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

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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

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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

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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