IMPACT OF HIV/AIDS ON AGRICULTURE AND FOOD SECURITY IN SWAZILAND

Presentation by

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• Agriculture is the main source of livelihood of the majority of people in Swaziland.
• About 70% of the population live in rural areas and derive their livelihoods from agriculture.
• HIV/AIDS poses a developmental problem and it challenges long-term strategy for poverty reduction and food security in the country.
• These challenges include the depletion of human capital, diversion of resources from agriculture, loss of farm and non-farm income together impacts negatively on agricultural productivity.
• The combined effects of these factors is lack of food and food inaccessibility to food.
FINDINGS OF THE STUDY

• Introduction
• Households with dead/sick member from HIV/AIDS related illness
• Impact of HIV/AIDS on Agricultural Production
  – Effects on land utilization and Accessibility
  – Effects on Agric Assets and Livestock
  – Effects on food and crop production
    • Effects on Maize and other crops production
    • Effects on Agric inputs
    • Effects on land allocation to crop production
• Impact on households food security
• Impact on Agric labor
• Strategies for Mitigating and coping with the impact of HIV/AIDS
Introduction

• Proxies of HIV/AIDS
  – Morbidity – Households with chronically ill members
  – Mortality – Households with dead members
  – “Hybrid” – Households with dead and/or chronically ill members

• Description of Household: A family that eats from the same pot
Households with chronically ill members

Table 1. Households with members showing symptoms of HIV/AIDS related illnesses by region (n = 839)

<table>
<thead>
<tr>
<th>Region</th>
<th>Frequency</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lubombo</td>
<td>66/157</td>
<td>42.0</td>
</tr>
<tr>
<td>Shiselweni</td>
<td>112/238</td>
<td>47.1</td>
</tr>
<tr>
<td>Hhohho</td>
<td>67/206</td>
<td>32.5</td>
</tr>
<tr>
<td>Manzini</td>
<td>101/238</td>
<td>42.4</td>
</tr>
<tr>
<td>Total</td>
<td>346/839</td>
<td>41.2</td>
</tr>
</tbody>
</table>

- 346 out of 839 = 41.2 percent of hhs had members with symptoms of HIV/AIDS
- Table 1 indicate affected households by regions
- Shiselweni region is the most affected (47%) followed by Manzini and Lubombo (42.4%), (42%) respectively
- Hhohho was least affected. (32.5%)
Households who lost members

Table 2. Households that had lost members due to symptoms of HIV/AIDS related illnesses by regions (n = 845)

<table>
<thead>
<tr>
<th>Region</th>
<th>Frequency</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lubombo</td>
<td>127/161</td>
<td>78.9</td>
</tr>
<tr>
<td>Shiselweni</td>
<td>188/239</td>
<td>78.7</td>
</tr>
<tr>
<td>Hhohho</td>
<td>170/206</td>
<td>82.5</td>
</tr>
<tr>
<td>Manzini</td>
<td>169/239</td>
<td>70.7</td>
</tr>
<tr>
<td>Total</td>
<td>654/845</td>
<td>77.4</td>
</tr>
</tbody>
</table>

- 654 out of 845 = 77.4 percent of the hhs lost family members as a result of HIV/AIDS related illnesses
- Table 2 indicates affected households by regions
- Hhohho region is the most affected (82.5%) followed by Lubombo and Shiselweni (78.9%), (78.7%) respectively
- Manzini was least affected with 70%hh who lost their members
Households with chronically ill members between 18 and 59 years

• Using hybrid indicator more than 60% of households have members dead and/or sick

• By Regions:
  • Lubombo is most affected (68%) followed by Hhohho (66%) and Manzini (65%) and Shiselweni (63%)

• Mortality proxy indicated that Hhohho was the most affected (52%) followed closely by Lubombo (51%) and Manzini (50%)

• Therefore Lubombo seems most affected
Households with dead/chronically ill members between 18 and 59 years by gender

- Lubombo had 76% hhs with sick females and 59% hhs with females who died
- Manzini had 67% hhs with sick females and 70% hhs with females who died of HIV/AIDS related illnesses
- Hhohho had 62% hhs with sick females and 67% hhs with females who died
- Shiselweni had 64% hhs with sick females and 67% hhs had females who died of HIV/AIDS related illnesses
- These confirm that women are more vulnerable to HIV/AIDS than men
Impact of HIV/AIDS on Agric production

• Impact on agric production is reflected in:
  – Reduction in land utilization
  – Loss in agricultural assets and livestock
  – Reduction in food and crop production
  – Decline in agric inputs
  – Change in labor time allocated to agric activities
Effects on land utilization and accessibility

- About 70% of the hhs reported a change in land utilization

Whilst most of the affected hhs live on farm, few of those reported change in land utilization.

However HHs with male dead/ill and living on farm are the most who reported a change in land utilization.

About 25% of these HHs have reported change in land utilization in Lubombo, followed by Manzini (11%)
Effects on land utilization and accessibility

- As a result of HIV/AIDS HHs realized decline in arable land utilized.

On average HHs observed 43% and 30% less of total arable land at homestead and under dry-land cultivation respectively.

Again Lubombo was the most affected (52) followed by Shiselweni(49%)

Those reported change in land utilization about 81% indicated that the impact was either big or very big
Effects on land utilization and accessibility by gender

- Female headed HHs access less land compared to those headed by men

They also risk having husband’s land confiscated

Figure 4. Hectares of Total land in households with death or chronically ill members by gender

- access/male
- access/female
- arab/male
- arab/female
- arabcult/male
- arabcult/female
- unutilized/male
- unutilized/female
Change in land access decision making

Gender imbalance also prevail in land decision making

About 63% hhs in Lubombo reported change in decision making followed by Shiselweni (50%)

Manzini and Hhohho have 47% and 45% hhs reporting change respectively
Effects on agric assets and livestock

- The figure shows change in livestock number in infected HHs.
- 67% hhs in Lubombo have livestock reduced due to HIV/AIDS.
- 26% in Shiselweni reported a change in assets and livestock.

Figure 4.7 Percentage of Households with death/chronically ill member that reported change in Livestock numbers.
Number of Livestock sold

- To substantiate the above findings this graph examines the livestock sold. The results suggest that a higher number of livestock were sold during illness and a slightly higher number after death.

- Lubombo realized an increase of 407 livestock sold, representing 63%.

- Hhohho experienced a slight increase in livestock sold during illness, compared to other regions.

Figure 8. Number of Livestock sold before, during and after illness in households with recent death/cronically ill members.
Effects on Household food and crop production

• **Yield on food and crop production decline because of:**
  – Decrease in land allocated to crop production
  – Decline in application of agric inputs
  – Less time allocated to agric activities
  – Lack of knowledge to manage crops
Effects on maize and other crop production

- This figure reflects a decline in maize production in the affected HHs.

Again Lubombo is leading (44%) followed by Shiselweni producing 22% less of maize.

Meanwhile Lubombo and Manzini increased beans whilst reducing maize production.
Effects on agric inputs use

Table 3. Percentage change in Expenditure on Agricultural Inputs for Households experiencing HIV/AIDS related illnesses and deaths of adult members.

<table>
<thead>
<tr>
<th>Region</th>
<th>Seeds</th>
<th>Fertilizer</th>
<th>Chemicals for crops</th>
<th>Veterinary Medicine</th>
<th>Hired Labour</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lubombo</td>
<td>-4%</td>
<td>-3%</td>
<td>-2%</td>
<td>-5%</td>
<td>-</td>
</tr>
<tr>
<td>Manzini</td>
<td>-7%</td>
<td>-8%</td>
<td>-5%</td>
<td>-2%</td>
<td>-</td>
</tr>
<tr>
<td>Hhohho</td>
<td>-3%</td>
<td>-3%</td>
<td>-1%</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Shiselweni</td>
<td>-11%</td>
<td>-4%</td>
<td>-1%</td>
<td>-1%</td>
<td>-1%</td>
</tr>
</tbody>
</table>

*No Statistically Valid Cases*
Effects on land allocation to production

Table 4. Percentage change in land allocation to crop production for Households experiencing HIV/AIDS related illnesses and deaths of adult members.

<table>
<thead>
<tr>
<th>Region</th>
<th>Maize</th>
<th>Groundnuts</th>
<th>Sweet potatoes</th>
<th>Potatoes</th>
<th>Cotton</th>
<th>Beans</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lubombo</td>
<td>-24%</td>
<td>-4%</td>
<td>-5%</td>
<td>-</td>
<td>-2%</td>
<td>+8%</td>
</tr>
<tr>
<td>Manzini</td>
<td>-3%</td>
<td>-1%</td>
<td>-2%</td>
<td>-1%</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Hhohho</td>
<td>-4%</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Shiselweni</td>
<td>-7%</td>
<td>-1%</td>
<td>-5%</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
</tbody>
</table>

- No Statistically Valid Cases
IMPACT ON HOUSEHOLDS FOOD SECURITY

• One way to examine impact on food security is to look at HHs income from both agric and non-agric
• Expenditure pattern of affected HHs has bearing on ability access food
Changes in Income of the infected households

Table 5. Percentage change in income of Households experiencing HIV/AIDS related illnesses and deaths of adult members.

<table>
<thead>
<tr>
<th>Region</th>
<th>Crops</th>
<th>Livestock</th>
<th>On-farm Agric Product</th>
<th>Off-farm Products</th>
<th>On-farm non agric products</th>
<th>Off-farm non agric products</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lubombo</td>
<td>9%</td>
<td>11%</td>
<td>4%</td>
<td>-4%</td>
<td>-5%</td>
<td>-</td>
</tr>
<tr>
<td>Manzini</td>
<td>15%</td>
<td>59%</td>
<td>1%</td>
<td>-</td>
<td>1%</td>
<td>-2%</td>
</tr>
<tr>
<td>Hhohho</td>
<td>-1%</td>
<td>-</td>
<td>9</td>
<td>7%</td>
<td>-</td>
<td>2%</td>
</tr>
<tr>
<td>Shiselweni</td>
<td>-5%</td>
<td>8%</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
</tbody>
</table>

No Statistically Valid Cases
Changes in Expenditure of the infected households

Table 6. Percentage change in Expenditure of Households experiencing HIV/AIDS related illnesses and deaths of adult members.

<table>
<thead>
<tr>
<th>Region</th>
<th>Crops inputs</th>
<th>Prod Assets</th>
<th>Livestock</th>
<th>On-farm Agric Product</th>
<th>Off-farm Products</th>
<th>On-farm non agric products</th>
<th>Off-farm non agric products</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lubombo</td>
<td>-35%</td>
<td>-</td>
<td>-8%</td>
<td>-</td>
<td>-1%</td>
<td>1%</td>
<td>-15%</td>
</tr>
<tr>
<td>Manzini</td>
<td>-3%</td>
<td>4%</td>
<td>-2%</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-1%</td>
</tr>
<tr>
<td>Hhohho</td>
<td>2%</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>1%</td>
<td>18%</td>
</tr>
<tr>
<td>Shiselweni</td>
<td>-13%</td>
<td>-2%</td>
<td>-1%</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
</tbody>
</table>

No Statistically Valid Case
Expenditure on medical bills and funerals increased in the infected HHs.

Lubombo observed an average increase of E1765.18 and E2095.44 in med-bill and funeral respectively.

Shiselweni increase med-bill by E1109.12 and E1767.17 in funeral costs.

The reduced income couple with increase in non-food items means less access to food.
implications

• Policy interventions should be aimed at mitigating the negative effects of HIV/AIDS on agricultural output.

• For example, where labour resources are affected as a result of the pandemic, training by agricultural extension staff on the introduction of less labour-intensive crops such as growing cassava instead of maize because it also has the same nutritive value.
Implications cont.

• To complement the above policies there is need to develop policy interventions derived from food security and rural development programmes.

• In pursuing these policies government in collaboration with NGOs should intensify its programme of distributing food aid by ensuring that HIV/AIDS households receive their quota.
Implications cont.

• Cultural practices that expose women to vulnerability of contacting HIV/AIDS need to be reviewed, especially that of having women given to a brother in law without her consent when the husband passes away.

• The mourning period for women also needs to be reviewed to allow them to engage in productive work after the death of the husband.