Implications of Seed Policies for On-farm Agro-biodiversity and Informal Seed Systems in Ethiopia and Uganda

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The Influence of Agricultural Policies on Seeds

Policy challenge: influence dominant smallholder farmer population?

Agricultural policies

Plant research and breeding

Seed multiplication and supply

Seed use in agricultural production

Bioversity International
But…
Farmers needs’ and consumers’ preferences? Traditional suppliers’ capacities?

Seed quality

Value for cultivation and use
Uniformity and homogeneity
Genetic purity of the seed
Phyto-sanity and cleanliness of the seed

Agro-biodiversity?
Formal Seed Systems and Informal Seed Systems in Ethiopia and Uganda

**Formal Seed System (<20%)**

- Commercial scale
- Source:
  - Government
  - Public seed enterprises
  - Private seed enterprises
- Seed types:
  - Certified seed
  - Quality Declared Seed (QDS / DUS)
  - “Improved seed”
    - Conventionally bred varieties
    - Genetically modified varieties

**Informal Seed System (>80%)**

- Small-scale/localized
- Source:
  - Own-saved seed
  - Other farmers
  - Community seed banks
  - Local markets
- Seed types:
  - Landraces and local varieties
  - Non certified improved varieties

Additionally, intermediary and hybrid systems have recently emerged that combine elements of both systems.
Key concepts and terms:
1. Availability and accessibility
2. Formal and informal seed systems
3. Seed types

“Improved” seed

“Quality” seed

“Genetically diverse” seed

Kristjanson, et al., 2012; Ssebuliba, 2010; TASAI, 2011; Otieno, 2015

Agro-biodiversity
Research Questions

● How do existing agricultural policies address the trade off between yield increases in the short term and long-term resilience of agricultural production?

● What are the implications of current seed and agricultural policies for on-farm agrobiodiversity?

● How do current and proposed seed and agricultural policies affect farmers’ participation in formal versus informal seed systems?
22 Ethiopian and Ugandan policies: coding the *stated intent* of the policies

Coding: 5-point scale for key indicators of seed system impacts

- **Availability & Access**
  - Increase imports
  - Increase quality control
  - Promote conservation and research

- **Formal & Informal Seed Sector**
  - General language and indirect support

- **Seed type**
  - No impact

<table>
<thead>
<tr>
<th>Score</th>
<th>Availability</th>
<th>Access</th>
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</thead>
<tbody>
<tr>
<td>2</td>
<td>Increase imports</td>
<td>Extension services</td>
</tr>
<tr>
<td></td>
<td>Increase quality control</td>
<td>Subsidies</td>
</tr>
<tr>
<td></td>
<td>Promote conservation and research</td>
<td>Increase access to credit</td>
</tr>
<tr>
<td>1</td>
<td>General language and indirect support</td>
<td>General language and indirect support</td>
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<tr>
<td>0</td>
<td>No impact</td>
<td>No impact</td>
</tr>
<tr>
<td>-1</td>
<td>Indirectly limits seed</td>
<td>Indirectly limits access to seed</td>
</tr>
<tr>
<td>-2</td>
<td>Bans Limitations on imports</td>
<td>Taxing/Price increase</td>
</tr>
<tr>
<td></td>
<td>Limitations on imports</td>
<td>Limiting imports</td>
</tr>
</tbody>
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Key indicators:
- **Availability & Access**
- **Formal & Informal Seed Sector**
- **Seed type**
Crash Seed Multiplication Program of Ethiopia (2008)

Accelerate production of certified, hybrid maize

Formal Seed System
- Improved Seed
- Quality Seed
- Genetically Diverse Seed

Informal Seed System
- Improved Seed
- Quality Seed
- Genetically Diverse Seed

Policies

Availability

Access
Number of policy impacts on each country's formal and informal seed sectors
Policy Impacts on Seed Type by Country

Impact of policies on seed in **Ethiopia** in the formal and informal sector

Impact of policies on seed in **Uganda** in the formal and informal sector
Ethiopia: Effect of Seed Policies on the Availability and Accessibility of Different Seed Types in the Informal System
Uganda: Effect of Seed Policies on the Availability and Accessibility of Different Seed Types in the Informal System
Number of Policies that Target Conservation and Use in Ethiopia and Uganda
Conclusions

- Imbalance in seed variety focus
- Imbalance in sector effects
- No impact may lead to negative outcomes
Conclusions

- The question of whether agricultural policies are appropriate is a valid one
- Integrated approaches can be a good alternative, but policies haven’t found the way to support them
- Innovative approach, to be complemented by further research on implementation
Recommendations

● More efforts on policy analysis and advocacy are necessary

● Bottom-up approaches are likely to be more effective
Works Cited


Kristjanson et al., 2012;


PELUM-Uganda. (2012). "Is the Future of the Small Scale Farmer Bleak or Bright"? The Seed Sector of Uganda


Seeds. Photograph. Retrieved from