Farmers Seed Systems and Livelihoods

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Objectives of Presentation

• Why farmers’ seeds matter for economic development?
• SD=HS global programme
• Vietnam as case study
Why farmers’ seeds matter?

• Major source of diversity and foundation of PGRFA
• 80-90% farm saved seeds; grow 60–70% of all food crops consumed locally
• 870 million are chronically hungry, 2 billion people suffer from “hidden hunger.” 70% live in rural areas and engaged in agriculture.
• Women managers of biodiversity
• 70% increase in demand for food by 2050
Sowing Diversity = Harvesting Security (SD=HS)

• Strengthen farmers’ seed systems (rights &technical) for food and nutrition security for climate change adaptations,
• 8 countries: Vietnam, Laos, Myanmar, India, Peru, Mali, Senegal, Zimbabwe, 300,000 HH, 50% women
• Low land paddy fields, high altitude mountains, semi-arid regions, high and low potential areas
• 60 Partners and allies: CSOs, IPSHF, governments, universities, national and international research institutions, private sector
• Donors: Sida, IFAD, Netherlands Post Code Lottery, Dutch government +++
Farmer Field Schools
Participatory Plant Breeding & Seed Banks
Farmers’ Seed Fairs
Evidenced & grounded policy: Local to global
SCALING-UP PATHWAYS

IMPACT:
IPSHF Rights and Technical Capacities
to influence local to global policies and institutions on
the sustainable use of PGRFA
under climate change

Mainstream:
- Vertical
- Horizontal
- Temporal
- Scaling down

Scaling up:
- Gender sensitive concepts and tools
- Adaptation strategies
- Increased access to germplasms

Innovation

PGRFA Participatory Toolkit

Gender Inclusion

Farmer Field School

Policy Influencing

PGRFA Access

Climate Change Response
Searice in Vietnam

Project phases:

1991-1995: PGR-CI

1996-2000: CBDC (4 pro)

2001-2005: CBDC (8 pro)

2006-2010: CBDC/BUCAP (13 pro)

2011-2015: FARES (19 pro)
Vietnam (rice) Track record

• 1996-2015: 18,900 farmers trained in FFS
• Since 2000, released 328 farmer varieties +2 certified varieties
• Seed Clubs (2014): 30% of Mekong Delta seed requirements, about 70 rice varieties (certified and uncertified)
• Farmers received many awards
• Several academic journals, publications, television
• Pilot of women’s video diaries

Source: MDI, CTU 2015
## % Sources of rice seed requirements in Mekong Delta

<table>
<thead>
<tr>
<th>Source</th>
<th>2000</th>
<th>2006</th>
<th>2014</th>
</tr>
</thead>
<tbody>
<tr>
<td>RI/CTU</td>
<td>1.3</td>
<td>0.8</td>
<td>3.5</td>
</tr>
<tr>
<td>Seed Center</td>
<td>5.3</td>
<td>6.8</td>
<td>10.6</td>
</tr>
<tr>
<td>Seed Company</td>
<td>4.4</td>
<td>9.4</td>
<td>17.7</td>
</tr>
<tr>
<td>Local trader</td>
<td>3.5</td>
<td>4.1</td>
<td>9.9</td>
</tr>
<tr>
<td>Seed Club</td>
<td>1.3</td>
<td>18.8</td>
<td>28.3</td>
</tr>
<tr>
<td>Farm save seed</td>
<td>51.8</td>
<td>36.1</td>
<td>21.2</td>
</tr>
<tr>
<td>Exchange</td>
<td>32.5</td>
<td>24.1</td>
<td>8.8</td>
</tr>
</tbody>
</table>

Source: MDI, CTU 2015
Seed production (ton)

Seed requirement of the MD: 450,000 ton/year

Seed price of companies: 600-700 USD/ton
Seed price of seed club: 300-400 USD/ton

Economic impact?

Source: MDI, CTU 2015
Seed flow

Fig: Seed flow of farmers in zone 1 & 2 (2014)

Source: MDI, CTU 2015
Good practices to CCA

Good seeds

<table>
<thead>
<tr>
<th>5 Reductions</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Seed rate</td>
<td>44</td>
</tr>
<tr>
<td>2. Nitrogen</td>
<td>32</td>
</tr>
<tr>
<td>3. Application times</td>
<td>29</td>
</tr>
<tr>
<td>4. Water amount</td>
<td>40</td>
</tr>
<tr>
<td>5. Post-harvest loss</td>
<td>20</td>
</tr>
</tbody>
</table>

Yield increased 10-15%

Source: MDI, CTU 2015
Local contributions (2011-2015)

Total: 229,000 USD

Source: MDI, CTU 2015
Achievements & policy ask

328 varieties released
2 varieties certified (HD1 & NV1)

Certification for farmer’s variety

1. Doing breeding at seed clubs
   - Selecting from segregating generation
   - Evaluating yields, tolerant

2. National tests
   - VCU
   - DUS

3. Certification – national level
   - Certification for multiplying tests
   - Defending to different levels
   - Certification of new variety
   - Defending to different levels
   - Releasing decision from MARD

Certified HD1 and NV1 varieties

Recommendations to seed certification

1. Certification of community and local traders
   - Farmers’ acceptance and multiplication
   - Local traders’ acceptance to buy

2. Certification at province level (DARD)
   - Variety test at the research stations
   - Best selected varieties should be certified by DARD for developing in the province.

3. Certification at national level (MARD)
   - Exceptional certification by Dept. of Crop Production if growing area of this variety is more 1000 ha, and ignores VCU test.
   - DARD should support documents for certification

Source: MDI, CTU 2015
Moving forward

Sowing Diversity

PPB/PVS/SS Farming systems

Harvesting Security

Source: MDI, CTU 2015