

Mainstreaming HIV/AIDS into Agricultural Research and Development

HIV/AIDS IS a global catastrophe. It affects every sector of society, and agriculture is no exception. FAO estimates that 7 million agricultural workers have died of AIDS world-wide, without counting those debilitated by the disease or impoverished by the loss of labor. The CGIAR recognizes that the time has come to include HIV/AIDS in its agenda, and WARDA is playing a lead role in this System-wide initiative.

It is estimated that 25 million Africans are already infected with HIV. Most of those are in the 'prime' of their lives, in the age group 15 to 49 years old—the main labor force of agricultural economies. HIV and AIDS occur in every country, and numbers are increasing, with new cases of people becoming infected *daily*. Burkina Faso, Cameroon, Côte d'Ivoire, Nigeria and Togo have already reached the 5% 'threshold,' at which point a significant portion of the working population starts to succumb to the disease.

As the largest employer in the region, agriculture will suffer as much as any other sector. The labor force will be reduced due to death and debilitation of working-age people. Farming families will suffer from loss of labor and subsequent loss of income, the poorest will find it difficult to produce enough food to subsist on.

A case in point

The scene is one of apparent tranquility: Nancy Ngozo* sits in the shade of a kola-nut tree in the midst of her family's land. Close by, her mother cradles Nancy's baby daughter, while her niece hovers shyly within arm's reach.

Yet only two years before, the Ngozo family's lives were turned upside-down by the death of Nancy's father. In just a few short years, they have gone from being moderately well off and almost self-sufficient in food to having meager income and not enough time to grow much in the way of food crops.

"When my father was ill," explains Nancy, "I had to give up secondary school to take care of the farm." She has never gone back to her education, and now runs a small marquee (food kiosk) in the village of Hakena to supplement the family income.

Hakena village did not exist until about 30 years ago. WARDA Agronomist and HIV Focal Point Frank Abamu explains: "In the early 1970s, the national Government invested in oil-palm plantations on a large scale. These villages, only 30 km from an international border, were a direct product of the scheme's need for laborers on site." Consequently, Hakena is cosmopolitan, with at least

*Names of people (except WARDA staff and collaborators), places and companies have been changed throughout to protect identities.



Case studies

Marie-France and Claudette were both married to Jean-Paul Ouattara, who was a relatively senior employee of Oilpalm, Inc. for about 20 years, until illness set in in 1994, resulting in his death in 1999. Marie-France and Claudette were 'lucky' in that, because Marie-France works in the oil-palm nursery of Oilpalm, Inc., they were able to stay in the village; however, Marie-France's position only entitles her to the lowest category of housing—a single room. "These two women have had to cope with a serious downgrade in their socio-economic position," explains Tveteraas, "they live in a smaller house, eat lower-value food, and are now separated from three of their children." Before his illness, Jean-Paul had maintained a 'cottage garden' with maize and yams, which provided the family's staple diet. Then, they were nearly self-sufficient in food, but they had to give up the vegetable growing because they had no time to do it, so now they have to buy all their food requirements. In Jean-Paul's days, the family regularly ate meat, chicken and fish; today, fish is a rare luxury, and they can never afford meat or chicken. The eldest son is a nurse in their home country, and now looks after three of the younger children, simply because schooling there is cheaper than it is in Hakena. Claudette—the younger widow—works in the Hakena market and so makes a daily income. She manages this by being a member of a savings club—she contributes 5000 CFA (about \$7) per week to the club of ten women, then once every ten weeks receives her 'savings' as a lump-sum of 50,000 CFA (about \$70).

"These women are coping well," explains Tveteraas, "partly because of the large social network associated with their former husband. These many friends were particularly helpful during the husband's five-year illness."

Annette's husband was a teacher at the Hakena school and, although not strictly an employee of Oilpalm, Inc., they lived in a good house and ate well. However, Annette is neither a teacher nor an Oilpalm, Inc. employee; thus, she had to give up her house when her husband died in 2000. Annette was able to return to Hakena, thanks to the fact that one of her aunts works for Oilpalm, Inc.; however, the aunt has only a two-room house. Annette returned to her former occupation of making and selling cakes in the market, but whereas this used to provide her with 'pocket money' over and above her husband's teaching salary, she now has to feed and clothe four growing children on her meager income.

five major ethnic groups represented in the population. "What is more," continues Abamu, "many of the workers are either transient or seasonal, and those that aren't will likely spend at least some time visiting their home villages. This makes the village a potentially high-risk area for HIV infection. And that's why we're here."

The Government of Norway sent Astrid Tveteraas to WARDA in August 2001 to do research for her Masters thesis on rural households' mechanisms for coping with HIV/AIDS-related problems. At the end of her third week in Hakena, Tveteraas is frustrated. "There is a whole array of major problems here," she explains, "not least of which is that HIV/AIDS is very much a taboo subject in this community and people simply won't, or can't, talk about it. When we look at coping mechanisms, Hakena is not a place where most bereaved families can actually cope." When a worker falls ill, Oilpalm, Inc. gives them up to 10 months sick leave. "So, if AIDS should strike, the family would most likely have to leave the village even before the employed family member is dead. It is only those who have other relatives employed by the plantation who can venture to stay on" (*see* Box 'Case studies'). To



make matters worse, there are more employees at Oilpalm, Inc’s Hakena plantation than there is work to do, so some level of workforce attrition is of no consequence to the company.

“In the time I’ve been here,” Tveteraas continues, “I have interviewed three families in which the male head of household has died during the past three years. To be honest, there’s no proof and no real evidence that any of these men died of AIDS or related causes, so all we can do is generalize about the coping mechanisms and impact of death or incapacity of the main bread-winner on the family’s financial and overall well-being.”

The family Ngozo is one of these, but even there it is likely that Mr Ngozo died from heart-related problems rather than AIDS.

Hakena is hardly a typical African rural setup, where the villagers would be totally dependent on agriculture. This is where the Ngozo family helps with Tveteraas’s work: “The Ngozos lived where they do now even before the oil-palm plantation was established,” she explains. “They are in fact one of the few families here that *are* dependent on agriculture.” But this doesn’t make their situation any easier to interpret in the light of Tveteraas’s thesis topic. “Their whole economic situation is incredibly complex,” continues Tveteraas, “since it is quite possible that they would have suffered economically with the continued downward trend of coffee and cocoa prices, even if the father hadn’t died.” In the past, the family members ate well, or at least better than they do now; today, they blame a “lack of hands” in part for their reduced diet—Nancy senior is now quite old, and her five other children all live in the nearest big city (about 60 km away). “But even this situation is compounded,” says Tveteraas, “as their customs prevent Nancy junior from going near a fire because of her young baby. Consequently, she cannot do any of the household cooking.”

It is not all ‘doom and gloom’ for the Ngozos, however. They have adapted their agriculture to their new situation, and still manage to retain four laborers and their

Perceptions of HIV and AIDS: challenges and obstacles to research

AIDS is a very sensitive subject that people in West Africa hesitate to talk about. The challenge is therefore to obtain relevant information *without* over-emphasizing HIV and AIDS.

“The inability for the project to collect data specifically on AIDS was evident at all levels,” says Tveteraas. “On the technical side, there are no HIV-testing facilities in Hakena or its neighboring villages, but even if there were, most people that I spoke to would not want to know if they were HIV-positive anyway.”

There are at least three potential repositories for medical information of the inhabitants of Hakena—the management of Oilpalm, Inc. itself, the clinic and the school. However, each of these refused to divulge any information to the project, even anonymously.

“HIV/AIDS is such a taboo subject that even if someone knew that the disease existed in their family, they would never tell me about it,” explains Tveteraas. “From the first fieldwork, I realized that it would be impossible to identify households that had been affected by HIV/AIDS. That is why we decided to focus on long-term diseases that normally resulted in death, and using those to analyze coping mechanisms, which should be essentially the same for families affected by AIDS.”

“What we saw in Hakena,” says WARDA HIV Focal Point Abamu, “is a taste of the differences between the West African situation, and that in Central and East Africa. There, HIV/AIDS has a longer history and the death toll attributed to AIDS is already marked; in much of West Africa, AIDS is still a relatively unknown factor in the every day lives of farmers. It also gives us a taste of the sort of problems we are likely to face in the rest of the sub-region.”

families to work what’s left of the farm. They have stopped growing yam, and now only grow enough cassava for home consumption. With the decreasing value of coffee and cocoa, the main cash crop now is oil-palm. “We harvest about one tonne of coffee per year,” says the younger Nancy, “and that is sold for about 200,000 CFA [about US\$300].” Their cocoa production has been cut to a mere 15 kg a year. Oil-palm is favored because it

provides monthly, rather than yearly, income. “We have five hectares of oil-palm around the ‘settlement’ and another seven about 3 km away.”

Meat still features in the Ngozo diet, albeit at a reduced level. “We have some chickens,” says Nancy, as we watch a hen and her brood of young chicks pecking about among the coffee trees, “but I don’t know how many. Hawks take some of them.” They also own a goat or two. Thus, they can still manage a meal of meat when one of the other children visits from the city, or on festival days.

The CGIAR HIV/AIDS initiative—the bigger picture

The response of the CGIAR to the HIV/AIDS pandemic has been to launch the System-wide Initiative on HIV/AIDS and Agriculture (SWIHA). Abamu is coordinating WARDA’s contribution to assess the impact of HIV and AIDS on rural agricultural communities. The fact that the initiative is ‘System-wide’ means that it includes several of the CGIAR centers as active players. “To date,” explains Abamu, “thirteen centers and the System-wide Program on Gender and Diversity are involved in the Initiative. As partners, we have on board ministries of health and medical colleges in target countries, sub-regional research organizations (e.g. WECARD/CORAF in West Africa), advanced research institutions, FAO and donor agencies.”

A steering committee has been established to oversee the whole process. WARDA’s Director General Kanayo F. Nwanze is convener for SWIHA. “We have opted for a sub-project *modus operandi*,” he explains, “in which individual members, or combinations of members, prepare and submit separate project proposals to donors for funding. The decision was also made to channel such proposals through the steering committee.”

“Given that linkages between agricultural research and the health sector are generally few and far between, it is necessary to see our role clearly,” explains Abamu. “For example, it is obvious to us that agricultural research

cannot eliminate the HIV virus, it cannot cure the AIDS disease, it cannot stop prostitution or unsafe sex, and it cannot eliminate witchcraft or voodoo.” So, what does agricultural research have to offer?

“The agricultural research and development sector has several comparative advantages,” continues Abamu, “not least because agriculture is the largest employer in the region.” Other advantages include:

- functional research and development networks with direct access to farmers;
- higher quality food products that should improve the overall health of agricultural workers, possibly mitigating the effects of HIV-related debilitation;
- improved farm productivity improves rural livelihoods, thereby either reducing the risk of infection or providing financial support for coping mechanisms;
- improvements in rural agriculture should also reduce the continuing trend toward increased rural–urban migration;
- these should combine to encourage increased investment in rural agriculture, not just by donors, but also by individual farming families.



SWIHA: structure and function

The future structure of the CGIAR System as a whole has been under discussion for some time, and one of the proposals currently under consideration is that greater use should be made of Center complementarities through a system of ‘global challenge programs.’ “There is a good chance,” says Nwanze, “that SWIHA may become a global challenge program, but we could not afford to wait for the final structure of such entities to be decided before we launched into this vital area of research.”

As is so often the way with new and innovative ideas among a range of partners, a lot of time over the past two years has been dedicated to discussing options—mechanisms for collaboration, subject areas to be researched, and so on—and many ideas are still to be submitted to donors as full proposals. WARDA has been active in presenting ideas and proposals to regional and national partners through such fora as the Forum for Agricultural Research in Africa (FARA)–CG consultation, the West and Central African Council for Research and Development (WECARD/CORAF) General Assembly, and the CGIAR’s Mid-Term Meeting in 2001. In addition, WARDA has established partnerships with the UNAIDS in-country team for West and Central Africa and ECODEV—an NGO with experience of working with HIV/AIDS in West Africa.

Meanwhile, a representative of another partner in the initiative (the International Food Policy Research Institute, IFPRI) has addressed the UN Sub-Committee on Nutrition and the UN General Assembly Special Session on HIV/AIDS. The International Service for National Agricultural Research (ISNAR) is already active in two AIDS hot-spot countries in East and Southern Africa, namely Malawi and Uganda. In particular, a network is being established bringing together national stakeholders in agricultural research and development, with those already involved in HIV/AIDS and public health. Linkages between HIV/AIDS and food security and rural livelihood are being ascertained with a view to

Potential HIV/AIDS impact-mitigation technologies

Part of the reason for the CG Centers becoming involved in the HIV/AIDS arena is that their work has already been addressing issues close to the heart of the problem, especially with respect to labor- and cost-saving technologies. Some WARDA-promoted technologies that are relevant to the HIV/AIDS issue are listed here.

- NERICA varieties
 - Weed-competitiveness and short growth cycle reduce labor requirement for weeding
 - High protein content increases nutritional value to consumers
- Small-scale machinery, such as thresher-cleaner
 - Reduces labor requirements
- Leguminous crops as fallow-replacement
 - Replenish soil fertility, resulting in increased rice yields next season
 - Increase number of years a field can be used before needing to clear new land (thereby reducing labor for land clearance)
- Integrated crop management
 - Improving returns to investment in inputs at no, or minimal, extra cost
- Direct seeding methods
 - Remove need for transplanting (labor)

establishing recommendations that will be considered by agriculture and public-health institutions.

AIDS in the workplace

Another aspect of the CGIAR initiative involves the Centers preventing the further spread of the disease among staff and their families. With AIDS affecting so many people world-wide, there is a need for awareness raising among the Centers’ staff. To this end, the CG’s Gender and Diversity Program has produced model policies on HIV/AIDS in the workplace. The goals of these are to:

- prevent further HIV infection among employees and their families;
- preserve the lives of those employees and dependants currently suffering from HIV/AIDS;
- provide compassionate care for those employees and dependants suffering and/or dying from AIDS;
- encourage a commitment to provide HIV/AIDS insurance for all staff;
- foster a workplace that does not discriminate on the basis of disease;
- set an example for local communities and national partners for the compassionate management of HIV/AIDS.

The models have been distributed to all CGIAR Centers, and WARDA has already presented an adapted version to its Board of Trustees for discussion.

WARDA has established a peer-group among staff for mitigating HIV/AIDS. The idea being to bring together staff of diverse gender, culture, religious and social backgrounds to devise a holistic approach to the problem. The goal is to provide a mechanism whereby staff will be able to talk about HIV/AIDS in confidence with colleagues or peers. The NGO ECODEV was called in to brief the peer-group on the outset of their work.

“Unfortunately, it seems that HIV and AIDS are with us for the long haul,” says Nwanze. “It is important for us to bring our wealth of knowledge of agriculture and farmers to alleviate the suffering of those families affected by the disease in our region. It is no less a concern that we address the situation in our own house.

“The story of Hakena village shows that this will be an uphill struggle for WARDA and its partners, especially in West Africa, but we trust that a work well begun will lead to fruition in the not-too-distant future.”