

Making Sense of the Agriculture-Nutrition-HIV/AIDS Links

Michael Loevinsohn¹
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For many at the grass roots, the links between agriculture, nutritious food and health are the stuff of everyday life and for the most part no mystery. That food underlies health and that health makes it possible to work and produce or purchase food is as clear as the day is long. Weaken one link and you weaken them all.

Often, however, the links are not so clear for professionals, because health and agriculture are the concerns of the separate sectors, ministries, faculties etc to which they owe allegiance. Dividing concerns by sectors generally makes sense: it permits specialization and focus. The price is that issues at the intersection of sectors get short shrift. What I would like to draw your attention to in the time I have is that in the struggle with HIV/AIDS we find ourselves now, and have for some time, at a point where the benefits of specialization are outweighed by its costs. In the countries of Africa and Asia where HIV/AIDS epidemics are well-established in the general population or spreading rapidly, agriculture is the source of livelihood for the majority of the population and a critical economic sector. Professionals shaping policies and programs in agriculture sector organizations, public and private, really have no choice but to take heed of the agriculture-nutrition-HIV/AIDS links primarily because a medical and public health strategy, on its own, is proving inadequate to the task of containing HIV and dealing with the consequences of infection in heavily affected countries. That failure is implicating the core concerns of the agricultural sector. I will try to make this as clear as I can.

Prevention of HIV currently relies on behavior change – the trilogy of abstinence, being faithful and using condoms (ABC) – an effective vaccine not yet being in prospect. In most of the countries where HIV is well established, levels of knowledge of HIV/AIDS are often quite high, particularly among young adults. Yet in many situations, they are unable to act on that knowledge and apply the ABC. Food insecurity and the lack of livelihood in many cases push them into transactional (“survival”) sex. There is scattered evidence – mostly still anecdotal – that the continuing food crises in southern Africa have worsened the situation. A few months ago, I was in a village meeting in S. Malawi. A young woman, her eyes cast down, described girls being sent out at 4 PM to find kerosene or a plate of maize meal – without money. More social marketing of ABC is unlikely to be of much help to those girls and young women. What they were discussing in that meeting were livelihood opportunities: getting hold of land near a stream and buying treadle pumps that would help them produce vegetables out of season for a nearby urban market. To them, it made perfect sense that finding a better livelihood in agriculture was a way to avoid infection – to be able to say “no”. But at the moment, that idea does not find a place in HIV prevention strategies. I’ll come back to this in a moment.

Treatment with ARVs – expanding their accessibility – is currently the focus of much attention for dealing with the consequences of infection i.e. where prevention has failed. Yet what can feasibly be achieved still falls far short of the need viz. “3 by 5” (WHO’s goal of reaching 3 million with ARVs by 2005) and “2 by 8” (the US’s PEPFAR goal) vs. the 40 million people now estimated to be living with HIV/AIDS world-wide. Providing care for those not reached

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and treatment of the opportunistic infections that accompany HIV will continue to be a priority and a challenge for a long time yet. Food and proper nutrition are front and center in this.

We are working with an NGO in Lilongwe district, Malawi whose focus is home-based care. It is a community initiative now 4 years old to help families cope with the rising tide of ill and dying. Family members – mostly women – who provide the care are supported by the NGO's staff and volunteers with advice, materials and medical backstopping. But the effort is teetering. The ill are often poorly nourished and easy prey to infections. A woman care giver, haggard and ill-fed, told us how she was taking time from her own home and fields, and felt herself under pressure from her husband and children. The NGO is working with local home garden and permaculture experts to develop intensive production of fruit, vegetables and medicinal plants to meet these different needs. The labor will be provided by the community, including those living with HIV/AIDS, when they are able. Excess production, particularly of high-value products like herbal medicines, will be sold. The hope is that home-based care in the village can be put on a more self-sustaining basis.

The initiative in each of these two cases has come from the grass roots and indeed that has been the hallmark of the response to HIV/AIDS in Africa. How can the institutions of agriculture engage effectively in the struggle with HIV/AIDS in support of that response? The issue is critical because communities, stretched by the expanding epidemic and a host of other forces, can only do so much on their own. The issue is at the heart of what RENEWAL – the Regional Network on AIDS, Rural Livelihoods and Food Security – is about.

An effective institutional response has to be based on being able to see things more clearly. Agricultural professionals at different levels within sector organizations – public and private – need to see how what they do for a living relates to HIV/AIDS, positively or negatively, and in 2 directions: preventing or hastening the spread of HIV and exacerbating or mitigating the consequences of infection, illness and death. This ability comes from learning to use what we refer to an “HIV/AIDS lens”. In general, agriculture is relevant to health in 3 main ways: as a source of food and nutrition; as a source of livelihood and as a shaper of landscapes. How these 3 functions affect or are affected specifically by HIV/AIDS varies in different contexts and by actions at different levels of decision making.

The first priority when using the lens is to consider whether one's actions may, inadvertently, be making matters worse. HIV risks may be increased by programs or policies that, for example, contribute to food price volatility, or that lead to laborers, separated from their families, being housed in single-sex dormitories on agricultural plantations or around rural industries – the kinds of risk-filled conditions that have been described around S. African mines and West African dam construction sites. Policies, national and local, can also magnify the consequences of AIDS-linked deaths for example by leaving widows' access to land and other key resources insecure. If there is good reason to believe that these effects are real, then real changes in these policies or programs need to be considered as a matter of urgency.

On the other hand, policies and programs could potentially support prevention or mitigation, but because they weren't designed or implemented with this in mind, these benefits cannot be enhanced. These opportunities should become clearer to decision makers as they gain confidence in using the lens. For example, those women in Malawi had heard that treadle pumps were being promoted by a program of the Ministry of Agriculture and a local NGO. They were anxious, however, that they wouldn't qualify because the program was focused on landed farmers and at the time they were landless. The program managers had probably never

considered that pumps could be relevant to HIV prevention but there seems to be real potential – and not just in that one valley – if they make the right changes.

We need action oriented and operational research to clarify both the dangers and opportunities inherent in current policies and programs. This research has to be closely linked with decision makers and widely communicated so that it helps to refine the HIV/AIDS lens.

Decision makers from policy to village level need to better understand the sources of resilience to AIDS – the factors that enable some households, groups and communities to avoid the worst consequences of AIDS-linked illness and death or to recover faster than others. Similarly, they need to understand the sources of resistance to HIV- the factors that enable some to avoid infection when others, similarly situated, succumb. Innovativeness and invention, and social cohesion, are important elements of both, but we need to learn much more – this is a priority in the work that RENEWAL supports. Currently, far more effort is spent on documenting the impacts of AIDS than the sources of strength but the latter are ultimately the more useful guide to developing helpful interventions.

We don't have a lot of evaluated experience on “what works” in this area and gaining more is essential, but a few things seem relatively clear. What makes sense in particular situations will probably not require the application of rocket science. The treadle pumps and home gardens in the above examples are pretty familiar agricultural technologies. What is innovative and important is how they are used: consciously in support of a health goal – prevention of HIV or mitigation of AIDS. Many interventions currently require recurring expenditure to be effective: a condom promotion program, for example, depends on procuring and distributing condoms for which somebody has to pay. Health economists assess and prioritize interventions based on the cost of avoiding a DALY – a disability-adjusted life year. In these terms, an action such as the women in that Malawi village are contemplating, offers the prospect of a sustainable reduction in DALYs, with low recurring expenditure, because, *but only if*, they are able to make a living producing something that others want to buy². The Chinese say, simply, that we walk on two legs.

I believe that this is the essence of that elusive but widely promoted notion, the multi-sector response. The frontline here is understanding – competence – at different levels of decision making. At the local level, there is real potential for smart, win-win approaches. For example, those young women have time and energy, but as yet no access to land. In the same village there are older women, widowed by AIDS, who are at risk of some of its worst impoverishing consequences. They have land but lack the labor to put it to full use. One can imagine a social innovation whereby the young women make use of the land that the widows cannot till who in exchange receive a fair share of the harvest. Someone credible has to facilitate this, but just as importantly, changes in customary and/or national land policy may be required to provide the widows with secure title to their land so that they can negotiate – in many parts of Africa and elsewhere, widows are often dispossessed by in-laws. Policies – policy makers and leaders – have to create an enabling environment for such innovation.

Many thanks for your attention.

² It should not be imagined that initiatives such as this involving livelihood and food security are in competition with condoms and AIDS education. On the contrary, they are highly complementary.

Capitol Hill Forum 2004
***The Critical Role of International Agricultural Development
in the Fight Against Undernutrition and HIV/AIDS***

Tuesday, January 27, 2004
Caucus Room, Cannon House Office Building
11:30 a.m.-1:30 p.m.

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Complimentary lunch 11:30 a.m.

Program

- ***Welcoming Comments (12:00 noon)***
 - **John Yohe:** President, AIARD
 - **Senator Chuck Hagel:** Senate Foreign Relations; Select Intelligence; Banking Housing and Urban Affairs Committees
 - **Congressman Doug Bereuter:** House International Relations; Financial Services; Transportation and Infrastructure; and Select Intelligence Committees
- ***Making Sense of The Agriculture/Nutrition/Health Connections (12:15 p.m.)***
Michael Loevinsohn: Senior Research Fellow, International Service for National Agricultural Research (ISNAR)
- ***Implications for USAID Programs and The MCA (12:30 p.m.)***
Andrew Natsios: Administrator, USAID
- ***Gender Considerations and The Agriculture/Nutrition/Health Connection (12:45 p.m.)***
Geeta Rao Gupta: President, International Center for Research on Women
- ***Private Sector View and Roles (1:00 p.m.)***
Robert B. Horsch: Vice President, Product and Technology Cooperation, Monsanto
- ***Summary, Questions and the Way Forward (1:15 p.m.)*** – John Yohe

Please RSVP to: Susan G. Schram by January 25: sschram@acdivoca.org

SPEAKERS

Michael Loevinsohn is an ecologist with long-standing interest in the application of ecological theory and understanding to development issues. He is currently Senior Research Officer at the International Service for National Agricultural Research (ISNAR) in The Hague where his principal responsibility is as Coordinator of **RENEWAL** (Regional Network on HIV/AIDS, Rural Livelihoods and Food Security) in eastern and southern Africa. This aims at enhancing the capacity of agricultural R&D organizations to contribute effectively to the prevention and mitigation of HIV/AIDS. His broad experience in the management of natural resources in a variety of settings in Africa and in the Philippines has been accompanied by a long-standing concern about the linkages between agriculture, the rural environment and human health. He documented the role of climate change in the upsurge of malaria in the late 1980's in the East African highlands (the first empirical evidence of this relationship) and the effects of expanding rice cultivation on malaria. In the Philippines his research linked poorly regulated use of pesticides with increases in the death rate of rice farmers following the Green Revolution. Following up, he promoted the concept of the Pesticide Hazard Audit at the international level and worked in the Philippines on reforming the links between research and regulation. A Canadian national, Michael earned his Bachelor's degree in biology from McGill University and his PhD in ecology from Imperial College, London.

Andrew Natsios was sworn in on May 1, 2001, as Administrator of the U.S. Agency for International Development (USAID). President Bush has also appointed him Special Coordinator for International Disaster Assistance and Special Humanitarian Coordinator for the Sudan. Natsios has served previously at USAID, as director of the Office of Foreign Disaster Assistance and as assistant administrator for the Bureau for Food and Humanitarian Assistance. Before assuming his present position, Natsios was chairman and chief executive officer of the Massachusetts Turnpike Authority and had responsibility for managing the Big Dig, the largest public works project in U.S. history. Prior to that he served as secretary for administration and finance for the Commonwealth of Massachusetts and vice president of World Vision U.S. From 1987 to 1989, he was executive director of the Northeast Public Power Association in Milford, Massachusetts. Natsios served in the Massachusetts House of Representatives from 1975 to 1987 and was named legislator of the year by the Massachusetts Municipal Association (1978), the Massachusetts Association of School Committees (1986), and Citizens for Limited Taxation (1986). He also was chairman of the Massachusetts Republican State Committee for seven years. Natsios is a graduate of Georgetown University and Harvard University's Kennedy School of Government where he received a master's degree in public administration.

Geeta Rao Gupta is President of the International Center for Research on Women (ICRW), a Washington, D.C.-based organization that undertakes policy-oriented research, technical assistance, and advocacy focused on women's rights and women's economic roles, health and nutrition, the environment and natural resources and adolescent sexual health. Dr. Gupta has over twenty years of experience in research and program development, particularly in the area of women's health, and is an international expert on women and HIV/AIDS. Dr. Gupta has been recognized for her commitment to quality research, her dedication to educating policy makers and the public on the gender-related aspects of HIV/AIDS. She delivered the plenary address at the 13th World AIDS Conference at Durban, South Africa in 2000. Dr. Gupta serves on many distinguished Boards, including the International AIDS Vaccine Initiative, the Ms. Foundation, Interaction, and the Moriah Fund. She has a Ph.D. in Social Psychology from Bangalore University, a Master of Philosophy degree from the University of Delhi, and both a Master and Bachelor of Arts in Psychology from the University of Delhi.

Dr. Robert Horsch is Vice President, Product and Technology Cooperation, at Monsanto Company, with responsibility for public-private partnerships to help smallholder farmers in developing countries gain access to better agricultural products and technologies. After receiving his Ph.D. in Genetics at the University of California, Riverside, in 1979, he conducted postdoctoral work in plant physiology at the University of Saskatchewan. In 1981 he joined Monsanto Company and led the company's plant tissue culture and transformation efforts until 1995. In 1996 he became Vice President and General Manager of the Agracetus Campus of Monsanto Company's Agricultural Sector in Middleton, Wisconsin, serving in that capacity until the end of 1999. Dr. Horsch has served on the editorial boards of several leading journals in the plant sciences and also as an advisor to the National Science Foundation and the Department of Energy. He has published more than 50 articles on plant biology and plant biotechnology and is a frequent speaker on these subjects, including Congressional testimony. In 1999 he was awarded the National Medal of Technology by President Clinton for contributions to the development of agricultural biotechnology. He is currently a member of the CGIAR Private Sector Committee and the United Nations Millennium Goal Task Force on Hunger.