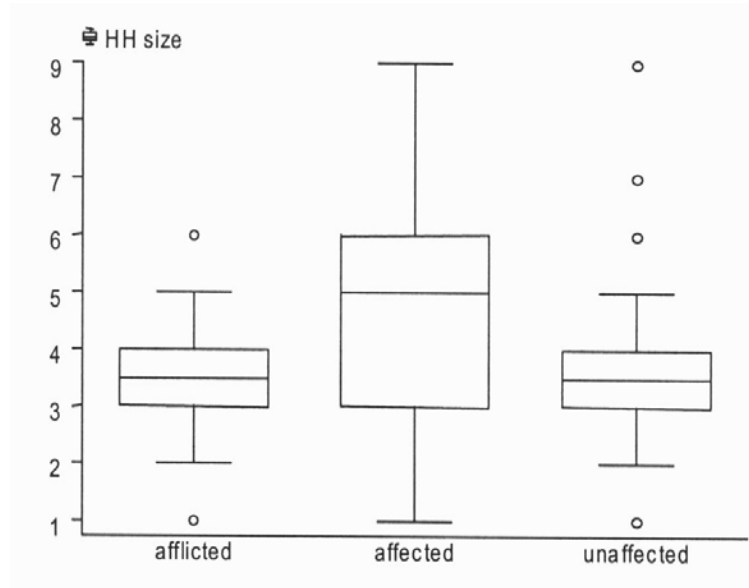


Fig. 1. Box Plots for Household Size by Household AIDS Status  
Source: Household census by the author

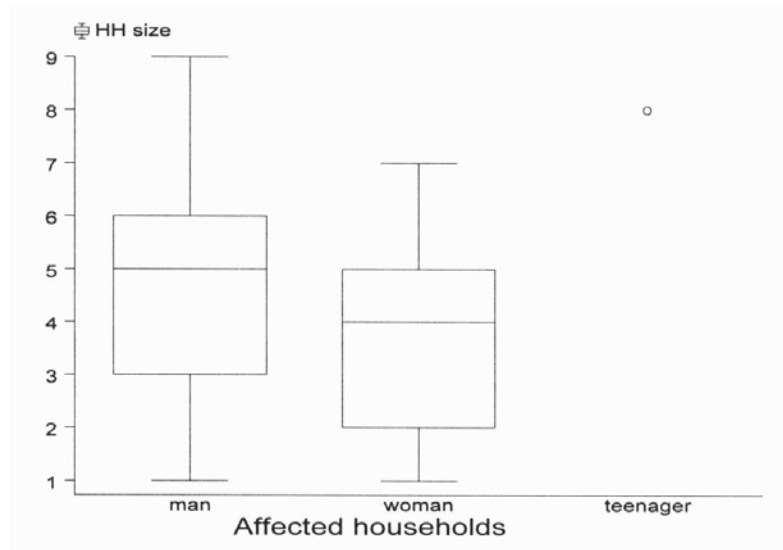


Fig. 2. Box Plots of Household by Type of Headship among affected households  
Source: Household census by the author.

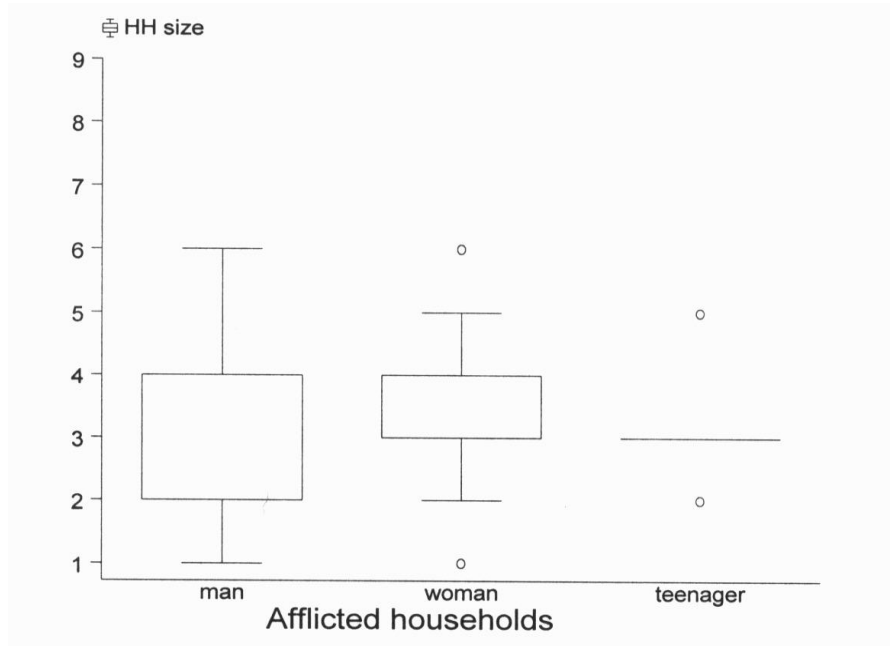


Fig. 3. Box Plots of Household Size by Type of Headship Among Afflicted Households. Source: Household census by the author.

relation to household AIDS status and type of head of household. As a result of fostering of AIDS survivors, affected households are considerably larger, as indicated by the median. The population size in this category of households is more spread, as shown by the large interquartile range.

The reason why affected male-headed households are comparatively large is that these households command more social and economic resources and have thus acted as *shock absorbers* by fostering orphans from afflicted households. Mostly these are 'complete' households in the sense that the wife-husband dyad exists. I found that having a wife and resources to provide for additional household members was a strong reason to foster orphans either voluntary or under pressure from the community. Moreover, Buhaya is a patrilineal society and so children belong to their father's clan. When a father dies leaving behind young children, it is a responsibility of his male clan members to foster the orphans. All these factors ensure that a majority of orphans are fostered in households headed by men.

As depicted in figure 1 afflicted households are smaller in size compared to affected ones. This is so because afflicted households have lost members. Membership loss is primarily due to death of a person or persons who fall ill and die of AIDS. But as already explained, death of a father or mother or both sets in motion a processes whereby other members of a household (survivors) move

out and are absorbed in other households. A closer examination, however, reveals male-headed afflicted households are larger (figure 3) than the rest of the households in the same category.

Among the afflicted households afflicted male headed-households have a larger interquartile range implying larger household size than either female- or teenage-headed ones. That afflicted male-headed households are large in size is explained partly in terms of reconstitution and partly in terms of lesser tendency towards fragmentation. In respect to the former, I found that AIDS widowers tend to marry sooner and frequently than widows. Widows, particularly those with young children find it difficult to re-marry partly because such a marriage would involve a widow leaving her children to join her husband on his land holding or taking her children with her. Both options are difficult. Leaving children behind would amount, in the eyes of the community, to abandoning the children. And the social pressure to ensure that this does not happen is so huge to bear. The second option, taking children to a new marriage, is difficult, so explained the widows because few prospective husbands would accept to raise children they did not sire.

Social networks are of particular importance to AIDS widowers. For example, I found that it is common for female relatives (sisters, aunts, or mothers) to move into households of widowers to help their male kinsmen with household chores. The reverse is not common among widow-headed households or those headed by orphan teenagers. That relatives move into widowers' households to help in housework and farming no wonder then that household size of afflicted male-headed households is larger than other afflicted households.

Another important factor that accounts for differences in household composition and size among afflicted households is fragmentation of household after death of an adult member. Widow-headed households as well as those headed by orphans are net donors of their members to other households. In other words, both widow-headed and orphan-headed households are more likely to foster-out some of their members. Widower-headed households on the other hand, retain most of the members save for those who die of AIDS and as explained above, these households are also able to attract new members either as wives or female relatives.

I have so far discussed the issue of age in respect to the orphans. However, age is also relevant in as far as the elderly are concerned (Rugalema 1998). As depicted in Tables 3 and 4 most of the orphans have been fostered by households headed by individuals above the age of 60. For example, Table 6 shows that 11 out of 16 households in which orphans have been fostered are headed by men between 50 to 85 years of age. A similar trend is shown in Table 7 where 13 out of 19 households that have fostered orphans are headed by women between 50 and 79 years of age.

Data presented in both tables 3 and 4 shows that household headed by the elderly are, in most cases, the ones left to pick up the pieces and to provide for the orphans in the aftermath of an AIDS death. As one elderly respondent observed, AIDS has turned life upside down. In the past it was the responsibility of adult children to care for their aged parents. Frequent morbidity and mortality of adults due to AIDS has meant that the elderly have to resume 'parenting' in the twilight years.

The impact of HIV on the elderly is therefore two-sided. On one hand the elderly are losing their adult children and hence social and economic security in twilight years. In countries where no formal kind of social security exists for the elderly, survival of adult children is paramount for the survival of the elderly. As another elderly respondent put it, old people who have lost their adult children have also been orphaned only that they are 'elderly orphans.' On the other hand, death of adult children forces the elderly to foster orphans. This not only poses the difficult challenge of resuming parenting duties in old age, the reality is that most orphans living with their grandparents live in deprivation because most of these households are resource poor (Rugalema 1999a).

**The Broader Picture**

Most social science literature that focuses on household demography place emphasis on fertility and marital factors as critical sources of variation in household demographic composition. Yet this study demonstrates that prolonged illness and subsequent death of the prime-age adult members due to HIV/AIDS has adverse impact on household composition. The study shows that death of a prime-age adult leads to household fragmentation, dissolution, and reconstitution. These findings are in no way unique to this part of Tanzania. Rugalema (1999b) have observed the same trend in Nyanza province of Kenya as has Mtika (1998) who witnessed a dissolution of four AIDS-afflicted households within a 10 weeks' period during which he was conducting his fieldwork in rural Malawi.

While the link between adult mortality and variation in household composition would by now seem obvious, it is also important to explore, albeit briefly, the link between adult mortality, household composition, and household livelihood. A more detailed discussion of the relationship just mentioned is presented in Rugalema (1999a). I conceptualize livelihood as the totality of activities

Table 3. Distribution of Fostered-in Orphans Among Male Affected Households in the Village

Head_age	Number of Orphans Fostered-in					Total (h'holds)
	1	2	3	4	6	
27	1	0	0	0	0	1
33	0	1	0	0	0	1
37	1	0	0	0	0	1
38	1	0	0	0	0	1
43	0	1	0	0	0	1
55	1	0	0	0	0	1
60	1	0	0	0	0	1
67	1	0	0	0	0	1
68	1	0	0	0	0	1
69	0	0	0	1	0	1
70	0	1	1	0	0	2
72	0	0	0	0	1	1
75	1	0	0	0	0	1
85	0	0	1	1	0	2

Source: Household census by the author.

Table 4. Distribution of Fostered-in Orphan-in Orphans Affected Female-Headed Households

Head_age	Number of Orphans Forsered-in		Total (households)
	1	2	
25	0	1	1
28	0	1	1
29	1	0	1
32	1	1	2
34	1	0	1
50	0	1	1
58	2	0	2
59	1	1	2
60	0	1	1
61	0	1	1
63	1	0	1
65	0	1	1
67	1	0	1
68	1	0	1
78	0	1	1
79	1	0	1
Total	10	9	19

Source: Household census by the author.

and relationships that secure a rural household. These include access to and availability of productive capital (e.g. labor and land), agricultural production, earning of off-farm income, asset accumulation, and access to social networks (including kinship) all of which enable a household to provide for its members hence maintain itself as a unit of production and reproduction.

Evidence obtained in the research area also shows that adult death impinges on household economic and social viability. The primary effect is through the loss of labor of the person who falls ill and die of AIDS and that of care-givers. Loss of labor does not only affect agricultural production, it also impinges on the household's ability to generate income (Brown et al.1994). In Buhaya men are the main earners of household off-farm income. Death of the male head of a household deprives the household of the income earner and leads to curtailment of consumption of goods and services. Number of meals is reduced and so is the quality of meals. Education of orphans is compromised as children are removed from school (World Bank 1997) but also health and nutrition of child orphans are thrown into jeopardy (Rugalema 1999c).

To the extent that death of prime-age adult changes the gender and age composition of the household it leads to change in the farming system (Gillespie 1989, Barnett and Blaikie 1992). Such changes may be manifested in terms of reduction of acreage (Hunter et al. 1993) or change in cropping patterns and livestock management whereby a high-labor demanding system is replaced by a low-labor demanding one (Halswimmer and Barnett 1994, Rugalema 1999b). Substitution of low-labor demanding crops for high-labor demanding ones is technically rational but economically and

nutritionally inferior. The trend has been towards adoption of early maturing, low input crops such as cassava and sweet potatoes at the expense of cash crops such as coffee. This may partly explain the acute lack of cash reported among afflicted households as well as high levels of malnutrition among AIDS orphans (World Bank 1997).

Family networks and clan groups have provided a reliable if less perfect safety net for survivors. But this worked well when adult mortality was not as common as now. Then as opposed to now survivors, particularly children, would be fostered within their fathers' clan and a widow would mostly be sent to her natal home. Today, the propensity to foster orphans has declined. The rise of orphan-headed households is one of the strongest evidence to this. Additionally, widows are no longer sent to their natal homes, they are rather retained on their marital land and left to care for their children although economic and social support from the rest of the kinship is, if anything, minimal.

### **Conclusion**

Households facing high adult mortality are liable to fragment and even dissolve. This is so because mortality impinges on the household's ability to provide (economically and emotionally) for its surviving members. Adult mortality has demographic and economic consequences not only to afflicted households but also to affected ones because the latter have to serve as *shock absorbers*. The extent to which a household is able to weather away the demographic effects of adult mortality are largely dependent on gender and age of the survivors.

To the extent that adult mortality affects household composition it has implications for survival and livelihoods of affected and afflicted households. This is an area of inquiry that has received scanty attention so far. Preliminary evidence though shows that adult mortality imposes a heavy burden on survivors partly because assets are spent in managing protracted illnesses and funerals and partly because survivors are, to a large extent, constrained by gender and age in their quest to marshal resources necessary for subsistence.

### **ENDNOTES**

<sup>1</sup>Bahaya is the dominant ethnic group in the study area. The totality of land, people, and culture of the geographical area inhabited by the Bahaya people is referred to as Buhaya (lit. the land of the Bahaya).

<sup>2</sup>Case rate means cases of AIDS per 100,000 of population.

<sup>3</sup> This categorization is in line with Barnett and Blaikie's categorization of Uganda households in relation to HIV/AIDS status. See Barnett and Blaikie (1992).

<sup>4</sup>Broadly it could be said that all households in the village are affected in the sense that deaths and funerals have depressed the village social and economic life. To the extent that every household has to contribute to every funeral in the village, AIDS is depriving every household not only labour (time spent on funerals) but also cash income and other materials that have to be contributed to organise a funeral. Similarly, loss of productive adults implies an economic loss to the village.

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