HIV/AIDS AND CHANGING VULNERABILITY TO CRISIS IN TANZANIA: IMPLICATIONS FOR FOOD SECURITY AND POVERTY REDUCTION

Paper presented by

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Introduction

1. According to the UN Development Report (2003) Tanzania ranks among the bottom 16 countries in the world based on standard development indicators. Tanzania is characterised by very high levels of chronic rural poverty. Gross Development Product (GDP) per capita is estimated at $280 (URT and UNICEF, 2003). In 2003, 30% of the population was estimated to be living on less than $1/day (PPP). Life expectancy at birth is 51.1 years. Other indicators point out that Tanzania is well short of achieving the Millennium Development Goals (MDG).

2. Since the mid-1990s, Tanzania has been regarded as a model of economic reform and growth. GDP growth has averaged around 3%, rising to 5.5% in recent years. Some commentators have even called Tanzania an ‘emerging economy’, implying an imminent transition to middle-income status.

3. The first cases of AIDS in Tanzania were recognised in 1983. Since then the country has suffered a generalised epidemic. In fact, it might be more appropriate to describe HIV/AIDS in Tanzania as a succession of regionalised epidemics, beginning in the northwest, then striking Mwanza and Dar es Salaam, and subsequently spreading to the southwest. According to the Government of Tanzania and UNICEF Master Plan of operations 2002–2006, HIV/AIDS has become the most important factor threatening human development in Tanzania. Out of a population of about 34.5 million people, 2.2 million individuals above the age of 15 were estimated to be living with HIV in 2001, including 700,000 to be living with AIDS. Current prevalence figures are about 12%, rising to 17-22% in the worst hit areas of Mbeya, Kagera, Iringa, Arusha and Dar es Salaam. Blood donor data indicate an
increase in prevalence during the 1990s, with a possible stabilisation or slight decline between 2001-02.

4. In recent decades, Tanzania has been vulnerable to two kinds of crisis. One is food crises, usually localised, associated with droughts, floods or pest infestations. The second is refugee flows from neighbouring countries afflicted by conflict. Both of these have required traditional kinds of emergency response. However, there is a concern that new forms of structural vulnerability to crisis may be emerging in Tanzania, associated with the concurrence of HIV/AIDS and other causes of poverty. A crisis in Makete District, Iringa Region (explained later) associated with livelihoods collapse and a very high prevalence of AIDS, is a possible augur of this kind of disaster.

5. The wider impact of HIV/AIDS on Tanzania’s economy and society is not fully understood. It is estimated that by 2010 GDP will be 15-20% lower than it would have been without the epidemic. This relative shrinkage does not just represent a smaller economy, but a structurally different economy, with certain categories bearing the brunt of the relative decline, and others continuing to progress.

The study

6. In July 2004 a study was commissioned by UNICEF Tanzania in order to identify changing patterns of vulnerability to crisis in Tanzania, with special reference to children, and with a view to determining programmatic, policy and advocacy activities. The study was designed to investigate emergent vulnerabilities to crisis in Tanzania. The basic organising hypothesis was that rural people have adopted livelihood strategies that hedge against risk, but that multiple concurrent shocks and strains impose too much stress, and precipitate a collapse into destitution and hunger. One of the main issues to be investigated was the nature of the social categories so affected: are all rural Tanzanians rendered more vulnerable by the HIV/AIDS epidemic? Are certain localities rendered vulnerable? Or are specific structural categories of people rendered vulnerable?

7. The study consisted of (a) a literature review and general analysis of Tanzanian macro-economic data and (b) empirical findings from two study districts (Bukoba Rural in Kagera Region and Makete in Iringa) using qualitative assessment (key informant interviews, focus group discussions, observations, problem mapping, SWOT analysis) in both districts and a quantitative survey of a sample of 286 households in Makete District. On the basis of these a series of recommendations were made.

HIV/AIDS and Rural Livelihoods

8. Evidence from an array of small-scale studies in Tanzania and elsewhere in sub-saharan Africa indicates that HIV/AIDS causes serious losses at household level, including lower incomes, decreased food cultivation and depletion of assets. A study of rural Tanzanian households suffering an adult death found that about one third of those who died had joined the household recently—they had

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relocated because they were terminally ill. During or soon after funerals, urban households also leave children orphaned by AIDS in the village for care (often because of the presence of grandparents). As a result, the rural economy is bearing a disproportionate burden of the costs of the HIV/AIDS epidemic. Data from the Household Budget Survey (HBS) indicate that rural households are relying more than ever on transfers from urban areas. However, there are also indications that urban households’ capacity to provide assistance to rural kin in times of distress has been reduced partly due to increased urban poverty, and unemployment but more so when family members living in urban areas fall ill due to AIDS.

9. Other households may suffer from the negative externalities of their AIDS-afflicted neighbours. Factors include the afflicted households no longer hiring labour or, as found out in Bukoba rural, village markets closing down owing to limited local production or the burden of upkeep of orphaned children left in need of support when the household ultimately dissolves. On the other hand, some neighbouring households may be able to benefit, for example by acquiring the land or assets of the distressed household. The exploitation of orphans for domestic labour, agricultural work, income generation, and sexual services is increasingly getting documented.

10. A number of studies provide evidence of the absence of clear socio-economic impacts of adult deaths attributable to HIV/AIDS. The Kisarawe/Monduli study is one of these. Other studies indicate that many households impacted by an adult death respond by drafting in new adults, thus maintaining the household workforce. The strategy (and hence the impact) differs according to the gender of the deceased. In parts of Tanzania adjacent to Lake Victoria, farm production has proved remarkably resilient in the face of an adult death.

11. These are indications that rural Africans’ famed coping strategies can be utilised in the face of the stresses of HIV/AIDS. Factors that determine the success of these strategies include the availability of labour elsewhere for drafting into the house (e.g. unmarried young men and women relatives) and the nature of the labour demands of agriculture. Where rainfall is well distributed and tree crops are

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common, households can remain viable with low levels of labour availability and high dependency ratios. Where rainfall is unimodal and there is a seasonal labour bottleneck, household level labour shortages can be critical. Any effective coping response is contingent on these positive conditions, and is short term. Likewise, inter-household transfers (gifts and loans) and formal governmental support mechanisms also facilitate coping.\textsuperscript{17} The studies quoted above mostly concern households that are not subject to additional stresses such as drought, and all have a relatively short reference period (maximum two years). What happens when there are multiple stresses, or over the longer term?

12. Kagera Region in northwest Tanzania was one of the two locations that first suffered a generalised epidemic of HIV/AIDS, in the mid-1980s. Kagera has been widely studied to investigate the impacts of HIV/AIDS at household level.\textsuperscript{18} While very considerable adverse impacts have been noted, the region as a whole has not suffered a catastrophic economic or population decline. This study like the ones before it found out that possible reasons for this modest impact of AIDS include:

(i) A relatively high level of economic development prior to the HIV/AIDS epidemic.
(ii) Higher prevalence of HIV among the fewer wealthier households and less impact in the majority poorer households.\textsuperscript{19}
(iii) A farming system that requires relatively low labour inputs, given good year-round rainfall and high reliance on tree crops.
(iv) Strong social cohesion, so that affected households can obtain transfers of labour, assets, food and cash from other households.
(v) High levels of assistance through NGO and government intervention.
(vi) Burden shifting, whereby individuals sick or dying from AIDS are transferred to better-off households for support in their last days.
(vii) Lack of concurrent shocks, e.g. good cash crop prices.

13. The other coping mechanisms for responding reported in this study were:

(i) Cutting down on the number of meals consumed (as noted in Makete).
(ii) Purchase of staple foods including bananas, maize and rice.
(iii) Cultivation of short-season crops including sweet potatoes, beans, cassava, tomatoes, cabbage and groundnuts for both consumption and sale, albeit on a much smaller scale.
(iv) Casual labour by surviving adults and orphans including carrying stones, herding cattle, fishing, collecting firewood and cultivating for piece rates.
(v) Changes in gender roles especially the gender division of labour, leading to men learning to cook, women collecting firewood, and both sexes participating in decision-making and the cash economy.
(vi) Seeking assistance from relatives and NGOs.

Sale of assets such as cows.

However, it is debateable whether the above, properly count as ‘coping’, especially if pursued over extended periods of time, or whether households should instead be characterised as ‘struggling.’

14. In Kagera region therefore, modest aggregate socio-economic impacts related to the resilient structure of rural livelihoods, a strong economic environment, lack of concurrent shocks, good coping strategies based on the extended family, and assistance from government and NGOs have staved-off a crisis. But perhaps HIV/AIDS related socio-economic deterioration accumulates over time and the full impacts have yet to become evident.

15. And what of locations in which drought has occurred alongside the HIV/AIDS epidemic? A pilot study of Kisarawe and Monduli districts of Tanzania, both drought-affected in 2003, investigated food security and nutrition outcomes for households directly affected by adult morbidity and mortality, and households not affected. The results were counter-intuitive: where differences were found, they indicated that AIDS-affected households were better off than unaffected. It is probable that this arises from the higher-prevalence of HIV in larger and wealthier households (as observed in Kagera) and/or in households closer to roads and towns (as observed in southern Africa). In support of these suggestions, it is notable that the AIDS-affected households had higher production in ‘normal’ times than the unaffected. Further analysis could focus upon comparative rates of decline during the drought period, and the socio-economic profile of the individuals who died of AIDS.

16. In sum evidence from the above findings and the existing body of literature emerging from the Kagera region and elsewhere in Tanzania, points to the fact that the impact of HIV/AIDS on rural livelihoods appears to be highly context-dependent with four factors being particularly important, namely:

(i) The nature of labour demands in the production system, and the availability of labour support to affected households.
(ii) The availability of formal and informal sources of support including credit and inter-household transfers.
(iii) The length of time that the epidemic has been impacting upon the rural economy.
(iv) The existence of concurrent shocks such as drought or commodity price collapses.
(v) The socio-economic profile of those who contract HIV.

17. The good macro-indicators for the Tanzanian economy in recent years, and the absence of clearly measured impacts in these locations, is reason for optimism. But it should not make us over-confident that all Tanzanians can weather the stresses of HIV/AIDS. There is plenty of qualitative evidence to suggest that the epidemic is causing disaster at individual and household level. Across all sectors and in all regions, the impacts are appreciable.

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18. This implies that the HIV/AIDS epidemic should be seen as one source of stress/shock among others, albeit a distinct one. With HIV/AIDS having become a long-term feature of the eastern and southern African social-economy, the sub-region is subject to one continual stress/shock. The impact of other shocks is therefore likely to be worse, because of the interaction effect that occurs with multiple concurrent shocks.

19. The most plausible answer to this apparent paradox of robust macro-performance and multiplying indicators of distress is that the HIV/AIDS epidemic is, at this stage having two main impacts on vulnerability. One, it is creating a new (and largely invisible) underclass of disadvantaged people, particularly most vulnerable children (MVCs), women, and the elderly who have been plunged into poverty by the impact of AIDS at the household level. Two, in specific localities which are already vulnerable to impoverishment, and which are poorly-endowed with social capital and governmental support, the impact of HIV/AIDS can be devastating as discussed in the section below.

**Localised HIV/AIDS epidemic on poverty**

20. One such locality, Makete District, in Iringa region of Southern Tanzania was covered in this study. The district has an economy that largely dependent on agriculture characterised by the growing of few food crops – Irish potatoes, maize, sorghum, rice and wheat. Recently these have also assumed a primary role as the main sources of cash incomes for the district. Other less widely grown crops include sweet potatoes, yams, beans, peas, groundnuts, vegetables and pumpkins. Fruits that were reportedly possible in the district include peaches, apples and plumes. The main cash crop in the district has traditionally been pyrethrum but in recent years has been hit by lack of markets. Coffee is also possible but less common. Bamboos are grown on a small-scale by at least 60% of the households as a source of income in form of an alcoholic drink locally known as *ulanzí*. Several households have also established woodlots of soft woods, which are used as a source of firewood, construction materials and more recently timber for sale. There is a growing lumbering industry based on planted pine and cypress forests. Animal rearing in form of goats, cattle and pigs is much more rare.

21. Makete is one district in the midst of a debilitating epidemic. The exact time when HIV/AIDS hit Makete District is not known. However according to the district leadership the mortality from the disease was getting widespread by 1998. Almost a quarter of the households in Makete (22.4%) had lost at least one person since 1998. The average household size in Makete had declined from 4.19 people in 2000 to 4.17 by July 2004 with the average size of households higher among the households affected by mortality and morbidity as well as among the orphan foster households than those not affected by morbidity/mortality or fostering orphans.

22. In most of the schools anywhere between one third and one-half of the pupils are orphans (defined as having one or both parents deceased). This is one area where there is negative population growth with the youth migrating out in search of better opportunities and of-course dying of AIDS!

23. Between 1999 and January 2004 a total of 8 agricultural extension officers (raising the level of extension officer to farmers from 1:800 in 1999 to 1:1500 by 2004), 74 teachers, 27 health staff and many others staff had died without replacement.

24. The level of ignorance about HIV/AIDS and how to prevent it is high. The district only has faith-based organizations, with a high anti-condom use agenda that at the time of study was successful - unfortunately. There was a marked absence of non-governmental organizations (NGOs) whether HIV/AIDS or otherwise. Programmes in home based care, HIV/AIDS Counselling and Testing, anti-retroviral therapy, HIV/AIDS education were all generally very poor or totally absent. Even the most
basic activities, which should be undertaken as a matter of course, such as nutrition programmes and STI clinics, were weak or absent.

25. While few households owned most of the basic items identified as indicative of household wealth, the households that had been affected by mortality since 1998 and/or prolonged illness over the two years prior to the survey, were significantly less likely to own the basic wealth items (such as bicycles, radio, hurricane lamp and sponge mattress), stay in a house with permanent wall and roof materials or own livestock than those which had not been affected. Thus while generally Makete District households were poor, households, which had experienced morbidity and mortality, were poorer than their counterparts, which had not had a similar experience as indicated in the Household Wealth Indices for affected/unaffected households and the households fostering/not fostering orphans (Appendix 1). Fifty-one percent of the orphan foster households fell within the same wealth grouping as 38% of the non-foster households. Within the richest group given the same standard for the two groups, the foster homes had 10% of the membership compared to 19% of the non-foster homes. In comparative terms the bulk of the poorest households within the sample were among the affected households. The lowest 2 quintiles (40%) of the non-affected households had a corresponding 53% of the households among those affected by recent morbidity and mortality. While among the richest quintile the affected households had only 7%.

26. In sum therefore, fostering orphans and or having lost a household member over the period 1998-2004/having had a sick person that required medication over the two-year period prior to the survey significantly reduced overall wealth status of the household.

Localised Impact of the HIV/AIDS epidemic on food security

27. In Makete District the most frequently mentioned source of food for both the affected and non-affected households was cultivation. Cultivation accounted for 84% of the affected and 88% of the non-affected households’ source of income. Considering the alternative sources of food for the households it was apparent that households, which had been affected by recent mortality and morbidity, had a relatively higher tendency to rely on food aid, adult and child labour as well as relocation of family members. It should also be noted that there was relatively higher renting of land among the mortality/morbidity affected households than those not affected, perhaps indicative of the sale of own land in order to care for the sick. This may also have been a result of dispossession of widows and orphans by relatives in the event of death that left some of these households with no option but to rent land for cultivation.

28. Diversion and inadequacy of adult labour (69%) loss of land/fields (20%) and expenditure on funerals (13.7%) were reportedly the most critical areas in which mortality and morbidity had affected the procurement of food for the households.

29. While the majority of the households reported they depended on cultivation of food, the non-foster households were more likely to report food self-sufficiency sources of food – cultivation and their own stock than the foster homes. Even with regard to purchase of food the non-foster homes had a relatively higher proportion of members (17%) than the non-foster homes (14%). The foster household group however had a relatively higher proportion of membership that reported food aid/gifts as a major source of food (16%) than the non-foster homes (10%).

30. One of the most important indicators of the magnitude of vulnerability to food is the number of meals that children and adults access per day. While slightly more than one-half (53%) of the children in the foster homes were reportedly accessing three or more meals per days, more than three quarters
(77%) of their counterparts in non-orphan care homes were accessing three or more meals in a day. Similar trends obtained for the adults.

31. For nearly all farm produce, a higher proportion of the orphan foster households reported they produced them at the time of survey, than the proportion of household in the non-orphan foster households. This greater diversity in food production is counter-intuitive and demands special explanation. One possible explanation is that orphan foster households are diversifying their sources of income and food in response to distress. Focus group discussions in Bukoba identified that cultivation of short-season crops for consumption and sale was a common coping strategy for dealing with food shortages. It is possible that this was also pursued in Makete.

32. For the orphan foster homes, there was a significantly higher impact of death and illness on the different variables reported. While the highest effect of mortality appears to have been on diversion of adult labour and redirecting it towards patient care as well as actual loss through death of adults, among the orphan care giving households the percentage of those reporting these as causes was much higher than among the non-orphan care giving households. The largest difference between the orphan care giving households and the non-care giving households was in the effect on the labour variables, loss of remittances as a result of death and loss of animals.

33. In sum, Makete HIV/AIDS affected households are beginning to exhibit signs of food related stress and ‘coping strategies’ such as labour for food, dependency on handouts/gifts that leave them more vulnerable. If the crisis in Makete and Bukoba Rural is indicative of current or future trends some areas in Tanzania will be afflicted by overlapping and interacting vulnerabilities, including a severe HIV/AIDS epidemic, that drives communities into structural and long-term crisis compounded by poverty, food insecurity and lack of government capacity. The crisis is made worse by the absence of significant mitigation capacities especially those driven by state and non-state actors. There is insufficient support to the most vulnerable households especially in Makete district.

**Conclusion**

34. Localised socio-economic crises associated with HIV/AIDS, concurrent shocks, and low resilience/response capacities are a new feature of the Tanzanian socio-economy. One such crisis has been identified in Makete, but others may also be found, or emerge. Although localised, these crises are structural and chronic. They demand a new form of early warning (based on Rural Vulnerability Analysis) and response (based on scaled-up social protection and livelihoods support).

35. Tanzania is posting very impressive figures for macro-economic growth, and is succeeding in reducing poverty, albeit not at a sufficient rate to meet the poverty Millennium Development Goals (MDG). At the same time, significant social categories and some rural communities are facing a new spectrum of vulnerability. The HIV/AIDS epidemic has become an embedded condition of the social economy, with the result that other sources of risk have been upgraded to becoming a major threat to the viability of rural livelihoods. For some groups and localities, stresses and shocks that could have been withstood twenty years ago, now threaten destitution and hunger. This is likely to occur on a small scale in different localities in Tanzania, but if it is not adequately responded to, larger crises cannot be ruled out.

36. The data show the complexity and diversity of rural livelihoods in Tanzania, including the range of responses to shocks and stresses. The study underlines how households and communities respond to adversity in highly variable ways, depending on a range of factors to do with their own endowments and the wider social and economic situation in which they find themselves. Understanding these local
and circumstantial factors is essential for obtaining an accurate appraisal of the implications of a shock including HIV/AIDS.

37. This study confirms that Makete District is afflicted by overlapping and interacting vulnerabilities, including a severe HIV/AIDS epidemic, which threatens the entire future of the community. This is a structural and long-term crisis unlike any that has been witnessed in Tanzania’s history as an independent nation. It has similarities with the ‘triple crisis’ of HIV/AIDS, food insecurity and lack of government capacity, as identified by the United Nations Secretary General. It is however not sufficiently widespread or protracted to warrant the term ‘famine’. Any poverty reduction strategy in Makete will need to take account of the pattern of rural vulnerability. In this regard, there are important lessons to be learned from Bukoba Rural concerning HIV/AIDS impact mitigation.

38. Qualitative evidence from Bukoba, supplemented by a review of the excellent socio-economic studies that have been undertaken there, indicate the capacity for resilience and coping of a rural community faced with HIV/AIDS, but which is high in social capital and benefits from advantageous economic conditions. However, even in this ‘best case scenario’ for the impact of the AIDS epidemic, there are disturbing indications of household-level food insecurity, hunger and social distress, especially among the households most affected by HIV/AIDS and foster families. Some of the earliest affected households in the region have completely dissolved and the new emerging households are much economically weaker and food insecure than the households of the older generations. Within Bukoba district also, there is a marked difference between households with adult labour supply or those able to access remittances from elsewhere and assistance of NGOs compared to those, which have lost their adult labour, sources of remittances and are unable to access NGO assistance. While those with labour, remittances or NGO assistance are obviously withstanding stress, those without have either dissolved or are struggling.

39. The survey evidence from Makete indicates that affected households in that district are poorer than non-affected, and have responded to their adversity by adopting to quick food-search mechanism that remove both adult and child labour from working on their own farms which leaves the affected households perpetually food insecure. Households fostering orphans are similarly worse-off. These differences appear largely at the two ends of the wealth spectrum: affected and fostering households are disproportionately represented among the poorest, and found rarely among the richest quintile. Retrospective data indicate little change in overall wealth in the last four years.

Recommendations

40. A broad package for intervention in curbing household vulnerability to the concurrent impacts of HIV/AIDS and poverty would of necessity incorporate a set of components in most districts and communities in Tanzania. These would include:

(i) Prevention incorporating HIV/AIDS education, condom promotion, Voluntary Counselling and Testing within communities;
(ii) School-based HIV/AIDS programmes targeting teacher education, creation of counselling and peer education capacity among teachers and pupils, and establishment of family life education and healthy life networking for students;
(iii) Home-based care and giving hope to those affected (PLWA);
(iv) Income generation and remedial services against poverty. Ensuring the survival and economic self-support of widow, child, grandparent and young unmarried mother headed households. This would include strengthening structures and in
particular agricultural and health services to enable them reach the population so regularly as to enable the slow adaptation of necessary and feasible changes;

(v) Offering the youth alternatives for employment that minimise their exposure to HIV/AIDS infection as well as the violation of their rights to protection from child labour with particular emphasis on the prevention of the worst forms of child labour;

(vi) Facilitating policy development geared at promoting the integration of HIV/AIDS prevention, impact mitigation and care within all the people affected by investments and recognition of the need for promotional measures for protection of the most vulnerable in society from poverty, health and food vulnerability;

(vii) Working with institutions such as the army, civil service, teaching and health services, NGO and other development workers with a view to ensuring they are saved from infection and/or death due to AIDS;

(viii) Monitoring of progress, scaling up and addressing gaps.

41. Clearly the scale of these needs and possible interventions goes well beyond one agency. However the Tanzania national Council for AIDS (TACAIDS) is well positioned to play a coordinating role of a range of multiple partners including marshalling the necessary top, mid and grassroots political support to ensure a range of these activities are progressively introduced in the most vulnerable communities.
Appendices

Appendix 1: Makete Household Wealth Indices for HIV/AIDS mortality/morbidity affected and orphan fostering /non-fostering households

Figure 1: Household wealth index by affliction status

Figure 2: Household wealth index for orphan and non-orphan fostering households
Appendix 2: Makete Household reported causes of food shortage

Figure 3: Causes of food shortage

- Loss of land
- Funeral expense
- No energy
- No fertilizers
- No seeds
- Tools
- Loss of animals
- No market
- Dependency

Legend:
- Affected
- Not affected