

**Household welfare impacts of mortality of adult females in  
Zimbabwe: Implications for policy and program  
development**

**Paper Presented at The AIDS and Economics Symposium, Organised by the IAEN  
Network Held in Durban 7-8<sup>th</sup> July 2000.**

**by Gladys Bindura Mutangadura**

The Carolina Population Centre, University of North Carolina at Chapel Hill,  
CB 8120, 123 W. Franklin Street, University Square  
Chapel Hill, NC 27516  
email:gladys@unc.edu

## **Household welfare impacts of mortality of adult females in Zimbabwe: Implications for policy and program development**

### **Abstract**

The HIV/AIDS epidemic in Africa is increasingly becoming one of the major impediments to sustainable development. Zimbabwe is one of the southern African countries that is severely affected by the HIV/AIDS epidemic which has already reversed hard won national health. At the global level, 46% of the 33.6 million people currently living with HIV/AIDS are women. The trend in the proportion of female living with HIV/AIDS to the total adult population living with HIV/AIDS has increased in the past three years. Given that women are gatekeepers to household food security and are key players in the overall household economy, it is important to find out the welfare impact of female mortality at household level. In times of tightening national budgets and declining national resource allocation to social services, understanding how the households respond to the death of an adult female is important. This understanding can help ensure that interventions aimed at assisting affected households and communities complement and strengthen people's own inventive solutions rather substitute for or block them. This study describes the major household impacts of female mortality in Zimbabwe, identifies the household coping mechanisms adopted and the current formal and informal social support mechanisms. Findings indicate that the major household welfare impacts of adult female mortality were food insecurity, decrease in access to school, increased work burden on children and loss of assets. Empirical evidence from the research also indicates that elderly women have become the leading foster parents of surviving maternal orphans. The study also reveals that households are more dependent on informal sources of support to help cushion the impacts of premature adult female mortality. Included in the discussion is how macroeconomic policies have aggravated the conditions resulting in the weakening of informal sources of support. The article suggests policy response options which can be used to strengthen the coping capacity of surviving households to the impacts of mortality of adult females. Such policy implications focus on intensification and expansion of national support to secondary education for orphans, support to the elderly and strengthening of community initiatives so as to generate substantial positive welfare effects by complementing the informal devices.

**Key Words: Adult female mortality, household coping, social support, Zimbabwe.**

## **Household welfare impacts of mortality of adult females in Zimbabwe: Implications for policy and program development**

### **1. Introduction**

Since the late 1980s, HIV/AIDS is having devastating effects on Sub-Saharan Africa. According to the 1999 report of the Joint UN Program on AIDS (UNAIDS) about 70% of the estimated 33.6 million people with HIV live in sub-Saharan Africa. There are 29 countries in sub-Saharan Africa that have an HIV prevalence of 2 percent or more which include Botswana, Burkina Faso, Burundi, Cameroon, Central African Republic, Congo, Cote d'Ivoire, Ethiopia, Kenya, Lesotho, Malawi, Nigeria, Rwanda, South Africa, Tanzania, Uganda, Zambia, Zimbabwe Benin, Chad, Democratic Republic of the Congo, Eritrea, Gabon, Guinea-Bissau, Liberia, Mozambique, Namibia, Sierra Leone, Togo (UN, 1998). Southern Africa holds the majority of the world's hard-hit countries. In Botswana, Namibia, Swaziland and Zimbabwe, current estimates show that between 20% and 26% of people aged 15-49 are living with HIV or AIDS. South Africa, which trailed behind some of its neighbours in HIV infection levels at the start of the 1990s, is unfortunately catching up fast as UNAIDS statistics indicate that one in seven new infections on the continent in 1999 are believed to be in South Africa. In countries hard hit by the pandemic, morbidity and mortality have risen and are expected to continue to rise. The major route of AIDS in Sub-Saharan Africa is heterosexual intercourse, estimated to account for 93 percent of all adult cases, followed by blood transfusions, and vertical transmission of the AIDS virus from mother to foetus.

At the global level, 46% of the 33.6 million people currently living with HIV/AIDS are women (UNAIDS, 1999). However the trend in the proportion of female living with HIV/AIDS to the total adult population living with HIV/AIDS has increased from 41% in 1997 to 46% in 1999. These figures show a narrowing of the male female gap as the proportion of adult female deaths to the total number of deaths due to HIV/AIDS has increased from 46% in 1997 to 52% in 1999. In Zimbabwe, the national adult HIV rate is 25.8%, but in terms of distribution between men and women, HIV infection is roughly equal. However women are infected by HIV/AIDS at a younger age with HIV rates showing a peak in the 19-29 year old age group, in men the peak is 30-39 year old in Zimbabwe (NACP, 1998). Since they get infected at a younger age, the death toll for women is high in their productive age group.

About 200 000 people in Zimbabwe have died of AIDS since the epidemic began in 1985 (UNAIDS, 1999). On average about 700 people were dying every week from AIDS in the country in 1998. Anti-retroviral therapy costs more than Z\$20 000 per month, which is more than three times the average formal wage earned by an average civil servant professional with tertiary training, hence it is beyond the reach of many. HIV/AIDS has already reversed hard won national health gains and continues to threaten the major health indicators. Life expectancy which had improved to 62 years by 1994 had fallen down to 49 in 1997.

In the absence of an AIDS epidemic adult deaths in the age range 15-50 in Africa is very low - about six deaths per 1000 persons aged 15-50 per year (Over, 1995, Adetunji, 1997). But with the AIDS epidemic, the total death rate in Zimbabwe which had fallen to 9% in 1994, rose to 13% per annum

in 1997 (Jhamba, 1997). The implications of rising mortality are that HIV/AIDS is changing the demographic structure of the households, with women dying at a young age. Women are especially vulnerable to HIV/AIDS because they have more vulnerable employment status dependent on labour intensive activities, lower incomes, least access to formal social security and least entitlements to or ownership of assets and savings. They are physiologically at high risk of being infected by HIV/AIDS, research indicates that the risk of HIV infection is 2 to 4 times higher for women than men during unprotected intercourse because of the larger surface areas exposed to contact (NACP, 1998, De Bruyn, 1992). More than 50 percent of the women in Zimbabwe live in rural areas where services are often inaccessible and unaffordable. Most women in Zimbabwe do not have the right to sexual and reproductive autonomy. It has already been recognised that the subordination of women to men creates a highly unfavourable environment for preventing HIV infection especially when major prevention strategies recommended are abstinence, mutual fidelity or use of male condom, none of which are under the control of women. The Government has put in place a number of legal statutes to protect and elevate the status of women, but the laws have not been effective as the environment which is male dominated is still harsh due to cultural norms and attitudinal problems (NACP, 1998).

Women bear the brunt of the epidemic as they are the main caregivers and when the breadwinner is gone, they have to support the family with limited resources. Women exhibit certain nurturing and allocative behaviours that enhance the food and nutrition security of the entire household and of children in particular (Haddad, 1993). But what happens to the household when this woman eventually falls ill and dies? Very little substantive evidence exists on the welfare impact of female mortality at household level yet illness and death of a woman is likely to threaten household food security given that women provide the bulk of the labour for food production, and the overall socialisation and education of the children. As a result, there are a number of important information gaps. Key questions which implementers are interested in include: What are the impacts of adult female mortality?, What is the role of inter-household support in alleviating the impacts? Are there any signs of the community failing to cope with adult mortality, if so what are the signs? What intervention programs are available to support households? What are the priority areas for strengthening programs or introducing new programs?

Answers to these questions are crucial to policy makers and development organisations concerned with developing short-term and long-term strategies to overcome the impacts of HIV/AIDS. Without information on the responses by households and communities most affected by morbidity and mortality, few specific conclusions can be reached about the impact of alternate policies and projects. The overall goal of this study was to examine the welfare impacts of adult female mortality at household level in Zimbabwe using quantitative and qualitative methodology and formulate sustainable mitigation strategies that can be implemented to strengthen the surviving household's coping capacity. The specific objectives include:

1. Describe the welfare impacts of female mortality on households, in terms of impacts on household's demographic composition,
2. Describe the impact of female mortality on the household resource availability and allocation,
3. Describe the impact of female mortality on household well-being in terms of food security,

- education, asset base and health,
4. Identify coping mechanisms adopted by affected households,
  5. Identify the role of the extended family, neighbours and other non-relatives in assisting an affected household,
  6. Are there any changes in the way these community support networks are operating? Is there any evidence of stress in any of these community support networks?
  7. What programming responses can be implemented in the community to overcome the effects of the epidemic
  8. Identify the existing formal social support mechanisms and the policy and program implications to help alleviate the impacts and strengthen the capacity of households to cope.

This article is divided into six sections. Section 2 outlines the conceptual framework, section 3 reviews Zimbabwe's socio-economic profile and the HIV/AIDS epidemic and Section 4 describes the research methodology; Section 5 details the results; Section 6 presents a discussion of the results and Section 7 outlines the emerging policy and program implications in terms of how programs and policy can strengthen the existing support mechanisms so as to strengthen surviving households; and Section 8 presents conclusions.

## 2. Conceptual framework

The health and life situation of any woman is critical to the health and life chances of her children, not only during pregnancy, childbirth and the early months of life but throughout the entire childhood. A mother's capacity for child care - the time and energy she can devote to her children, the conditions in the home, her material resources, her skills and knowledge - continue to govern a child's passage from childhood to maturity, socially, physically and emotionally. Whether or not an HIV-infected mother transmits the virus to one or more of her children, her early death from AIDS will have profound impact on all of them. If she is the key provider of food, clothing and household utilities for all her children, a mother's death has profound social and economic consequences for her orphans and for her husband if he survives. In the absence of appropriate carers in the community, adequate nutrition, and access to education and health services, orphaned children are likely to grow up as relatively inadequate adults with reduced potential to contribute meaningful to society and development (Jackson, 1997). Families may have to sell any economic assets in order to raise money to buy food or pay for school fees, thereby deepening their poverty, or go into debt by borrowing (if they can). Informal sources of income such as artisan crafts, market gardening and food processing, activities that previously contributed to the family budget through women may no longer be available. When household income is low, the remaining members may not be able to afford to pay school fees, even if they think that schooling would be a good investment.

Recent research indicates that HIV/AIDS has the greatest impact at household level (Kwaramba, 1998, World Bank, 1998). The household is forced to bear the costs of medication, funeral, loss of income, and loss of labour and management skills. Theoretical insights into the socio-economic impact of AIDS on households propose that premature death of an adult results in direct and indirect costs (Barnett and Blaikie, 1992, World Bank, 1998, Tibaijuka, 1997). Where direct costs are the medical costs prior to death and the costs of the funeral and indirect costs are costs related to the

income lost due to death of the adult, and the impact on other welfare measures such as household food security status, child schooling, and loss of assets.

This study adopts a similar framework and try to find out the impact of adult female death on key household welfare indicators: child schooling, health, food security and asset base. When a household experiences an adult female death, a child might be withdrawn from school to make up for the loss in income experienced by the adult or stop school because of lack of funds for school fees. Thus adult fatal illness is likely to affect two important school variables, enrollment and attendances (Ainsworth et al, 1993). In a study in Tanzania, Ainsworth found the death of woman aged 15-50 in a household to be negatively related with enrollments in the last 12 months of all children in that household while there was no association between enrollments and death of a man aged 15-50. Ainsworth concludes that when a woman in the household dies, children are likely to replace that woman's domestic roles in the short run.

Death of an adult female is likely to negatively impact household health outcomes. Theory suggests that the health status of an individual household member depends on the individual's social, behavioural, genetic, cultural, political, climatic and geographic circumstances which determine the quantity and nutritional levels of food items consumed, income level, personal variables such as education and personal hygiene, and exogenous factors such as access to clean water, sanitary conditions, access to and quality of health services. Premature death of an adult member of a household may lead to decreased income which can result in poor nutrition and poor access to health services and lack of good care particularly for children resulting in poor hygiene thus negatively impacting the health status of the household in general.

Women are known as the “gatekeepers” of their household food security through the allocation of their (a) time in food production, preparation, distribution and marketing roles, and (b) income through sale of excess food or their involvement in formal or informal activities. Overwhelmingly, studies in developing countries show that women more than men spend more of their individual income on goods and labor time in activities which contribute to security of consumption for children and other household members while men tend to spend more of their individual income on personal goods (Haddad, 1999). Evidence exist from other studies indicate that women spend more of their income on the childrens' daily needs because they spend more time with them (Hamilton, 1984, Guyer, 1980, Quisumbing et al, 1995, Quisumbing et al, 1998). Hamilton 1984 purports that, since women's income tends to come more frequently and in smaller amounts, it may be more readily spent on household daily subsistence needs than lumpier seasonal income, which tends to come to men and is likely to be spent on more expensive items. In rural Africa women play a major role in agricultural production, with women accounting for 70% to 80% of the food (Neema 1998, Quisumbing et al, 1995, Quisumbing et al, 1998). Affected female-headed farming households or households heavily relying on female-dominated agricultural production may suffer severely in the short run through AIDS-related production losses in food and income (Neema 1998). In Uganda, a study by Asingwire showed that 44% of respondents reported reduced variety of crops in the last 10 years, in response to reductions in labor supply due to AIDS. Most of the reduction was more common in female-headed households (77.3%), especially those where the woman was widowed.

Such households also experienced a reduction in the quantity of food and cash crops produced. Thus the loss of an adult female in a household is likely to lead to increased poverty and food insecurity in affected households.

The major factors determining the vulnerability of households to the impact of the death of an adult female and the subsequent risk management strategy adopted by a household depends on (1) the household's socio-economic setting (internal factors peculiar to the household, such as the asset base, the household's access to resources, household size and demographic composition), (2) availability and accessibility of informal social support mechanisms, (3) availability and accessibility of formal social support mechanisms (Moser, 1996, Webb et al, 1992, Barnett et al 1995). The strength of the household in managing the impacts of the loss of an adult female in the household depends on the economic asset base which refers to capital, whether physical or financial, which provide a basis for generating income. The main economic assets include land, labor, financial capital from credit or savings, housing, household assets and livestock. These assets help the households to manage adult female death related income shock by making them be able to generate income to meet the stress created. Households that have higher incomes or better alternative resources are better able to cope with the impact of an income shocks such as HIV/AIDS (Rugalema, 1998, Topouzis, 1998). Evidence from southern Africa indicates that households that are more vulnerable to AIDS include those that are unable to secure non-farm incomes, unable to meet high peak seasonal labour demands, are highly dependent on female labour, inorganic fertilisers or credit, and are unable to substitute labour saving technologies or to switch from labour intensive to less labour intensive crops (Loewenson and Whiteside, 1997, Ledward, 1998).

Availability and accessibility of informal social support mechanisms is crucial for successful recovery from a death of an adult female in the household. Informal social support mechanisms refer to the inter-household relationships between the household and community members, friends, relatives, and neighbors. In times of stress, households usually resort to these relationships for help on the basis of trust and reciprocity. Social assets play an important role in strengthening households ability to manage shocks especially idiosyncratic shocks such as death in a household (World Bank, 1999). The role of the communities in mitigating the impacts of adult deaths depend on the socio-economic status of the community and the stage of the epidemic. The poorer the community and the more advanced the stage of the AIDS epidemic, the less likely the community is able to cope with the increase in number of orphans (McKerrow, 1998). Urbanization, economic and social hardship resulting from structural adjustment programs, western images, religious influences, and HIV/AIDS are having impacts on community and family structures (Ledward, 1997). Very little substantive evidence exists on the impact of HIV/AIDS on inter-household relationships, especially in terms of economic, psychological and social aspects relating to the way in which the community at large helps the affected household to cope.

Following closely with this conceptual framework, the thrust of this study therefore is to find out the impact of adult female death on key household welfare indicators: child schooling, health, food security and asset base and find out how formal and informal social support mechanisms can help strengthen surviving households.

### 3. Review of Zimbabwe's Socio-economic profile and the HIV/AIDS epidemic

At independence in 1980, Zimbabwe inherited an economy that was dualistic in character where service provision was based almost exclusively on race and income. After independence, the new Government set out to redress the marked inequalities in the health, education and other social infrastructure. Real attempts to satisfy expectations were reflected in the pattern of public spending in education, health and the development of other social infrastructure in the first decade. This resulted in substantial progress in the social sector with social indicators such as infant mortality rate, maternal mortality, immunization coverage, school enrollments indicating substantial gains (UNICEF, 1994). This however was not to last. However in the late 1980s, the country experienced economic difficulties; characterized by declining investment, low growth rates, weak export performance, increasing debt burden and increasing unemployment. The government realized the problems resulting from the macro-economic policies it was pursuing and it was in this context that in 1990, the government began to implement a structural adjustment program. The last ten years have seen a rapid economic downturn, largely provoked by crippling taxation, devaluation of the Zimbabwe dollar and high interest rates. Countrywide, the macroeconomic reforms implemented since 1991 have resulted in very high inflation which has eroded the real incomes of low wage earners and the poor in general and severely crippled their purchasing power. GDP growth has not kept up with population growth, and the performance of GDP/capita has been poor. Percentage annual GDP change has been on the decline since 1996. According to figures released by the International Monetary Fund (IMF), Zimbabwe's international reserves averaged less than \$200 million in 1999, down from 596 million in 1995 and 599 million in 1996.

The economic growth rates have also been on the decline, from 8.2 percent in 1996 to 3.7 percent in 1997, 1.5 percent in 1998 and 1.2 percent in 1999. Annual increase in formal employment has been very small. Massive retrenchments in the civil service resulted in many people losing their source of regular income. As part of macroeconomic reforms, health and education fees were increased and enforced, thus lowering the affordability of these services by low income households (Bassett et al, 1997). The general decline in the economy has resulted in increased poverty and poor performance of the health sector with some health indicators declining to below 1980 levels (Mutangadura, 1998). In urban areas, households are facing rising prices of basic food because of inflation. In 1995, 62% of the national population lived below the national total consumption poverty line of Z\$2132.33 per person per annum and about 46% of the population were living below the national food poverty line, indicating that these households are unable to meet their basic nutritional needs (MPSLSW and UNICEF, 1997).

Against this backdrop of an economic downturn has come the unparalleled crisis of HIV/AIDS that is now threatening the productive sector and seriously affecting the health of women and children. Zimbabwe has one of the highest AIDS infection rates in the world, with the adult HIV rate estimated to be 25.8% (UNAIDS, 1999). At least 700 people die from AIDS every week (NACP, 1999). Zimbabwe's last sentinel surveillance survey was undertaken in 1997. The reported HIV percentage rates among antenatal women in rural areas varied from 7% in Karirangwe, to a high of 50.8% in Buhera. In urban areas reported HIV percentage rates among antenatal women varied from 28% in Harare, to a high of 37.7% in Mutare. The fact that the highest prevalence rate nationally is

found in a rural area appears to indicate that HIV is spread throughout the country and confirms the mobility of the Zimbabwean population. The relative ease with which people travel between urban and rural areas may have contributed significantly to the rapid spread of the disease, as well as factors such as high levels of untreated STIs (Kerkhoven and Sendah, 1999). The data also shows a typical upward trend in the sero-prevalence in all areas over the years covered by the surveillance exercise.

The global distribution of HIV infection indicate adult male and female infection rates to be the same and children (0-5) to account for 4% of the cases (UNAIDS, 1999). However UNAIDS indicate that more women than men are being infected. In 15 studies conducted in both rural and urban areas in nine different African countries, results suggest that between 12 and 13 African women are infected for every ten African men (UNAIDS, 1999). According to the UNAIDS, AIDS is becoming the leading cause of death in young adult women (15-49). Specific information on adult female mortality is limited, HIV related illnesses are now the second main cause of death overall and the biggest killer in the 25-44 age range (WEDO, 1999). The cut backs in the social sector budgets, cost recovery measures, the AIDS epidemic and declines in real incomes has resulted in increased poverty, increase in adult mortality and a decline in major health and social indicators to below 1980 levels (Mutangadura, 1998). Whereas total crude death rates had fallen to 8 per thousand in 1988, it rose to 12.2 in 1997 and will continue to rise in the medium term as those who are currently HIV positive develop AIDS and die (CSO, 1998). Manicaland province has the second highest crude death rates which have shown an increase from 11.6 in 1992 to 13.7 in 1997 (CSO, 1998). The HIV/AIDS epidemic has resulted in a decrease in the life expectancy which had improved to 62 by 1994, to fall down to 53.4, 49, and 44.1 in 1996, 1997 and 1999 respectively (UNAIDS, 1999).

The loss of the breadwinner, who may be responsible for bringing in non-agricultural income, means that the woman farmer has to devote her labor to agriculture to earn a living. Research in Mashonaland Central Province (FOST 1998) highlighted the fact that if the father dies first, the family usually experiences severe hardships. The widowed wife often suffers severe financial difficulties, particularly when relatives claim all the belongings of the husband. Women often do not have marriage certificates or other documentation to protect their rights (and wills are rarely drawn up). Income from a single parent may not be enough; findings from the study indicated that single widowed mothers had children drop out from school early. When the woman eventually dies, what happens to the household? Foster and Makufa (1998) indicate that a number of child headed households have emerged. Households headed by the elderly, mostly grandparents are emerging. These households are likely to fall deeper into poverty and food insecurity as fewer family members have the energy and time to earn income. Close to 1 in 4 rural households are already fostering one or more children that are not the biological children of either parent(s) (Foster and Makufa, 1998). The high HIV prevalence means that many children who lose one parent eventually lose the other. Child-headed households will face all of the social and economic dislocation suffered by all families in the face of death and loss of income, but in addition these children will be open to abuse, exploitation, neglect, malnutrition and the lack of adult love and affection, socialisation, guidance, education and support. The number of orphans who lost their mother or both parents to AIDS (while they were under the age of 15) has been on the increase. In Zimbabwe, the estimated number of

orphans who lost their mother or both parents to AIDS since 1985 is estimated to be 450 000 (UNAIDS, 1999). The National AIDS Co-ordination Program- NACP estimates the orphan population to be growing by 60 000 children per year.

Throughout history the extended family as a safety net is still by far the most effective community response to income crisis (Mukoyogo and Williams, 1991). Traditionally it is assumed that the extended family and the community at large assist the household socially, economically, psychologically and emotionally. This is a common practice in most parts of eastern and southern Africa. In Zimbabwe, traditional strong family ties have been the best social insurance against starvation (Thompson, 1993). These ties include regular urban-rural inter-household income transfers. When the crops fail, family members in town bring cash and purchased food to rural areas. When a family member in town loses a job, they are sent food from the rural areas or are received back on the rural homestead (Thompson, 1993). Literature reveal that households experiencing an income stress due to AIDS, send their children to live with relatives: Sauerborn et al, 1996 in rural Burkina Faso, SAfAIDS (1998) in rural Zambia, Barnett et al (1995) in Uganda, Lwihula (1998) in Kagera region, Tanzania, Rugalema (1998), Drinkwater (1993) in Zambia, Kwaramba (1997) in Zimbabwe and Mutangadura et al (1999) in Zambia. Relatives will then be responsible for meeting the children's food requirements. Relatives, friends and neighbors may provide both moral and material support to the sick on the assumption of future reciprocation. Foster et al (1995) found, in an orphan enumeration study in Mutare, that all 340 orphans he identified were absorbed into extended family structures. The role of maternal kin especially grandmothers and maternal aunts, was found to be increasing, as 84% of orphans in Foster's study were cared for on the maternal side. In Masvingo province, a study by UNICEF revealed that of the 11 514 orphans and children needing protection in Mwenezi and Masvingo districts, over 11 000 of them were being cared for by relatives living in the community. The majority of the care givers were women, widowed and over 50 years old (frequently grandmothers) (UNAIDS, 1999).

Besides the extended family, many communities have traditional indigenous groups such as savings clubs, burial societies, grain-saving schemes and labor-sharing schemes rotating and savings club associations, and expensive loan clubs called chimbadzo (the interest rates can be substantial) which play a major role in helping households cope with the death of an adult. These informal groups provide a wide range of support which include loans, food, funeral assistance, labor and cash. For a detailed review of these informal coping social support mechanisms refer to UNAIDS, 1999, A review of household and community responses to the HIV/AIDS epidemic in the rural areas of sub-Saharan Africa.

However a lot of questions are still unanswered as far as how long inter-household relationships can absorb the impacts of the AIDS epidemic. With the increase in the number of AIDS-related deaths and the economic hardships caused by the economic environment, both the extended family safety net and the existing local support networks are increasingly under pressure severely restricting the effectiveness of the support mechanisms (Thompson, 1993). The emergence of child headed households is considered by most authors to be an indication of that the extended family is under stress and can not cope. Barnett and Blaikie (1992:112) state that in Uganda indigenous mechanisms

for managing orphans in the kinship and household system are now reaching their absorptive capacity. In 1997, Foster (1997) found that the relatives of 23 out of 30 child headed households in their study in Mutare, Zimbabwe were unwilling to look after the children. The main reasons given were that it could affect their standard of living because they had no love, time nor space for the children and the stigma attached to children whose parents had died of suspected AIDS. In a study to find the role of relatives, friends and community in helping cope with an income shock in Zimbabwe, Mutangadura et al (2000) found that (89%) of the sample of 797 households reported that it was difficult nowadays to get help from relatives and friends. The major reason cited was high inflation, followed by too many commitments in the community because of frequent illness and deaths nowadays and breakup of family ties. The extent to which informal institutions such as extended family and kinship networks are able to provide for the AIDS afflicted households depends on the extent of families and village communities are impacted. In localities where prevalence of AIDS is very high and many families are affected, the capacity of the social capital to provide for the needy is severely curtailed (Tibajuka et al, 1995). As more households are affected by the AIDS epidemic, the literature indicates that some communities are failing to absorb all orphans from AIDS because of lack of resources, urbanization and migration (Webb, 1997). This failure is seen, for instance, in the existence of unsupported child-headed households or, in the World Bank Kagera study of the disappearance of some households. Nevertheless many community-based orphan support organizations have been initiated as the number of orphans increases. It is important therefore that this study find out whether the communities are still able to help households cope following the death of an adult female.

Very limited forms of formal social protection exist to cushion the impacts of the death of an adult female on households in Zimbabwe. The main forms of public social protection measures that exist in Zimbabwe include public assistance, social development fund, free food distribution, grain loan scheme and the child supplementary feeding program (Kaseke, 1997). These services provide food, and assistance to health and education. The effectiveness of these public schemes is however undermined by lack of adequate resources, failure of the schemes to generate self reliance in the beneficiaries and difficulties for beneficiaries to access (Kaseke et al 1997, Mutangadura et al, 1999). The main form of formal support to orphaned children in especially difficult circumstances are institutional support such as orphanages. By 1994, Zimbabwe had 38 registered institutes which were catering for 2 794 children, only a small fraction of the total orphan population (Parry, 1998). As the number of children orphaned by AIDS increases, the demand for orphanages may well increase. Review of literature reveal that orphanages are unlikely to be sustainable on financial grounds because of the heavy, long-term burden which they place on the Department of Social Welfare or other organizations responsible for running them. According to Ainsworth and Over (1997), the cost of supporting a child in an orphanage was about eight times the cost of support in a foster home. In Ethiopia, for example, where GDP per capita is around \$100 per year, institutional care costs about \$300-500 per child per year (Williamson, 2000). It is also clear that such orphanages are rarely in the best interests of the children on social grounds in the long term (Jackson, 1997). Mukoyogo and Williams (1991), noted that in Tanzania, by leaving their village, these children forfeit their right to inherit their parents' land and will lose their sense of belonging. They also experience poor socialization and loss of cultural roots which prove to be very costly in the long term as it results in

maladjusted adults and perpetuation of the epidemic. Children in orphanages are not fully integrated into the community because the institutions operate in isolated communities, with integration taking place only in school (Powell et al, 1994).

In 1999, Zimbabwe's cabinet approved an orphan policy which reaffirmed the position that orphans should be placed in institutions only as a last resort. The policy also emphasize that targeting support directly to the community is more effective. The Department of Social Welfare piloted models aimed at strengthening community-based responses to orphan support. Although the pilot models were found to work, the Department of Social Welfare has limited capacity to replicate the programs to a national level. However a number of other NGOs are operating in some areas. FOCUS (Families, Orphans and Children Under Stress) is an example of a program that is assisting children in Mutare.

The Families, Orphans and Children Under Stress (FOCUS) community-based program was established in 1993 in a rural area by a local church with technical support from the Family AIDS Caring Trust (FACT) a non-governmental organization. The main activities of the project include the recruitment of volunteers from the community to identify, register and visit orphans within a two kilometer radius of their homes. Volunteers are provided with basic training and they visit orphan households twice per month, but those orphans in greatest need, such as those in child-headed households are visited weekly. Orphans are supported materially with agricultural inputs (such as maize seed and fertilizer), primary school fees, food and blankets. Other activities undertaken by FOCUS include: assistance in ploughing orphans' fields, repairing of houses, health care, child care, income supplementation and income-generating activities. The later includes the provision of material inputs to community-based projects such as poultry and vegetable gardens. Income from income-generating projects is used to support destitute families. The FOCUS program does not differentiate "AIDS" orphans from other orphans, and tries to target those in greatest need. By 1999, the FOCUS program had 180 volunteers in 8 rural sites and one high-density urban residential area in Mutare (FACT, 1999). The total catchment of the program is 50 000 households with 2764 orphan households assisted. The total cost of the FOCUS program in 1998 was US\$20 750 of which 59% were direct expenditure on the program in the communities (material assistance to orphans, volunteer allowances and uniforms, training and meeting costs) (FACT, 1999). The cost of the program per family was US\$ 9.54 for 1998. The FOCUS program has been replicated in some other provinces in the country and other programs have been established in Zambia, Kenya and Malawi following visits to FOCUS sites as part of FACT's regional training program.

The conceptual framework has raised the importance of analyzing the impact of adult female death in terms of the major household welfare indicators: education, health, food security, household domestic chores and household asset base. In this context it is important to identify the factors that the internal and external factors that help household manage the loss of the adult female. This calls for close examination of the household's resource endowments, the available inter-household support linkages and the formal support network. A review of the informal social protection mechanism in Zimbabwe has revealed that informal networks are a major source of support in managing AIDS and drought. The review of the formal social protection schemes available has shown that public schemes are limited because of resource constraints but that community-based interventions with some formal support are helping communities support surviving orphan

households.

#### 4. Methods

The study was conducted in Manicaland province of Zimbabwe where the 1995 surveillance data indicated a provincial antenatal clinic HIV rate ranging from 14.0% in a rural area Rusitu to 34% in the province's capital city (Mutare) and 67 % in a smaller town in the province. The sites selected for this study were an urban and a rural site. The urban site was a high density suburb, Sakubva township, located in Mutare, the provincial capital. Mutare is characterised by high HIV prevalence rate estimated to be 37.7 in 1997. The rural site was Marange which is serviced by a rural mission. Both sites are part of the Family AIDS Caring Trust (FACT) operating areas. FACT runs an orphan support program (FOCUS) in the areas. A total sample of 215 of purposively selected households fostering maternal orphans was interviewed (Mutare (n=101), Marange (n=114)). The research design adopted in this study has some limitations. (1) Because the sample was purposively selected, the findings can not be generalized for the entire population of deceased adult females because deceased adult females who did not have a surviving were not included. (2) This study tried to capture the impacts of adult female mortality retrospectively, which inevitably gives rise to problems of recall and the problem that some households might have dissolved and relocated elsewhere.

Both qualitative and quantitative research methods were used. Qualitative methods involved three focus group discussions with communities in each site and key informant interviews. Quantitative methods involved administering a household questionnaire on the purposively selected sample. The respondent was the foster parent (in many cases was a relative), surviving husband with the help of the deceased's children. Data was collected in February and March 2000.

#### 5. Results

##### **Socio-economic characteristics of sampled households**

The socio-economic impacts of adult female death on household welfare can be found by examining what the welfare of the surviving orphans is like compared to when the adult female was alive. More surveyed households were participating in the FOCUS program in the rural site (55%) than in the urban site (24%). About forty percent of the interviewed households had orphans who had lost both parents. Sixty five percent of the households where the deceased adult female used to live before her death were reported to be no longer in existence in both the urban and rural sites. This indicates that when an adult female dies, her household is likely to dissolve as her children are taken up for fostering by relatives. The leading category of foster parents are grandparents accounting for 50% in urban areas and 52% in rural areas. Most grandparents were from the mother's side 65%. Characteristics of the head of the foster household reveal that 62% of the total foster household heads are women, with the proportion being higher in urban than the rural site. Of these female headed foster households, 60% are grandparent headed, 25% other relative, 13% adult child headed and 2% child headed. In addition, 40% of the female foster heads are aged 60 and above. What emerges is the fact that when an adult female dies, her children are to be likely fostered by an elderly

woman whose main business activity is informal. This calls for mitigation programs to pay attention to this gender issue.

**Table 1 Demographic characteristics of sampled households by site**

	Urban(n=101)	Rural (n=114)	Allareas(n=215)
<i>% of households participating in FOCUS program</i>	24	55	41
<i>Type of orphan-hood (% of households)</i>			
maternal	58	57	57
both parents deceased	42	43	43
<i>Is the household still in existence after death of adult female? (% of households)</i>			
Yes	33	35	34
No	67	65	66
<i>Type of household fostering maternal orphans (% of households)</i>			
child headed	0	4	2
household headed by an adult child >18years	21	7	13
grandparent headed	50	52	51
surviving husband	9	11	10
related foster parent	20	26	24
<i>Sex of head of household (% households)</i>			
Male	33	42	38
Female	67	58	62
<i>Marital Status of head of household (% households)</i>			
Married	34	44	39
Divorced	1	3	2
Single	18	7	12
Spouse deceased	48	47	47
<b>Average age of head of household (% of households)</b>	52	55	53
<b>Average household size (% of households)</b>	5.6	5.4	5.5

Nine out of the 12 surviving husbands in the urban area remarried within the first year of the death of the wife. All the 10 surviving husbands in the rural site remarried within the first year. “Some men marry the next day or week” (Focus group participant). In some of the cases, the surviving husband was given a sister of the deceased by the in-laws to replace the deceased wife. Focus group discussions revealed that this was a customary practice which was still being practised by some households to ensure that the children are raised by a maternal relative. However with the current fears of HIV/AIDS, participants indicated that parents now use their discretion to see whether their daughter could have died of AIDS or not before they send their other daughter to take up the role of the deceased. The husband is also only given another wife if they were in good talking terms and had paid lobola (brideprice).

The socio-economic characteristics of the households interviewed in the study reveal that a very small proportion of the household heads are formally employed (16%), with the percentage being smaller in rural (4%) than urban areas (30%). This is understandable as there are fewer formal employment opportunities in the rural areas than in the urban areas. What is striking however, is the fact that of those who reported to be formally employed, only 36% of them are women in female headed households. Household head's formal income is relatively low with more than 50% of the formally employed household heads earning Z\$2000 or less in both areas (the percentage is higher in the rural site).

More than 70% of the interviewed foster household heads relied on informal sources of income. The leading informal business activities in the urban site were urban agriculture and food vending followed by cloth vending and knitting and sewing. The dominant informal activity in the rural site was agriculture followed by craft and food vending. Sixty seven percent of those household heads who were reliant on informal activities were women. This confirms the fact that women in sub-Saharan Africa are concentrated in the informal sector. However informal sector jobs are generally low paying. As indicated in table 5 informal activities are low paying, with 75% of the whole sample indicating their informal incomes to be Z\$500 per month or less.

House ownership is an indicator of wealth with households who live in brick and corrugated houses expected to be wealthier than those in wooden structures or huts. About 18% of the total surveyed households were living in wooden structures in the urban area and 17% in huts in rural areas. A closer examination of these households revealed that 50% of them were fostering a double orphan, 31% of them had a child who was not attending school after the death of the mother, and 67% of them were female headed.

What emerges in this section is the fact that when an adult female dies, her children are likely to be fostered by an elderly woman whose main business activity is informal. The informal business activities are low paying and the prevailing poverty can deprive children of food and education security.

#### **Anyone who died before the adult female died?**

It is important to know who died before the death of the adult female death so that one can relate whether the death of the adult female was related to the family member's death. One major characteristic of HIV/AIDS is that a family experiences more than one death. Results from this study indicate that 37% and 30% of deceased adult females in urban rural site respectively had a relative who had died before their death. In both sites about 30% of the deceased adult females had lost their husbands before their death while about 50% had lost a child. Of the total children who died before the adult female, 62% were aged 2 or less. The leading causes of death in the children were measles, diarrhea coughing/TB and pneumonia. The leading causes of death in the adults were HIV/AIDS, coughing/TB, malaria and cancer.

#### **The Socio-economic Profile of Deceased Adult females**

The number of living children left by the deceased ranged from 1 to 11 but the average was about

3. The average age at death of the deceased adult female was 35. Sixty percent of the deceased adult females had primary education, 31% secondary education, 2% tertiary education and 7% no education. This is not so surprising given that women have poor access to education. However this determines the type of income generating opportunities that the women end up taking up. As shown in table 2, only 19% of the deceased adult women had a formal job before their death and the dominant type of job reported was civil servant. Sixty three percent of the deceased adult women were informally employed before their death. The dominant type of informal employment were agriculture, food vending, knitting and sewing and clothes vending. Ninety five percent of the informally employed deceased women had an income that was Z\$2000 or less (this is an estimate given by the key respondent). Even though the income that the deceased adult female earned was low, 70 percent of households in both areas indicated that the adult female household had experienced a decrease in the amount of income available to the household as a result of the death of the adult female. This implies that in some households women were a major source of income security.

**Table 2 Socio-economic characteristics of deceased adult female**

	Urban (n=101)	Rural (n=114)	All areas (n=215)
<i>Average number of children of deceased adult female</i>	3.3	3.2	3.2
<i>Average age at death of deceased adult female</i>	35.4	33.9	35
<i>% of deceased adult female who were formally employed</i>	14	4	9
<b>Deceased's formal monthly income (%)</b>	n=14	n=5	n=19
Z\$0 - 500	6	50	15
Z\$501-2000	44	25	40
Z\$2001-4000	0	25	5
>Z\$4000	50	0	40
<i>% of deceased adult female who were informally employed</i>	57	68	63
<b>Deceased's informal monthly income (%)</b>	n=58	n=77	n=135
Z\$0 - 500	39	77	62
Z\$501-2000	50	22	33
Z\$2001-4000	7	1	4
>Z\$4000	3	0	1
<b>Deceased's Informal Activity (%)</b>			
Food vendor	28	10	18
Knit and sew	31	20	24
Cloth vendor	28	9	17
Urban agriculture/ agriculture	12	60	40
Poultry/rabbitry	2	1	1

#### **Main cause of death of deceased adult female**

The leading reported causes of death were child birth, coughing/TB, HIV/AIDS, malaria, diarrhoea, high blood pressure and meningitis. The conditions were self-reported by the main respondent with

no examination of medical records as confirmation. Tuberculosis and diarrhoea are primary manifestations of AIDS, while meningitis and malaria mortality can be AIDS related also. Sixty three per cent of the deceased women had been ill for more than three months. Close examination of those women who had been reported to be ill for more than three months (a total of 135) revealed that the major causes of death were coughing/TB (23%), HIV/AIDS (20%), child birth (10%), diarrhoea (9%), malaria (8%) and hypertension (7%). A closer look at the relationship between adult female who had died after being ill for more than three months and a related household member who had died earlier revealed that 33% of the deceased adult female had a spouse who had died earlier while 48% had a child who had died earlier. There is also a strong correlation between adult females who died after three months and the cause of death of the related household member who had died before the adult female, with 23% reported to have died of HIV/AIDS, 21% coughing/TB, 14% diarrhoea, and 21% measles. These results imply that the leading causes of death in adult female in this purposively selected sample was AIDS related. AIDS was indicated in focus group discussions to be the leading cause of premature adult female deaths in both urban and rural sites. Participants indicated that they suspected it was AIDS because the deaths usually took both the adult female and her spouse and at times the youngest child in very short time intervals.

Before the adult female died, her relatives were reported to play a major role in taking care of her. The woman's nuclear family (her parents and siblings) and the husband (if he was alive) were the ones responsible for taking her to a health facility and meeting the health costs. In the rural area where the adult female was ill at her own house, her mother or sister came to live with her and help take care of the children until she died. However if there was some misunderstanding in the marital family such as unpaid lobola, the woman's nuclear family took their ill daughter to their home where she will be taken care of until she eventually died. The main sources of income to meet medical costs included relatives (mainly maternal), wage earnings, savings, medical aid, husband, social development fund and sale of an asset. Prevention of long illness partly through improved health services and behavior changes (case for HIV) is the main strategy that can be used to prevent death of an adult female.

The average funeral costs were Z\$5716 and Z\$3561 in urban and rural site respectively. Maternal relatives were responsible for meeting funeral costs in 80% of the cases, followed by church, savings, wage earnings of deceased and husband. This implies that when an adult female dies, her relatives, particularly her nuclear family was the one which experienced a diversion of resources to meet funeral costs.

### **Change in asset ownership following the death of an adult female**

Households were asked whether they had sold or lost an asset due to the death of the adult female. Overall 24 percent of all the surveyed household indicated that they had sold an asset to cope with the death of the adult female, with the percentage higher in rural areas. The most commonly sold items were cattle, goats, furniture, clothes, televisions, poultry and wardrobe. The dominant reasons for selling assets were marriage, to buy food, meet funeral costs, and pay school fees. Basing on these results one can infer that assets play an important role in managing income shock related to the death of an adult female. However in the case where production assets are sold such as livestock, it

is important to note that such families maybe deprived of future ability to sustain production.

Households were also asked whether they had gained an asset as a result of the death of an adult female. Nineteen percent of the surveyed households indicated that they had gained an asset due to the due of an adult female. The most commonly gained assets were clothing and furniture. The main reason for gaining these assets were inheritance by the surviving children and forced marriage, in the case where the husband had not paid a brideprice. From this finding one can conclude that some assets are gained after the death of the adult female but these are only limited to clothing and furniture.

### **Impact of adult female death on child education welfare**

A significant finding from the study was that a total of 27 households (13% of interviewed households) had children who were unable to go to school after the death of the adult female (Table 3). The number of households was higher in the urban (70%) than rural site (30%). The main reason why households had failed to send children to school was lack of money. Sixty percent of the households with a child who was not going to school after the death of the mother were female headed, 52% had both parents deceased and 60% of the households reported that the household of the deceased adult female had dissolved after her death. The dominant household head in the households with a child who was not going to school after the death of the mother were a related foster parent (48%) and grandparent (48%). In general these households had household heads who reported a very low income ie. 80% of the household heads received Z\$500 or less per month.

Households reported that FOCUS, relatives, foster parents and surviving parent were the ones mainly responsible for paying the fees. The number of households with children not going to school was higher in the urban site because FOCUS did not have a very good coverage of its program in the urban area than it did in the rural site. Primary school fees in the sites were reported to be ranging between US\$6<sup>1</sup> to US\$20 per year in urban areas and US\$2 to US\$6 per year in rural areas. Secondary school fees for day scholars ranged from US\$59 to US\$80 in urban areas. A child requires about US\$25 to buy a complete uniform set for the year (includes a dress for girls or short and shirt for boys, shoes, socks and jersey). Students commuting to their school, particularly secondary school students in urban areas require about US\$12 per month to meet transport costs. Secondary school children are also expected to pay examination fees for examinations held in the last year of their high school.

**Table 3      Impact of adult female death on child education welfare**

	<b>Urban (n=101)</b>	<b>Rural (n=114)</b>	<b>Allareas (n=215)</b>
<i>Average number of school going children per deceased adult female</i>	2.4	2	2.2
<i>% households with children going to school before the death of the mother</i>	98	100	99
<i>Reason for children not going to school before the death of the mother</i>	n=2		n=2

<sup>1</sup>At the time of the study US\$1 was equivalent to Z\$38

Financial constraints ( <i>% of households</i> )	100	0	100
<i>% households with children going to school after the death of the mother</i>	80	93	87
<i>Reason for children not going to school after the death of the mother</i>	n=20	n=7	n=27
Financial constraints ( <i>% of households</i> )	100	100	100
<i>Length of time children not in school (% of households)</i>	n=20	n=7	n=27
1 to 3 months	5	0	4
3 to 6 months	17	33	21
> 6 months	78	67	75

About 22% of the households indicated that fees are not paid in full particularly by relatives and foster parent. The main coping mechanisms resorted to when fees are not paid in full included withdrawing children from school, asking for help from a relative, borrowing from the community, use income from informal activities and sale of assets. Withdrawing children is short-term strategy which has permanent long-term effects that could make it difficult to reduce poverty in the longer term. Thus there is need to provide assistance in the form of school fees to needy households so as to prevent a potential negative impact on human development. The role that FOCUS is playing in providing school fees for primary school children was widely acknowledged and recommended by participants in focus group discussions. However one major needy gap identified was secondary school fees assistance as children who might have been assisted by FOCUS for their primary education are failing to go into secondary schools because of lack of financial resources to pay for the school fees.

### **Impact on food consumption**

One impact of female mortality can be linked to the fact that the food security status of the children maybe affected and become poorer. Households were asked how their consumption of a particular food commodity had changed since the death of the adult female. Households indicated that they had decreased consumption in most of the food commodities with the exception of kapenta and vegetables. These commodities tend to be cheaper implying that some households are switching from expensive commodities to consume more of these commodities. More households in the urban than the rural site indicated a decrease in the consumption of maize meal. Food items for which many households indicated a decrease in consumption were meat, cooking-oil, bread, sugar, milk, and eggs. However caution needs to be exercised when interpreting the decrease in food consumption because it is difficult to separate the impact of adult female death from impacts caused by rising inflation. Nevertheless it is important to note that the food security situation of the surviving family was poorer after the death of the adult female.

Key informant interviews with the staff of FOCUS revealed that they were getting reports from headmasters that the students that they support with school fees were fainting at school because of hunger. Many children were surviving on one meal per day given in the evening. It is therefore important that specific nutrition supplementary programs be targeted to needy children. Such supplementary meals can be provided in schools and clinics.

**Table 4      Percent of households indicating a decrease in the consumption of food item**

Food item	Urban (n=101)	Rural (n=114)
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

For households who indicated a decrease in the consumption of various food items the main reasons cited were (in rank order):

- Inflation, commodities are now too expensive
- Lack of money
- Family too big
- Death of adult female

The dominant forms of coping strategy adopted by households included decreased consumption, switching to cheaper goods and stop consumption of the items altogether. Focus group discussions revealed that many households had reduced the number of meals per day to one major meal in the evening. In urban areas the problem is more severe with some children left with no choice except to beg.

Some children who are young (10 to 15 years) are forced to seek casual employment in order to buy food. Some children become destitutes. Children in are stealing maize cobs to survive. (Key informant, Sakubva).

In rural areas it was less common to see children begging, but key informants indicated that children resort to eating wild produce (fruits and vegetables) when there was no food.

### **Who is responsible for deceased adult female's domestic duties?**

Households indicated that the deceased adult female used to do a number of domestic duties which included cooking, laundry, cleaning the house, taking care of the young children, wood and water fetching, shopping, going to the grinding meal and overall socialization and discipline of children. In households with orphans being fostered by grandparents, the domestic duties were reported to be done by the eldest children of the deceased and the grandmother was responsible for the overall socialization and discipline of the children. However some sentiments were raised in focus group discussions that grandparents may find it difficult to control and discipline adolescent children resulting in the children having delinquent behavior. In households where the orphans were being fostered by a relative such as an aunt, the orphans were responsible for some of the domestic chores such as laundry, cleaning, wood and firewood fetching. In households where the surviving husband

had remarried, orphans were reported to be doing some of the domestic duties and helping out their stepmother. The father was responsible for overall socialization. In households where the father had not remarried, the children did most of the domestic duties, with the father responsible for their overall socialization. This study like in the study by Ledward on a commercial farm in Mashonaland Central, girl orphans and older boy orphans appeared to be adopting adult roles earlier. They were engaged earlier in various domestic duties such as fetching water, washing plates, washing clothes and cooking, had less contact with responsible adults, and left school earlier. These findings reveal that maternal orphans have to assume some of the domestic duties which their mother used to do. In this regard adult female death places demands and pressure on orphans and this can result in emotional insecurity.

### **Household coping responses to decrease in income following death of adult female**

The study revealed that a variety of coping and mitigating strategies were adopted by households. The dominant households coping responses from surveyed households in both areas included remittances from family members, informal business activities and agriculture. In the urban site the other coping mechanisms adopted included borrowing from informal sources, use of savings, and subletting. In the rural site the other coping mechanisms adopted included sale of assets, migration to other areas in search of employment and child labor. Further disaggregation of the data reveal that female-headed households relied more heavily on remittance from family members, informal activities and agriculture and subletting while male-headed households depended more on use of savings followed by borrowing from informal sources and remittances from family member. One major form of informal activity that households headed by younger foster women were adopting was cross border trade taking foodstuffs into Mozambique and bringing back imported second hand clothing for sale.

**Table 5 How households cope with adult female related decrease in income**

<b>Coping strategy</b>	<b>Urban (n=101)</b>	<b>Rural (n=114)</b>
Remittance from family member	43	32
Informal business activities /agriculture	27	48
Use of savings	10	1
Sell assets	0	4
Borrow from informal institutions	6	3
Subletting	10	0
Migrate in search of employment	0	6
Child labor	4	7

### **The role of the community in helping the household cope**

It is important to know what happens to inter-household relationships when an adult dies between the bereaved household and the rest of the community. Traditionally it is assumed that the extended family, and the community at large assist the household socially, economically, psychologically and emotionally. As more households are affected by the epidemic it is important to find out whether these social support networks continue to operate in the expected way.

Households were asked to indicate the role played by the extended family and the community in

helping affected households cope with the shock. The results show 46% and 51% of surveyed households in urban and rural areas respectively had asked for some help from relatives, friends and neighbors within the last 12 months (see table 6). The help sought was mainly in the form of food (maize meal, the staple food) and money. A small proportion of households asked for help in the form of clothes, credit and child fostering. However help from relatives and friends is not easily obtainable as is reported by more than 95% of the households in both sites. Focus group discussions revealed that usually the community helps needy households by offering food and clothing and help in ploughing and rarely school fees and health fees assistance. When key informants were asked the areas in which communities are failing to provide support, they unanimously pointed out that school fees, health fees and rent are the areas in which the community fail to provide support. Even though they said the extended family help with food and clothing, sometimes the help is not on a regular basis. Both key informants and focus group discussion participants pointed out that community help was not forthcoming anymore because of inflation, lack of money because of high unemployment, and too much commitment as everyone is being affected by the high morbidity and mortality being experienced in the country due to the AIDS epidemic. What the research revealed is that the community per se is failing to meet the needs of households in need because of the reasons cited above, and if at all they do help the main form of help is food. Only close relatives (extended family) still offer help in the form of fees, food and shelter. Focus group discussions also revealed that help from maternal relatives is usually more sustainable than that from paternal relatives. This finding implies that the community needs external help in order to help households that are in need.

Relatives do not want to take care of orphans anymore because they do not have anything to support them with (Day care teacher, Sakubva).

Community members do not have any resources to give to the needy households, they do not have any money or any grain (FOCUS volunteer, Marange rural site).

Things are now too expensive and money is so scarce (Focus group discussion participant, Sakubva).

**Table 6      Role of family and community in helping households cope with adult female death**

	Urban (n=101)	Rural (n=114)
<i>Have you asked for help in the past 12 months?</i>		
Yes	46	51
No	54	49
<i>Ask who?</i>		
Relatives	74	65
Friends	11	5
Neighbors	15	30
<i>Form of help</i>		
Food	47	63
Money	42	30
Credit	5	2

Clothing	5	0
Looking after children	2	6
<i>Is it easier to get help from friend nowadays?</i>		
Yes	5	2
No	95	98
<i>Reason why not easy</i>		
Breakup of family ties	2	3
Too many commitments because of illness and death	20	25
Inflation related	58	39
Too much dishonesty	6	9
Too much begging	4	6
Spirit of individualism	10	17

### **The role of existing informal social support mechanisms**

Very few households reported benefitting from informal social support mechanisms. The types of informal coping mechanisms reported by households were savings clubs, burial societies and church based support. Of the three types of informal social support mechanisms, the church based support benefitted more households. Churches were reported to support maternal orphans in the form of food and school fees. However support from the church was reported to be limited to church members and those who benefit from it indicated that the assistance was not regular and was inadequate. In the rural site, discussions with key informants and focus group participants revealed that some households were benefitting from grain-saving schemes. In this scheme people in the community contribute labor in the field of the chief or headman and store the produce for households in need. Discussions with key informants revealed that these grain-saving schemes have formed an important source of community support to affected households and they can help mitigate the impacts of loss of an adult due to the AIDS epidemic if replicated to areas where they are non-functional. However participants indicated that there is need to provide fertilizer and seed to help ensure that the harvests are meaningful and can stretch a long way to help needy households.

### **The role of informal business activities in mitigating the impact of adult female death**

Focus group discussions and key informant interviews revealed that households were resorting to a wide range of informal business activities in order to cope with the death of an adult female. The most dominant activities in urban areas were food vending and urban agriculture. In rural areas, the dominant informal activity was agriculture. Other informal activities included clothes vending, sewing, selling knitted products, repairs, beer vending, selling wild produce, and owning tuck-shop. The main constraint which households faced in informal vending activities was too much competition as there are now too many people involved in informal activities and the loss of purchasing power of potential buyers because of lack of money caused by unemployment and inflation. Other constraints cited included financial constraints, non-availability of inputs, lack of training and poor infrastructure.

Key informant indicated the provision of financial capital and offering management and skills

training as key solutions to the problems affecting informal business activities. No household indicated any use of micro-credit in both the urban and rural sites. The major reason cited for not using micro-credit were the current high interest rates which are very prohibitive for anyone to borrow.

Self help projects or informal business activities are increasingly viewed as a means to improve the income of community members and help mitigate the effects of HIV/AIDS. Through self-help projects children can be taught methods of self-sustenance and be able to move away from depending on relief. FOCUS has initiated a range of self-help projects which include gardening, poultry, crocheting and sewing. In the rural site the income generating projects that were operational were the mushroom, and gardening. FOCUS provides the inputs for the projects. Other income generating projects which are being planned for implementation in the future include oil expressing using locally grown sunflower seed, soap making, peanut butter making and grinding mill. Income from the projects is used to support destitute families and raise money for use by the volunteers. Although income generating projects were said to be benefitting needy households in focus group discussions, no households in the survey indicated to be benefitting from these activities. FOCUS evaluation report also questioned whether the income generating projects were benefitting the children more than they benefitted the volunteers. The main problems experienced with income generating activities were poor management, income generation diverting attention from orphan visiting, lack of irrigation water for gardening activities during off-season periods and lack of a market place for products particularly for poultry, sewing and knitting projects.

### **The existing formal public social support mechanisms**

The main public social support mechanisms which households reported to be utilizing were; the Social Development Fund for Fees (SDF-fees), the Department of Social Welfare public assistance and the grain loan scheme. However, only a very small proportion of households (2%) were benefitting from these public support mechanisms. Focus group discussions and interviews with key informants revealed that support from the Department of Social Welfare was not forthcoming because the government no longer had funds to support its social support mechanisms.

### **The existing Formal Private Social Support Mechanisms**

The main private formal social support mechanisms operating in the areas include FOCUS and Plan International in both the urban and rural sites and a Swedish organization, Christian care and UNICEF operating only in the rural site. These NGOs provide primary school fees, food, clothing, seed and fertilizer and skills training. Virtually all the types of programs that the NGOs were running and providing were rated to be helpful by the participants. However participants singled out the school fees program to be the most helpful because they reported that it was now very difficult to receive this type of help from the community and the extended family. The general constraint noted by participants was the irregularity and inadequacy of the help in particular food. Rural participants recommended that fertilizer and seed assistance should be continued because it empowered the household with a source of food for the rest of the year.

### **Socio-economic indicators used to identify needy households**

Discussions were held with key informants who were people working in the communities on the guidelines of socio-economic indicators that can be used to identify and target assistance to households in need. These indicators can be used to measure the level of welfare of the household and be used to determine whether the household needed external assistance. The same indicators can be used to observe the change in welfare of households following assistance by different programs. Such indicators can show how effective assistance is helping the welfare of the household. Discussions with FOCUS volunteers revealed that they use a lot of qualitative indicators in assessing children that are in need. Some of the indicators that they used include: no food in the kitchen or no sign of a recent cooking such as fire ashes or dirty pots, whether the children are starving, reports from the headmaster on children fainting from hunger, the type of assets the household has, tattered blankets on the laundry line, children going to school with no shoes or torn uniforms, children not attending school, the overall appearance of the children (children who have bathed with soap and have regular meals appear better looking than those in need), lack of shelter (many children sharing one room), poorly built shelter, water and electricity closed due to non-payment, the cleanliness of the house and the yard, and whether they have a field or any livestock in the rural site. Volunteers said that using this assessment procedure they are able to determine and prioritize those who are in greatest need. However to me it did not seem to be so obvious and maybe the different volunteers were using different yardsticks to determine and prioritize households in need. The FOCUS evaluation report also indicated that volunteers seem think the identification and assessment process of households in need is natural and obvious. For example volunteers say, "We are aware, because it is our area" (FACT, 1999). I got similar responses from volunteers who said that they know who has greater need because they know their area. While it is understandable that volunteers are from the community and know the area better, it is important that the process of identifying and prioritizing children that are in need is standardized by using specific indicators and this be complemented by intuition. This is important in not only ensuring that scarce resources are allocated to the most needy, but it will facilitate monitoring of program impacts. In this regards, the evaluation report of FOCUS also recommended that psychological needs be included in the process of prioritizing the needs of children.

At community level discussions with key informants on indicators of community welfare indicated that the number of children on the streets is an indicator of how the community is failing to cope with increasing number of orphans. An increase in teen pregnancies and increase in drug use were also noted to be signs of community failing to support needy orphans in the community as young girls are forced into relationships in search of a living. If the number of street kids decreases, key informant interviewees indicated that this will be a good indicator of the impact of a program to assist orphans. A street children survey conducted by FACT in early 2000, revealed the total number of street children to be 113, with 26% being maternal orphans and 40% paternal orphans, the remainder lived with their parents (FACT, 2000). 75% of the street children came from Sakubva. The study also revealed that there has been a significant increase in the numbers of children coming to the streets since 1996. The factors identified to be responsible to the increase in street children included crop failure, high death rates due to AIDS, a downturn in the economy, reduction in government support for the poor and introduction of the second phase of ESAP. The leading causes of the children being on the streets include no food at home, beg for money, no school fees, looking

for work and abuse by relatives.

## 6. Discussion

The leading cause of death of adult females in this study was AIDS related. Although Zimbabwe is currently experiencing a high adult death rate (estimated at 20.43 deaths/1,000 population in 1999), it was difficult to identify maternal orphans in the urban areas. A major reason for this could be because when an adult female dies, her household is likely to dissolve and the children are moved for fostering in rural homes as shown by the higher percentage of households who indicated that the woman's household was no longer in existence. It was not as difficult to find a household with a maternal orphan in the rural area.

The study revealed that surviving children of a deceased adult female were more likely to be fostered by an elderly, the grandparent. Households that fostered orphans were more likely to be female-headed. In Africa, AIDS is called the grandmothers' disease because the burden of caring for the sick and the survivors falls on the elderly (Moller, 1997). However the elderly have problems in taking care of young children because they have limited work opportunities open to them because of capital, age, health and education constraints (Foster et al, 1995). As AIDS continue to afflict young adults in Africa, it is increasingly intensifying the vulnerability of the elderly who are left without social and economic support. In a research in a district in western Tanzania, Rugalema, 1998, found that the elderly who had lost adult children to AIDS were invariably destitute. In the process of coping with illness of their children, most elderly had disposed off assets to generate money for paying medical bills and purchase of foodstuff for the sick. After the death of adult children (who in most cases were the carers of the elderly parents), the elderly were found to face acute shortage of cash, food and other household necessities. All of them were found to be much poorer and hence insecure than in the pre-AIDS period and about 25% had psychological problems such as crying spells (Rugalema, 1998). The burden of premature death of adult females is disproportionately affecting other women particularly elderly women. Elderly women with dependent children tend to become entrenched in poverty as they have limited work opportunities open to them because of capital, age, health and education constraints. This can have serious and often devastating impacts on the orphan's welfare and future likelihood of breaking out of the poverty cycle. Yet if these women have access to some form of income generation, studies have shown that women's incomes are more strongly associated with improvements in children's welfare (Quisumbing et al, 1995). It is therefore important to address the needs of elderly women when designing mitigation interventions to ensure that the constraints which they face in raising young children are addressed. This calls for mitigation programs to pay attention to this gender issue.

The study revealed that the adult female's relatives and the husband if alive are active in taking care of her when she is ill and help meet the health funeral costs. The study revealed that maternal relatives were now the main carers of orphans, contrary to the tradition which made paternal relatives be the main source of orphan care. Similar conclusions were reached in the study by Foster et al, 1995 in the same province and by Urassa et al (1997) in Tanzania. Surviving husbands were reported to remarry quickly soon after the death of the wife. Similar findings were found in a study by Ntozi in Uganda. One can conclude that when an adult female dies prematurely, the burden of socio-

economic impacts falls on the immediate family and the maternal nuclear family.

The leading reported causes of death of adult female in rank order were child birth, coughing/TB, HIV/AIDS, malaria, diarrhoea, high blood pressure and meningitis. The relative importance of a cause of adult death is important for setting priorities in research and intervention (Adetunji, 1997). These results show that the leading causes of death in adult female in this purposively selected sample was AIDS related diseases followed by childbirth. Although maternal-related mortality had decreased in the decade soon after independence, it has been on the increase since 1990. This purposively selected sample also bears evidence to the high incidence of maternal mortality. The policy implication is to improve access to health facilities of women. The other leading cause of death is HIV/AIDS related. Adetunji (1997) in the studies he reviewed on the mortality impact of HIV/AIDS in sub-Saharan Africa also found that HIV/AIDS was the leading cause of mortality for women aged 15 to 59 in Tanzania.

There were households which had children who were no longer going to school after the death of the mother. The major reason cited was lack of financial resources to pay for school fees. Sixty percent of these households were female headed. However the longer-term impact will be severe, and not only for the children but also for society at large. Children who grow up without adequate parenting and education are less socialized and less productive members of society. They are more likely to operate in or on the fringes of criminal activity. One of the key determinants of infant and child survival and health is the education of the mother. The consequences of this for the children of the AIDS orphans who become mothers are obvious. Thus AIDS has intergenerational, long-term effects. The lack of education will hamper their chances of finding formal sector employment and in a society, which increasingly requires educated and technically capable people, this lack of human capital will be a national constraint.

The extended family is still the major source of care for surviving orphans. However the study revealed that extended families are now under severe pressure and they now fail to meet certain needs of orphans particularly school fees due to lack of money and the severe economic pressures. Increased informal sector activity can be a major route to fostering the informal mutual assistance schemes found in the communities. Policies aimed at employment creation can help the urban poor with a source of income. Specific policies should be targeted at strengthening the informal sector as literature has indicated that the informal sector plays a more important role during periods of rigorous adjustments when employment and income generation in the formal sector declines (Cornia, 1990, Kurosaki et al, 1999). According to Cornia, 1990, evidence in Sub-Saharan Africa and Latin America shows that the informal sector employment increases to as high as 50 percent during periods of economic declines. The level of output and earnings in the informal sector can be increased by enhancing its supply potential through policies aimed at improving access to financing, supportive regulatory policies, supportive infrastructure, removal of prohibitive by-laws hindering the operations of this informal sector, training and disseminating information about appropriate technologies (Kurosaki et al, 1999, Raftopolous et al, 1998, Kanji et al). Policies aimed at removing such constraints could generate positive results in terms of employment, output and income during periods of economic declines.

The orphan problem need to be considered in the context of poverty. There was a high percentage of foster household heads who had relatively lower incomes averaging less than Z\$2000 per month. The major source of income was informal activities which are low paying. The 1995 total consumption poverty line calculated as Z\$2132.33 per person per year translates to Z\$817 per household per month using a national average household size of 4.6 persons (Raftopolous et al, 1998). Adjusting for inflation which averaged at more 21%, 19%, 32% and 57% in 1996, 1997, 1998, and 1999 respectively these results indicate that more than half of the households live below the inflation adjusted national total consumption poverty line. The macroeconomic conditions has badly affected the two main determinants of household food consumption, income and food prices. It is important that the macroeconomic situation is addressed so that the purchasing power of foster parents can be improved, consequently resulting in improved welfare of maternal orphans.

It is therefore important to improve the welfare of children in need by ensuring they get adequate nutrition and access to education and health through better targeting of social welfare assistance to households who are highly vulnerable (at the verge of calamity). Effective targeting requires decentralization and reformed screening techniques. One important aspect on social assistance is the fact that poor households which are not AIDS stricken need the same type of assistance as their children are also malnourished and drop out of school. Equity can be achieved if the government target social assistance to the most needy regardless of the immediate cause of their poverty. Thus targeting of assistance should be based on both direct poverty indicators and the presence of AIDS in the household, rather than on either indicator alone (World Bank, 1997).

The grain-saving scheme (zunde ramambo) has emerged to be one of the major community social support mechanism to needy households. This community response was rated to be helpful to needy households. It is therefore important to encourage replication of this scheme and help strengthen it through provision of seed and fertilizer. Williamson (2000) and Donahue (1998) emphasize that it is less expensive and better in terms of social integration to strengthen community capacities to care for orphans.

FOCUS run micro-credit schemes which were mainly for the use of the volunteers. Some volunteers in the urban areas indicated that they received loans of Z\$400 from FOCUS to start income generating projects such as food vending (ordering vegetables such as tomatoes and reselling at a profit), some have ventured into jam making, tie and dye, poultry and soap making. Although there was no evaluation of the income-generating projects to find the cost-effectiveness of the IGPs, activities that were reported to be helpful and could have potential if resources are made available were food vending, cross border trading, jam making, sewing school uniforms and knitting school jerseys for sale and tie and dye. However the loan scheme was reported not to be very helpful by the volunteers because there was need to train the participants (foster parents of orphans) business skills and profit making and they also raised the fears that group income generating projects have problems as no-one is specifically responsible for projects. Khonyongwa in Malawi also found that individual income generating projects were better managed than group income generating projects as there is greater control when a single person is responsible for managing the IGP. The main implications

on micro-credit and IGP include the following:

- Micro-credit be made available at an individual household level as this gives greater control of the project and accountability to the participant
- Micro credit must be deliberately packaged to attract female clients, because they have shown better repayment rates worldwide. Experience has also shown that women are more likely to use their income to help meet children's immediate needs (Hunter and Williamson, 1998). A program that targets the family unit will be more responsive to the needs of the ultimate beneficiaries (Khonyongwa, 1998).
- Lack of relevant skills and knowledge was identified in several studies to be the major reason for failure in many studies including this study.
- A savings and credit program that is owned and administered by the community and relies upon community participation has greater chances of sustainability than one that relies on a public servant for daily operations

Very few households reported benefitting from informal social support mechanisms. The types of informal coping mechanisms reported by households were savings clubs, burial societies and church based support. A study conducted by Mutangadura et al in 1999, on urban household vulnerability to income shocks in the same urban site (Sakubva) found more households reporting to benefit from a wider scope of informal activities. In their study the dominant informal support mechanisms cited by the surveyed households include burial societies (54%), savings club (17%), church clubs (16%), women groups (5%), informal borrowing (2.7%) and chimbadzwa (high interest loan clubs) (4%) (Mutangadura et al, 2000). The informal mechanisms where the households have been receiving benefits for a long time included burial societies, church, women's group and high interest loan clubs. The differences in fewer types of informal social support mechanisms reported in this study can be attributed to the fact that this study was purposive, selecting only households that were fostering a maternal orphan, whereas the other study selected households randomly. The purposive sample used in this study may have a biased sample with households that are not able to raise the joining fees and monthly fees required in these informal social support mechanisms. However in the other study, church support, burial societies, rotating and savings clubs and women's groups were rated to be effective types of informal support mechanisms. Following high death rate due to AIDS infection, many households in different communities benefitted from these mechanisms and have helped households cope with income shocks. It is therefore important in exploring ways of strengthening communities capacities to cope with the impact of adult female deaths to explore the role that can be played by burial societies, savings clubs, women's clubs and churches.

All in all, although policies which strengthen household's coping strategies should be encouraged, such policies should be seen as a complement to and not a substitute for efficient and equitable macro-economic policies and sustained growth in the formal sector of the economy. It is important that macro-economic policies securely embeds the need to sustain the welfare of the most vulnerable in society, by addressing inflation and ensuring that expenditure on social capital does not fall. It is important that the government prioritize the welfare of the poor and allocate resources towards it if progress in the country's human development is to be achieved. Poverty alleviation strategies can

only be successful where the macro-economic policies are supportive of the social policies (Raftopolous et al, 1998). High nominal and real interest rates and stagnant per capita incomes have created a hostile environment in which new small-scale enterprises have to operate (Raftopolous et al, 1998). The study has shown that inflation is weakening the informal support network, the most dominant form of support to households. Macro-economic policies that are required include those that foster economic growth, price stability, create an environment that promotes savings, investment and employment creation, improve the purchasing power of the poor, reduce unproductive spending (such as military spending) and promote efficient spending on the social sectors; health and education.

#### 7. Emerging program and policy implications

Policy and programs should seek to support households overcome negative coping responses (such as withdrawing children from school), reinforce households' positive responses and strengthen communities coping capacity. Thus policy and program interventions that are of priority include those that assist households with secondary school fees, assist the elderly with orphan care, assist to improve agricultural production in rural areas, strengthen the ability of households to help other households, empower women, and strengthen informal business activities.

#### **Secondary School Fees assistance**

There is need to assist needy orphaned children with school fees. The study revealed that priority areas of school fees assistance is both primary and secondary school fees. If a program is to complement FOCUS, the assistance should focus on secondary school education, since these are the children that are more likely to be pulled out since secondary school fees are higher and there are other monetary demands such as transport and uniform costs. Such a program can be tied not only to school attendance, but school performance, including passing on to the next grade. This approach can ensure that the funds are used effectively since it can lead to an increase in school attendance, or at least prevent its decline in a crisis and thus it addresses the longer term adverse impact of a crisis. On completing secondary education, most youths have the educational background to be able to undertake skills training and enter the job market.

#### **Assistance to the elderly**

To the extent that AIDS intensifies the vulnerability of the elderly, there is an urgent need both within communities and the state to rethink some new strategies for the elderly care in areas hard hit by AIDS in Africa. There is need to design a partial old age support package from the government, specifically targeted to the elderly who are in difficult situations such as fostering grand children. Although the current public support mechanism does cater for the elderly, as noted in the study not many of the elderly receive the support. There is need therefore to revamp the current public support program so that it can target this group of society that is vulnerable to the HIV/AIDS epidemic. Such a program can be in the form of free health care to the elderly, supplemental food, and assistance to the school fees of grandchildren. For grandmothers that are still active, involving them in income generating activities can result in the improvement of child welfare. Haddad (1993) indicate that giving women better access to income is one way of enhancing the household's food security. This has led many policy makers and donors to conclude that women should be targeted for credit and

small enterprise programs not only because their income boosts household income, but also because it meets global societal objectives such as increased spending on food and children's goods (Hopkins et al, 1994). Thus investing in elderly women is likely to generate large social returns.

### **Strengthening the ability of the community to help households**

The study revealed that informal networks are a major form of support to households. However with the deteriorating macro-economic environment, their capacities to provide support are severely curtailed. There is need to tackle inflation and unemployment, the most dominant problems affecting the ability of the community to help other households. The government should address the macro-economic problems that the country is currently experiencing and help restore the purchasing power of households to prevent households from falling into poverty. It is, therefore, important to create an enabling environment to ensure that households can positively help other households cope with premature deaths of adults.

### **Shelter Assistance**

In urban areas especially for those orphans who have lost both parents. One FOCUS volunteer interviewed in the fey informants interviews reported that one day when she arrived from town she found a pile of household goods piled at her front door. These were belongings of three children whose mother had passed away, and whose father had was already dead. The children could not pay rent so they had been evicted by their landlord. These children were later sent to live with relatives in the rural areas, but with the difficult economic situation in the country, the volunteer was worried that the children will not be able to attend school. Some orphans are stranded with no access to water and electricity in urban areas due to nonpayment of bill. Provision would have to be made for payment of utilities, rates and rents.

### **Strengthening informal grain-saving schemes**

There is need to strengthen the informal grain-saving schemes and encourage their replication in areas where they are not yet functional. Grain-saving schemes are a potential source of food for households which have experienced premature adult deaths. It is also important to explore ways of strengthening other identified community support mechanisms such as burial societies, savings clubs and women's clubs.

### **Strengthening informal business activities**

The informal business sector is still the major source of livelihood and the only means available to some households to help them cope against the death of an adult female. There is need to explore ways of strengthening informal activities that have been reported to be mostly used by households to cope such as vending, agriculture, crafts and sewing/knitting. This can be done by improving the accessibility of households to micro-finance credit schemes at soft interest rates that is earmarked for informal smallholder business owners.

### **Empowering women**

It is important that the government's long-term development strategies aim to address the underlying problems which make adult females vulnerable to illness and deaths. Strategies should be aimed at

empowering women through improved access to health, intensified AIDS awareness and prevention programs and improved access to education. Women are especially vulnerable to HIV/AIDS because they have more vulnerable employment status dependent on labour intensive activities, lower incomes, least access to formal social security and least entitlements to or ownership of assets and savings.

### **Improving agricultural production through provision of inputs**

Since most rural households are dependent on agricultural production for their livelihood (as a source of income and food) strengthening the household's agricultural production capability is one way in which the impacts of AIDS can be mitigated. Agricultural production ability of the household can be reinforced by improving their access to agricultural inputs identified to include seed and fertiliser.

### **Responsibility of the recommended Policy and Program Options?**

The main responsibility of implementing the recommended policy and programs falls within government's mandate. However there are problems with the government trying to implement the recommended support programs. These include lack of financial resources, poor co-ordination, and poor administrative capacity. Of these the main problem in Zimbabwe is lack of financial resources. There is need for government to find ways of increasing resource allocations to these social support mechanisms. The newly setup AIDS levy can be a major source of resources to meet some of these programs provided the collected money is linked to expanding such social support programs. However the new AIDS levy is already experiencing problems of funds not being made timely available to the National AIDS Trust Fund, the body designed to implement AIDS support programs (Financial Gazette, April 27, 2000). The use of these funds can only be effective if allocation and use of the funds is decentralized. It is necessary that some of the national allocation on social assistance is channeled to the district level which can be able to better target households in need.

Besides the AIDS levy, there is great need to increase the allocation of welfare grants and staffing to social ministries such as agriculture, rural development, health, social welfare and local government. This can be done by identifying and cutting back on spending that yield low returns to national investments such as defence budget.

Given the wide variety of interventions/ programs available there is need for each government organization working on AIDS mitigation to prioritize limited resources across the different intervention programs. For some government institutions, implementation of these recommendations involves integration of HIV/AIDS into already existing development programs. Existing agricultural research, and extension programmes can be reviewed to develop and promote technologies, and extension methodologies and that are appropriate and can assist HIV/AIDS affected families. The Department of Social Welfare can integrate AIDS prevention, care, counselling and mitigation into their formal social support mechanisms, since AIDS is now a major form of idiosyncratic shock affecting households and also in order to prevent future illnesses, deaths and increased poverty. This means that some of their programs can include prevention messages and some mitigation strategies such as micro-credit can be specifically targeted to women and youths who appear to be the worst affected by the epidemic yet they typically have limited access to productive resources and

employment opportunities.

Given the high death rates of young adults in the country, the state organisations cannot do it alone. There is need for collaboration with other development agencies (such as CBOs, NGOs, ASOs, churches) and communities if efforts to mitigate the impact of HIV/AIDS are to be successful. Private and community organizations need to network and identify the critical areas of need and prioritize the intervention programs.

## 8. Conclusions

In general, the impact of premature adult female death has a negative impact on the surviving children - notably shortage of food, lack of suitable shelter, and withdrawal of children from schools. The care of orphans will become one of the greatest challenges facing the country as the AIDS epidemic continues to claim the lives of young adults. In the past the burden was often picked up by the extended family but unfortunately as found in this study many Zimbabweans are now experiencing severe pressures from the poor economy and the increase in the number of people needing help.

What this study has shown is that inter-household linkages are a form of support mechanism only to close relatives (the extended family). Where there are non-relatives and not so close relatives, the community is not able to support anymore because of too much death burden and the harsh economic climate currently prevailing in the country. The priority areas of need identified in the study include secondary school fees, transport costs for children to and from school, food, school fees, shelter in the urban areas, seeds and fertilizer in the rural areas. The study has also shown that the burden of premature death of adult females is disproportionately affecting other women particularly elderly women. This calls for assistance to be specifically targeted at elderly women raising orphans.

The study has suggested that there is need for external source of assistance to undertake a broad range of programs that can improve the food security status of the household, improve the income generation capability of the household, empower orphans to become self reliant, strengthen community based social support mechanisms and empower women so that vulnerabilities that place them at risk of falling ill and dying can be minimized. The study emphasises that it is critical that the state play an active role in mobilising resources to fund programs which have been identified since improved human welfare is a necessary and primary condition for development. There is need for government to embed human development more securely into the macroeconomic policies by prioritizing resources to poverty eradication and tackling inflation which has undermined communities ability to cushion households from welfare impacts of premature death of adult females.

## References

Adetunji J, 1997, Assessing the mortality impact of HIV/AIDS relative to other causes of adult deaths in sub-Saharan Africa, Paper presented at the conference on Socio-demographic Impact of AIDS in Africa, Durban, South Africa.

Ainsworth M, G Koda, 1993, The impact of Fatal Adult Illness on child schooling, Paper presented at The Economic Impact of Fatal Adult illness in Sub-Saharan Africa Workshop held in Bukoba, Kagera Region, Tanzania, September 16-20, 1992.

Asingwire N (1996) "AIDS and Agricultural Production: Its Impact and Implications for Community Support in ACORD Programme Areas, Mbarara District," a consultancy report.

Asingwire N, Muhangi D (1998), "Strategies for Action (SFA) Phase III: Supported CBOs/NGOs," Evaluation Report, Makerere University, Actionaid Uganda.

Barnett T, Blaikie P (1990), Community Coping Mechanisms in the Face of Exceptional Demographic Change. Final Report to the Overseas Development Administration, London, ODA (July).

Barnett T, Blaikie P (1992), "AIDS in Africa: Its present and future impact," John Wiley & Sons Ltd, Chichester, UK.

Barnett T (1994), "The effects of HIV/AIDS on Farming systems and rural livelihoods in Uganda, Tanzania and Zambia," FAO, Rome.

Behrman, 1993, Health and Economic Growth: Theory, Evidence and Policy, in *Macroeconomic Environment and Health*, World Health Organization, Geneva.

Bassett M. T, Bijlmakers, L. A., Sanders, D.M.(1997) Professionalism, Patient satisfaction and quality of health care: Experience during Zimbabwe's Structural Adjustment Program, *Social Science Medicine*, Vol. 45#12, pp 1845-1852.

Boerma T, Ngalula J, Isingo R, Urassa M, Senkoro KP, Gabone R, Mkumbo EN (1997), "Levels and Causes of Adult Mortality in Rural Tanzania with Special Reference to HIV/AIDS," *Health Transition Review, Supplement 2, 7: 63-74*.

Bond VA, Wallman S (1993), "Community Capacity to Prevent, Manage and Survive HIV/AIDS," Report On the 1991 Survey of Households in Chiawa, Working Paper no. 5, Karolinska Institutet, University of Hull; Sociology and Social Anthropology, and University of Zambia; Institute of African Studies.

Central Statistical Office, 1998, Poverty in Zimbabwe, Harare.

CSO (Central Statistical Office) (1992) *Census 1992*, Harare: Government Printers.

Cornia G. A, 1990, Adjustment at the Household level: Potentials and Limitations of Survival Strategies, in *Adjustment with a Human Face: Protecting the Vulnerable and Promoting Growth*, A study by UNICEF, Edited by Cornia G. A, R. Jolly and F Stewart, Clarendon Press, Oxford.

Develay A, Sauerborn R, Diesfeld JH (1996), "Utilisation of Health Care in an African Urban Area: Results from a Household Survey in Ouagadougou, Burkina-Faso," *Social Science Medicine*, 43:11,1611-1619.

Donahue J (1998), "Community-based Economic Support for Households Affected by HIV/AIDS," Health Technical Services Project Report of TvT Associates, The Pragma Corporation, USAID HIV/AIDS Division.

Drinkwater M (1993), "The Effects of HIV/AIDS On Agricultural Production Systems in Zambia; An Analysis and Field Reports of Case Studies Carried out in Mpongwe, Ndola Rural District, and Teta Seranje District," FAO.

Family AIDS Caring Trust and Scripture Union, 2000, A Report on the Situation of The Street Children and Youth in Mutare, Unpublished FACT Report.

Family AIDS Caring Trust and Scripture Union, 1999, FOCUS Evaluation Report: Report of a participatory, self-evaluation of the FACT Families Orphans and Children Under Stress (FOCUS) Programme, Unpublished Report, Mutare.

FAO (1993), "The Effects of HIV/AIDS on Agricultural Production Systems in Zambia: An analysis and field reports of case studies carried out in Mpongwe, Ndola Rural District and Serenje District," Adaptive Research Planning Team Report, Ministry of Agriculture, FAO.

Farm Orphan Support Trust (FOST) (1998), "Farm Orphans: Who is coping?, A study of commercial farm workers and their responses to orphanhood and foster care in Mashonaland Central Province of Zimbabwe," FOST, Harare.

Financial Gazette, 2000, Govt to deposit \$170m into empty AIDS levy coffers (Fingaz, Thursday 27 April, 2000)

Foster G, Makufa C (1998), "The Families, Orphans and Children Under Stress, (FOCUS) Programme," Paper presented at the UNAIDS Community Mobilisation in Eastern and Southern Africa meeting held in Pretoria, South Africa, (November 9-11).

Foster G, C. Makufa, R Drew, S Kambeu, and K Saurombe, 1996, Supporting Children in Need Through a community-based orphan visiting program, *AIDS Care*, 8: 389-403.

Foster G, R Shakespeare, F. Chinemana, H Jackson, S. Gregson, C. Marange, and S Mashumba, 1995, Orphan Prevalence and Extended Family Care in a peri-urban community in Zimbabwe, *AIDS Care*, 7:3-17.

Gumbo P (1998), "The Gender Dimension in Social Security: A Historical Perspective," Friedrich Ebert Stiftung, Harare.

Guyer J, 1980, Household Budgets and Women's Incomes, African Studies Center Working Paper no. 28, Boston University.

Haddad, L, 1999, The income earned by women: Impacts on welfare outcomes, *Agricultural Economics* 20, 135-141.

Haddad L, 1993, Promoting Household Food Security: Women as Gatekeepers, Shock-absorbers, and a Focal Point for policy, International Food Research Policy Institute, Washington DC.

Hamilton, S, Popkin, B, Spicer, D, 1984, Women and Nutrition in Third World Countries, Begin and Garvey, Praeger Special Studies, New York.

Hunter S, Williamson J (1994), "Children on the Brink: Strategies to Support children isolated by HIV/AIDS," Health Technical Services Project of TvT Associates, The Pragma Corporation, USAID HIV/AIDS Division, Arlington, Virginia.

Hunter S, Williamson J (1997), "Developing strategies and policies in support of HIV/AIDS infected and affected children," Health Technical Services Project of TvT Associates, The Pragma Corporation, USAID HIV/AIDS Division, Arlington, Virginia.

Hunter S, Williamson J (1998), "Responding to the needs of children orphaned by HIV/AIDS," A report produced by the Health Technical Services Project of TvT Associates and The Pragma Corporation for the HIV/AIDS Division of the USAID, Discussion paper 7.

Hopkins J, C Levin, L Haddad, 1994, Women's Income and Household Expenditure Patterns: Gender or Flow? Evidence from Niger, *American Journal of Agricultural Economics* 76, 1219-1225.

Jackson H, Civic D (1994), "Family Coping and AIDS in Zimbabwe," *Journal of Social Development in Africa*, School of Social Work, Harare.

Jackson H, Udwin M, Chandra-Mouli V, (1994), "AIDS Support and Income Generation," *Global AIDS Network* (1994) Vol 10:4 pp10-11.

Jackson H, 1997, The Relevance of AIDS to Development in Sub-Saharan Africa with Special Reference to Southern Africa, Presentation to Save the Children Fund (USA) West and Southern Africa (WASA) Area Planning Meeting, 28-April 1997, Bronte Hotel, Harare.

Kadonya C (1998), "The Impact of HIV/AIDS on Smallholder Agriculture in Tanzania: Rethinking of other intervention Strategies," Regional Conference for Eastern and Southern Africa on Responding to HIV/AIDS: Technology development needs of African Small-holder Agriculture, Harare (June 8-10).

Kanji N, N Jazdowska, 1993, Structural Adjustment and Women in Zimbabwe, *Review of African Political Economy*, (#56), pp 11-26.

Kaseke E (1997), "Social Security in Systems in Rural Zimbabwe," Friedrich Ebert Stiftung, Harare.

Kelly M (1998), The Children in Distress Conference, *AIDS Analysis Africa* (Southern Africa Edition), 9(3), Oct 1998.

Kerkhoven R and M Sendah , 1999, HIV/AIDS in Zimbabwe, in *AIDS Analysis Africa*, Volume 9, Number 6.

Kurosaki T, Y Sawada, 1999, Consumption Insurance in Village Economies; Evidence from Pakistan and other Developing Countries, *Economic Review*; 50 (2), April 1999, pp 155-68.

Kwaramba P (1997), "The Socio-Economic Impact of HIV/AIDS on Communal Agricultural Systems in Zimbabwe," Zimbabwe Farmers Union, Friedrich Ebert Stiftung Economic Advisory Project, Working Paper 19, Harare.

Laver S, Van den Borne B, Kok G (1996/1997) "Was the Intervention Implemented as Intended?: Process Evaluation of an AIDS Prevention Intervention in Rural Zimbabwe, *International Quarterly of Community Health Education* 16 (1), 25-46.

Ledward A (1997), "Age, Gender and Sexual Coercion: Their role in creating pathways of vulnerability to HIV infection," Masters Thesis submitted to University College of London.

Leshabari M (1995), "Household and Community Responses in Kyela district, Tanzania," Report from a consultation on the socio-economic impact of HIV/AIDS on households, UNAIDS, World Health Organisation, ( September 24 -25).

Loewenson R, Kerkhoven R (1996), "The Socio-Economic Impact of AIDS: Issues and Options in Zimbabwe," SAfAIDS and TARSC, Harare.

Loewenson R, Whiteside A (1997), "Social and Economic Issues of HIV/AIDS in Southern Africa: A Review of Current Research," A Consultancy report prepared for SAfAIDS.

Lwihula G (1998), "Coping with AIDS Pandemic: The experience of peasant communities of Kagera Region, Tanzania," Paper Presented at the East and Southern Africa Regional Conference on:

Responding to HIV/AIDS: Development Needs of African Smallholder Agriculture, Harare, (June 8-10).

Madembo RC (1997), "The Role of Savings and Credit Schemes in Meeting the Social Security Needs of Communal Farmers," In *Social Security Systems in Rural Zimbabwe* edited by Kaseke E (1997), Friedrich Ebert Stiftung, Harare.

McKerrow N. H, 1998, The Vulnerability of the Southern African Family, Paper presented at the Conference on Raising The Orphan Generation, Pietermaritzburg, (June 9-12).

MoH&CW (1995) "HIV and STI Surveillance Zimbabwe," *Quarterly Report, April-June*, Health Information Unit and National AIDS Coordination Programme.

Ministry of Health and Child Welfare, 1998, HIV, AIDS, STD, and TB Fact Sheet, Quarterly Report November 1998, Monitoring and Evaluation Unit and National AIDS Coordination Programme.

Ministry of Public Service, Labour and Social Welfare (MPSLSW) and UNICEF (1997), 1995 Poverty Assessment Study Survey: Main Report, Harare.

Moses S, Plummer FA, Ngugi EN, Nagelkerkes NJD, Anzala AO, Ndinya-Achola JO (1991), "Controlling HIV in Africa: Effectiveness and cost of an intervention in a high-frequency STD transmitter core group," *AIDS* 5: 407-411.

Mukoyogo C, Williams G (1991), "AIDS Orphans: A Community Perspective from Tanzania," *Strategies for Hope*, 5: Actionaid, AMREF, World in Need.

Mutangadura G, 1998, *Macroeconomic policies and the health sector in Zimbabwe: Past experience and Lessons for the future*, Paper Presented at the Zimbabwe: Macroeconomic Policy, management and performance since independence (1980-1998): Lessons for the 21st Century Conference. Held at the Harare Sheraton Hotel, 19-21 August, 1998.

Mutangadura G, and E Makaudze, 2000, Urban Vulnerability to income shocks and effectiveness of current social protection mechanisms: The case of Zimbabwe, Consultancy report submitted to the Ministry of Public Service, Labour and Social Welfare and the World Bank.

Ncube G (1998) "The Impact of HIV/AIDS on Smallholder Agriculture Production in the Districts of Gweru/Shurugwi in Zimbabwe and the Current Recommended Sustainable Coping Strategies and Areas of Research," Paper Presented at the East and Southern Africa Regional Conference on Responding to HIV/AIDS: Development Needs of African Smallholder Agriculture, Harare, (June 8-10).

Neema S, 1998, Afflicted and affected: Consequences of HIV/AIDS on women in a farming community in Uganda, Paper Presented at the East and Southern Africa Regional Conference on

Responding to HIV/AIDS: Development Needs of African Smallholder Agriculture, Harare, (June 8-10).

Ng'weshemi J, Boerma T, Bennett J, Schapink D (1997), "HIV prevention and AIDS care in Africa: A district level approach," Royal tropical Institute, KIT Press, Amsterdam.

Ntozi J P M, 1997, Widowhood, Remarriage and Migration during the HIV/AIDS epidemic in Uganda, Paper presented at the Conference on Raising The Orphan Generation, Pietermaritzburg, (June 9-12).

Over M (1995), "Kagera Health and Development Project," Report from a consultation on the socio-economic impact of HIV/AIDS on households, UNAIDS, World Health Organization.

Over M, Bertozzi S, Chin J, N'galy B, Nyamuryekung'e K (1988), "The Direct and indirect cost of HIV infections in developing countries: The cases of Zaire and Tanzania," in the *Global Impact of AIDS* edited by Flemming AF, Fitzsimons DW, Mann J, Carballo M, Bailey MR; New York: Alan R Liss, 123-135.

Over M (1998), Coping with the impact of AIDS, *AIDS Analysis Africa* (Southern Africa Edition), 9(3), Oct 1998.

Parry S, 1998, Community Care of Orphans in Zimbabwe - The Farm Orphans Support Trust (FOST). Paper presented at the UNAIDS Community Mobilisation in Eastern and Southern Africa meeting held in Pretoria, South Africa, (November 9-11).

Poulter K (1996), "A Psychological and Physical Needs Profile of Families Living with HIV/AIDS in Lusaka," Lusaka.

Powell GM, Morreira S, Rudd C, Ngonyama RP (1994), "Child welfare policy and practice in Zimbabwe," A Summary Report based on a Study by the Department of Paediatrics and Child Health, University of Zimbabwe in collaboration with the Department of Social Welfare, Ministry of Public Service, Labour and Social Welfare, Harare.

Quisumbing A R, L Haddad, R Meinzen-Dick, L R Brown, 1998, Gender Issues for Food Security in Developing Countries: Implications for Project Design and Implementation, *Canadian Journal of Development Studies*, Volume 19, pp 185-207.

Quisumbing A R, L R Brown, H S Feldstein, L Haddad, C Pena, 1995, Women: The Key to Food Security, International Food Policy Research Institute, Food Policy Statement Number 21, Washington DC.

Rugalema G (1998), "It is not only the loss of labour: HIV/AIDS, loss of household assets and household livelihood in Bukoba district, Tanzania," Paper Presented at the East and Southern Africa

Regional Conference on Responding to HIV/AIDS: Development Needs of African Smallholder Agriculture, Harare (June 8-10).

Rugalema G, 1999, AIDS and African Rural Livelihoods, From Knowledge to action, Keynote Address presented at the Conference on AIDS, Livelihood and Social Change in Africa, Wageningen, April, 1999.

SAfAIDS, Commercial Farmers Union (1996), "Orphans on Farms: Who cares? An Exploratory Study into Foster Care for Orphaned Children on Commercial Farms in Zimbabwe," Harare.

SAfAIDS (1998), (Forthcoming), "Socio-economic Impact of Adult Mortality and Morbidity on Households in Kafue District, Zambia," Harare.

Sanders D, Sambo (1991) "AIDS in Africa: The Implications of Economic Recession and Structural Adjustment," *Health Policy and Planning* 6 (2), 157-65.

Sauerborn R, Adams A, Hien M (1996), "Household Strategies to Cope with the Economic Costs of Illness," *Social Science Medicine*, 43:11, 291-301.

Shreedhar J, Colaco A (1996), "Broadening The Front; NGO responses to HIV and AIDS in India," *Strategies for Hope 11*, ACTIONAID, London, The British Council, New Dehli, UNDP, New Dehli.

Sithole E, V Sithole, and S Soko, 2000, Review of the Social Development Fund (SDF) and Public Assistance, School, Examination, and Health Fees Programmes, Consultancy report submitted to the Ministry of Public Service, Labour and Social Welfare.

Thompson C. B., 1993, Drought Management in Southern Africa: From Relief Through Rehabilitation to Vulnerability Reduction, Report prepared in association with the SADC Food Security Unit for UNICEF, Harare.

Tibaijuka AK (1997), " AIDS and Economic Welfare in Peasant Agriculture, Case Studies from Kagabiro Village, Kagera Region, Tanzania," *World Development*, 25: 6, 963-975.

Tibaijuka AK and F Kaijage (1995), " Patterns and Processes of Social Exclusion: Rhetoric, Reality, Responses," International Institute for Labor studies, Geneva.

Topouzis D (1998), "The Implications Of HIV/AIDS For Rural Development Policy and Programming: Focus on Sub-Saharan Africa," Paper prepared for HIV and Development Programme, UNDP, Sustainable Development Department, Rural Development Division, FAO.

Topouzis D (1994), "Uganda: The Socio-economic Impact of HIV/AIDS on Rural Families with Particular Emphasis on Rural Youth," Paper prepared for the Food and Agricultural Organisation of the United Nations, Rome.

UNAIDS (1998) Zimbabwe Epidemiological Fact Sheet on HIV/AIDS and Sexually Transmitted Diseases, Geneva.

UNAIDS (1999) AIDS Epidemic Update: December 1999, Geneva.

UNAIDS, (1999), Children Orphaned by AIDS: Frontline responses from eastern and southern Africa, Geneva.

UNAIDS, 1999, A review of household and community responses to the HIV/AIDS epidemic in the rural areas of sub-Saharan Africa, Geneva.

UNICEF (1994) "Situational Analysis of Women and Children in Zimbabwe," Harare: UNICEF.

United States National Research Council Panel on Data and Research Priorities in Sub Saharan Africa, (1996), "Preventing and Mitigating AIDS in Sub Saharan Africa: Research and Data Priorities for the Social and Behavioural Sciences," Edited by Cohen B and Trussell J, National Academy Press, Washington D.C.

Urassa M, J. T. Boerma, J Z L Ng'weshemi, R Isingo, D Schapink, Y Kumogola, 1997, Orphanhood, Child Fostering and AIDS epidemic in rural Tanzania, Health Transition Review, Supplement 2 to Volume 7, 1997, pp 141-153.

Wallman S (1996), "Kampala Women getting By: Well-being in the time of AIDS," Eastern African Studies, James Currey Ltd, London.

Webb P, Reardon T (1992), "Drought Impact and Household Response in East and West Africa," *Quarterly Journal of International Agriculture*, 31: 3, 230-246.

Webb D, (1995), Orphans in Zambia: Nature and extent of demographic change, in *AIDS Analysis Africa*, Volume 6, No 2, pp5-6.

Williamson, (Forthcoming), Finding a way forward: Principles and Strategies to Reduce The Impacts of AIDS on Children and Families, Chapter in *The Orphan Generation, the Global Legacy of the AIDS Epidemic*.

Women's Environment and Development Organisation (WEDO), 1999, Risks, Rights and Reforms; A fifty country survey assessing government actions five years after the international conference on population and development, New York.

Woelk G, Jackson H, Kerkhoven R, Hansen K, Manjonjori NN, Maramba P, MutambirwaJ, Ndimande E and Vera E (1997), "The Cost and Quality of Community Home Based Care in Zimbabwe," University of Zimbabwe, SAfAIDS and Ministry of Health and Child Welfare, Harare.

World Bank, University of Dar es Salaam (1993), Report of a Workshop on: “The Economic Impact of Fatal Adult Illness in Sub-Saharan Africa”, Held in Bukoba, Kagera Region, Tanzania, 16-20 September, 1992.

World Bank (1997), *Confronting AIDS: Public Priorities in a Global Epidemic*, A World Bank Policy Research Report, Oxford University Press, New York.