



Agriculture and HIV/AIDS: A primer on the dynamics with examples drawn from sub-Saharan Africa

Presented by Cynthia Donovan
Michigan State University
Department of Agricultural Economics

IFPRI Workshop: Agriculture and Health Linkages:
Towards Improved Co-ordination
23 June 2005



Objectives

- Draw the basic linkages with examples from research in Sub-Saharan Africa
- Reflect complexity of the relationships and issues between agriculture and HIV/AIDS
- Highlight areas where health sector specialists can contribute positively to ag sector issues and vice versa

Special note: Thanks to USAID Washington (EGAT/Ag and AFR/SD) and Country Missions, particularly the agricultural sector departments, for challenging us and supporting this research.



Context

- HIV/AIDS has come into an environment where:
 - Agriculture is key, but increasing diversification
 - Subsistence food production for the poor in SSAfrica
 - High rural poverty
 - Health problems severe even without HIV/AIDS
- Food security as key in HIV/AIDs & Ag
 - Availability (production)
 - Access (income)
 - Utilization (health)
- Women are at a disadvantage for economic activities and in other respects



HIV/AIDS ⇔ Agriculture

- Initial work on hypothetical impacts, based on economic logic and simulations, using prevalence data that may not be accurate in rural areas
- Increasing body of literature empirically assessing impacts, yet with gaps



Basic Logic

- HIV/AIDS directly affects human resources available to ag
 - Reduced labor of person when ill and after death
 - Reduced skill set and related contacts
 - Labor dedicated to care for ill, attend funerals, etc.
 - Reduced resources for educating/training young
- HIV/AIDS results in lowered assets, including production assets
 - Selling assets to provide care, medicines, funerals
 - Loss of rights to assets after a death
- Overall effect: Lower production; lower productivity of land and labor; lower incomes; greater reliance on subsistence crops, especially those crops using less labor



Evidence on Human Resource Changes

- Labor shifts out of agriculture found in Tanzania, but only in the short run (Beegle)
- Loss of skilled workers a problem on commercial farms (Zambia)
- Dependency ratios and labor to agriculture are not significantly different for hhs with a death compared to other hhs (Moz, Rwanda)
 - Hiring in labor
 - Bringing in new members
 - Relying on neighbors, social networks
- Person who is ill/died is often not the head or spouse



Evidence on Asset Losses

- Selling assets during illness period was found in Rwanda
- Loss of rights to assets after a death was found in Malawi (land rights) (Mazhangara)
- Kenya found significant asset losses in households with a male death (Yamano & Jayne)



Evidence on Overall Effect

- Lower cash crop income in Kenya (Yamano and Jayne); lower production of cash crops in Rwanda (Donovan et al)
- Loss of access to land in Malawi (Mazhangara)
- Reduced labor in agriculture in period of illness, but not in the longer term in Tanzania (Beegle)
- Etc.

Many other studies/results ...

BUT: Heterogeneity of results with different environments and different strategies/options of households



Agriculture ⇨ HIV/AIDS The Bad Side

- Risk and poor productivity in agriculture
 - Increasing vulnerability, reducing resiliency of household: both food availability and access problems
 - Risky behavior due to poverty (transactional sex)
- Market participation and labor away from home
 - Increase potential exposure to HIV in markets
 - But, higher income may be key in lowering risk, resiliency



Agriculture ⇨ HIV/AIDS The Good Side

- Higher Ag incomes provide resources
- Good agricultural production can help to support social networks
- Higher Ag incomes under women's control reducing vulnerability
- During illness, ag production providing increased food security/food diversity



Mitigation Activities/Programs for HIV/AIDS and their Ag Impacts

- Choice of action in health or in ag will affect the other sector so need coordination/balance
 - Food aid
 - ARVs and medical investments
 - Labor saving technology: ag or domestic chores?
 - Decisions on when to intervene as well as how
 - Decisions on targeting of interventions
 - Overall allocation of scarce aid and development resources



Key Gaps

- Evaluation of resource allocation across sectors
 - Low resource allocation to agriculture and long run consequences (6% of aid goes to ag)
 - *“A development strategy based on rural social services and food aid represents a narrow and inefficient approach to poverty reduction in Africa” (Eicher and Kane 2004)*

Key Gaps

- Need to understand the dynamics of the illness, relationships with nutrition, and the effect of providing “better nutrition”
 - “Living positively” recommendations and micro-nutrients (with and w/o ARVs)
 - Home gardens as an example
 - Small animal livestock (own consumption/income)

Key Challenge

- Problem: Sector specific surveys
 - (eg. DHS and Agricultural Surveys)
 - Lack of coordinating information Needs
 - Need to developing adequate instruments

