

THE EXISTING LINKAGES BETWEEN HIV AND AIDS AND NATURAL RESOURCES MANAGEMENT IN KENYA



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1.0 Background

In sub-Saharan Africa, the HIV/AIDS pandemic is having adverse effects not only on the health of its people but to their livelihoods. This is because it remains a challenge to development, and more so to economic growth. It is evident that natural resources plays an important role in sustaining livelihoods in Africa and indeed to national economies and that the environment is indeed the foundation of human well-being. In Kenya, it is estimated that 1.5 million people have died of HIV related illnesses since the first case was diagnosed in 1984. A total of 1.8 million children have been left orphans, and 1.4 million people are currently living with the disease (NACC, 2005)

The Economic Recovery Strategy for Growth & Wealth Creation (2003-2007) estimates that 67% of Kenya's population live in rural settings where agriculture is the main economic mainstay comprising of both subsistence and cash crop production (GoK, 2003). Moreover, the agricultural sector employs 80% of the labour force and accounts for about 30% of the country's GDP & 70% of Kenya's export earnings (CESifo, 2003). Economic growth has had a direct impact on sustainable environment efforts in the country, leading to direct stress of natural resources and environmental degradation, which ultimately affects sustainable growth and national development. Due to the heavy reliance on natural resources by majority of Kenyans coupled with existing poverty levels, the HIV/AIDS pandemic is

putting additional pressure on the natural resources base. However documented linkages between HIV/AIDS and the environment in Kenya are still anecdotal.

It is with this background that this paper presents the linkages between HIV/AIDS & Environment identified through a desk study and various community consultations conducted through a partnership between The International Union for the Conservation of Nature (IUCN) and the International Planned Parenthood Federation (IPPF), in 2008. The paper identifies existing linkages and the dimensions that such linkages have had on both natural resources management and mitigating HIV/AIDS in Kenya.

2.0 Linkages between HIV and AIDS on Natural Resources

The impact of HIV and AIDS on the management and conservation of natural resources is a field that

is not well explored. This is partly because more emphasis has been on mitigating the disease and not at how it impacts other aspects of human well-being and sustainable development. Various studies have looked at the impacts that HIV/AIDS has had on other sectors of the economy such as health and education but few have studied the impacts it has had on the environment & natural resources.

Literature has demonstrated that the linkages between HIV/AIDS & natural resources are both direct and indirect. It is also important to note that the linkages between HIV and AIDS on food security, poverty and natural resources degradation affects the core of livelihood options available and therefore it is important to understand livelihood security in the context of how natural resources affects it so as to draw the linkages between HIV/AIDS & natural resources management.



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The sustainable livelihood framework, defines “livelihoods” as the capabilities, assets (material and social resources) and activities required for a means of living (DfID, 2003). This definition applies at individual, community and societal levels. The assets include physical assets (e.g. housing, access to land, credit and tools), Human capacity (e.g. knowledge and skills of a family), social assets (e.g. political association, clans, and family networks associations); Natural assets (e.g. forests, wetland, rivers & lakes) and financial assets (e.g. savings and liquid cash). The level of the mentioned assets and the external services available to an individual define the livelihoods status of that individual. Hence, the capability of a household to withstand shocks such as health and disease in this case HIV and AIDS will depend on the level of assets and the external services available to them. It is very important to note that for most people the most important livelihood asset is the Natural capital. Most local communities depend on ecosystem goods and services for their livelihoods. They provide the most important safety net for their support once other livelihoods options fail. Hence the reliable and secure access to these resources (ecosystem services) is fundamental to their lives.

Using this background, the following factors have therefore been highlighted and categorized according to the livelihood assets mentioned above.

Impact of HIV and AIDS on Physical Assets: (access to land, credit, tools): HIV/AIDS has greatly affected access to physical assets. This is further exacerbated amongst women and more so amongst the widows and orphans. The HIV and AIDS epidemic has further compounded land tenureship rights. Land tenure in Kenya ranges from customary to statutory, communal versus private ownership. Around Mt Elgon for example, where land is highly agriculturally productive land is leased off by the head of a family in whose name it is registered by. Once this individual receives the money, indulgences in liquor and high risk sexual behaviour is observed. Such individuals, ultimately die of Aids and poor nutrition. The sons who inherit the land, end up undertaking the same patterns of their fathers and the vicious cycle continues (Matiru & Mwangi, 2005). Certain cultural practices such as wife inheritance amongst the communities in Nyanza Province (Oyaro, 2007) and limited access to land by women and orphans due to cultural practices such as gender based land inheritance and land grabbing by extended family members have been further accelerated due to HIV/AIDS. In Kenya, where women are the main resource users, the long term investment in land & productivity has been further reduced due to HIV/AIDS. Land utilization patterns have also changed with the increasing demand of land being used as burial sites as a result of the increasing numbers of people dying of HIV/AIDS. This

has ultimately also reduced farm produce for both subsistence and export requirements.

Lack of access to good sanitation especially in informal settlements, coupled with the failure of many municipal councils to collect waste are factors that contribute to the spread of infections such as cholera, typhoid and amoeba. These infections have led to early deaths of ²PLWHAs, due to the dirty environments that such people live in. Poor waste disposal and illegal dumping sites have affected both the lives of PLWHAs and their surrounding environments. The lack of access to alternative fuel sources by those affected and afflicted with HIV/Aids is yet another problem that has led to the increased cutting down of timber & non-timber products.

Impact of HIV and AIDS on Human Capital: The AIDS epidemic has had a direct significant impact on human capital though the **reduction of the availability of productive labour as a result of** increased adult mortality due to AIDS or reduced capacity to engage in heavy productive activities by the sick or the people who look after the sick. This has led to reduced activities that households can undertake to meet their livelihoods needs.

Reduced Human Capital has also led to the loss of traditional knowledge in the management and conservation of natural resources that had previously been passed on through generations. Traditional practices such as sustainable fishing methods, agriculture and livestock production, use of medicinal plants, predicting weather and trends, knowledge of bio-diversity conservation, wise use of natural resources, indigenous species for crops and animal varieties have continued to be lost due to AIDS.

HIV/AIDS has led to urban-rural migration and vice versa. Those afflicted with the disease, especially women whose husbands die of Aids are sometimes accused of having



² PLWAs refers to People living with Aids

brought the disease to the home are evicted from their homes, forcing them to migrate to urban centres (Kiai et al, 2003). This has led to the reduction in the productivity of land, as ancestral land is increasingly being sub-divided thus reducing its carrying capacity for productivity. Furthermore, households affected by HIV and AIDS have tended to replace long term soil conservation measures with short term economic and environmental survival strategies because they do not feel they would personally benefit from the long term outcomes of stewardship.

Impact of HIV and AIDS on

Financial Capital: Studies have indicated that as a result of the disease, household incomes have reduced income from the low productivity of labour and the increased costs on health associated costs. This has led to the drain of available resources for households.

Impact of HIV and AIDS on Natural

Capital: Natural resources, for example wetlands, rivers, forests, have continued to provide a safety net or required resources to populations especially those affected by AIDS. However, the epidemic has also had significant impact on the sustainable use of natural resources. Studies have indicated that there is an increase in the exploitation of Natural Resources for medicinal plants, water, coffins and firewood among others, as a result of the disease.

Interviews with a herbalist from Eldama Ravine (IUCN & IPPF, 2008), revealed that many herbalists travel far and wide in search of their herbal remedies. The Namanga forests provides bark, roots, berries and leaves of importance to herbal concoctions that support immunosuppressant related diseases that arise due to HIV/AIDS. *Acacia abyssinica*, *Acokathera schimperi* and *Cadaba farinosa* are just a few of a number of medicinal plants that are used by communities living around the Lembus Forest that are on the decline due to their demand in supporting the management of



various AIDS related diseases. On the other hand, the Peace plant (*Plumeria alba*) has supported the management of herpes zoster, a common opportunistic infection amongst people living with Aids. This plant has really been over-harvested around the Nakuru municipality. Similarly aloe vera and the neem tree are also facing threats of extinction as a result of their potential for contributing to the management of the disease.

In addition to the increased utilization of medicinal plants, other natural resources that have been put under increased pressure due to the disease include timber, especially for the making of coffins and as a source of energy for domestic purposes. The high rate of HIV/AIDS related diseases in Western Kenya is putting additional pressure for timber, especially illegally harvested timber from Kakamega Forest (Hammarskjold, 2003). Fuel wood for cooking, lighting and heating during funerals, especially amongst communities with lengthy burial ceremonies is also increasing. As a result of the increased logging of timber, forests are being degraded and water catchment areas eroded. Notwithstanding, Kenya's five "water towers" of Mount Kenya, Abedares Range, Mau Forest complex, Mount Elgon and the Cherangani Hills are now being heavily eroded.

The demand for diverse wild foods from forests such as white ants, honey, mushrooms, wild vegetables (e.g. *Solanum nigrum* (locally called managu), *Amaranth* spp (locally called terere) and fruits (e.g. *Syzgium guineensis* (locally called lamaiywet) are being overutilised due to their curative, nutritional & medicinal values. This has led to the evident decline in these resources. Small game (e.g. dik dik) as alternative sources of protein is also on the increase, as nutritional demands remain a pillar in the management of HIV. Without good food, ARVs alone do not provide improved well-being, and thus the role and importance that wild foods play in prolonging the lives of PLHIV is increasing. Forests in Kenya are indeed becoming the main safety net for households impacted by HIV/AIDS (CIFOR, 2006).

It should be appreciated that the reduction of any of the livelihood assets, implies increased exploitation of other available assets to meet livelihood needs. In most cases, the HIV and AIDS pandemic has reduced most livelihood assets leaving Natural Resources capital as the last available option especially among the poor to support livelihoods and hence leading to their over exploitation and unsustainable use.

³ A list of various medicinal plants used by communities living around Lembus Forest has been documented through a desk study review of linkages between HIV/AIDS & Environment that was conducted by IUCN & IPPF.



Photos: Violet Matiru

Building partnerships for better management of natural resources & human well-being

The ability of a household to withstand vulnerabilities such as disease in this case AIDS is determined by three characteristics; people's livelihoods, the assets they possess and the external services provided such as infrastructure, institution and enabling policies and appropriate governance structures (IUCN/ISSD/SEI 2003).

The desk review recommended the need for a multi-sectoral approach that would mainstream environmental concerns in the fight against HIV/AIDS, by mainstreaming both environmental & HIV/AIDS concerns into other sectors of the economy. Sharing of knowledge & information between conservation organizations and those dealing with HIV/AIDS is also key for both the mitigation of the disease and

sustainable natural resources management.

4.0 Conclusion

This paper has highlighted the direct and indirect impacts of HIV and AIDS on the Environment using the livelihood approach. As demonstrated in this paper, natural resources are usually left as the last available option especially among the poor to support livelihoods which leads to their over exploitation and unsustainable use.

Hence it is important to enhance the security of livelihoods of HIV and AIDS affected households by enhancing their capacity to mitigate against the impacts on their livelihoods. This would be achieved by enhancing livelihood options such as natural capital through sustainable ecosystem management. The interventions targeted should provide immediate

benefits to the affected households while also contributing to longer term conservation strategies. There is need to enhance the promotion of technologies such as energy saving stoves that will not only reduce the labour required to fetch fuel wood but would also assist conserving trees and water catchment areas.

Livelihood strategies should therefore also establish enabling institutions, policies and practice as well as effective programs that consider both environmental and health aspects. This means ensuring that both HIV/AIDS & environmental concerns are mainstreamed in other sectors so as to better manage the disease and promote sustainable natural resources management for improved livelihoods.

Although Kenya has achieved major gains through its implementation of the economic recovery strategy (GoK, 2003), that saw the increase of health facilities from 4,557 in 2003 to 4,912 in 2005, more needs to be done in both the environmental and health sector of the economy. Kenya 'Vision 2030' which aims to achieve "A globally competitive and prosperous nation with a high quality of life by 2030" would therefore need to be complemented with inter-sectoral plans that ensure the mainstreaming of environmental & health concerns at all levels and aspects of the economy.

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