Engaging with Academia and Research Institutions (ARIs) to support Family Farmers and Food System Transformation During and Post COVID-19 Pandemic in Asia

With technical assistance from the FAO Regional Office for Asia and the Pacific
Bridging the Gap Between Formal and Informal Seed Systems through Community Seed Banks in Asia

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Chiang Mai, Thailand
Seed Systems

Source: Almekinders and Louwaars, 1999
A Network of Community Seed Banks in Asia
A Network of Community Seed Banks in Asia
A Network of Community Seed Banks in Asia
## Community Seed Banks: Formal or Informal?

<table>
<thead>
<tr>
<th>FEATURE</th>
<th>FORMAL SEED SYSTEM</th>
<th>INFORMAL SEED SYSTEM</th>
</tr>
</thead>
<tbody>
<tr>
<td>Certification</td>
<td>Certified</td>
<td>Not certified</td>
</tr>
<tr>
<td>Seed production</td>
<td>Separate from crop production</td>
<td>Integral part of crop production</td>
</tr>
<tr>
<td>Variety release</td>
<td>Formal</td>
<td>Informal/not applicable</td>
</tr>
<tr>
<td>Exchange through</td>
<td>Officially recognized seed outlets, agro-dealers</td>
<td>Local markets, petty traders, social networks, own production</td>
</tr>
<tr>
<td>Main crop types</td>
<td>Hybrids, high-value horticultural crops</td>
<td>Self-pollinating crops and other crops reproduced by farmers’ themselves</td>
</tr>
</tbody>
</table>

Source: Sperling et al. (2008), Louwaars and De Boef (2012).
Regional Community Seed Bank Managers Forum

Seed Bank Managers Forum
October 7-9, 2019
ECHO Asia Small Farm Resource Center & Seed Bank
San Sai, Chiang Mai, Thailand

This forum aims to gather those actively managing community level seed banks in the Asia region.

This event will help participants share practical experiences, discuss seed bank operations, challenges and opportunities, and discuss strategies for consolidating seed banking initiatives in the region. If you or someone in your network would benefit from joining this event, please contact us!

This 3-day event will take place at the beautiful ECHO Asia Seed Bank and Farm!
For more information contact echoasia@echonet.org or go to www.echocommunity.org/events
Community Seed Banks Assessment

- Sent to Managers of 12 Community Seed Banks in 8 countries

- Questionnaire with sections related to Organizational Management, Seed Diversity, and Storage Infrastructure/Practices
### Community Seed Banks Assessment

#### Table 1. Organizational overview of nine Community Seed Banks.

<table>
<thead>
<tr>
<th>Seed Bank</th>
<th>Location</th>
<th>Years in Operation</th>
<th>Outside Funding</th>
<th>Primary Funding Source</th>
<th>Varieties Stored</th>
<th>Varieties Distributed</th>
</tr>
</thead>
<tbody>
<tr>
<td>Baan Na Thung Kula</td>
<td>Thailand</td>
<td>10</td>
<td>No</td>
<td>Sale of Seed</td>
<td>100</td>
<td>65</td>
</tr>
<tr>
<td>Doku</td>
<td>Malaysia</td>
<td>5</td>
<td>No</td>
<td>Self-Supported</td>
<td>50</td>
<td>30</td>
</tr>
<tr>
<td>ECHO Asia</td>
<td>Thailand</td>
<td>10</td>
<td>Yes</td>
<td>Donor Funds</td>
<td>850</td>
<td>175</td>
</tr>
<tr>
<td>Kabelu Center</td>
<td>Myanmar</td>
<td>1</td>
<td>Yes</td>
<td>Donor Funds</td>
<td>50</td>
<td>10</td>
</tr>
<tr>
<td>Phattalung</td>
<td>Thailand</td>
<td>4</td>
<td>No</td>
<td>Sale of Seed</td>
<td>55</td>
<td>55</td>
</tr>
<tr>
<td>Saman Chai Khet</td>
<td>Thailand</td>
<td>7</td>
<td>No</td>
<td>Sale of Seed</td>
<td>&lt;50</td>
<td>10</td>
</tr>
<tr>
<td>SEED Project</td>
<td>Philippines</td>
<td>4</td>
<td>Yes</td>
<td>Donor Funds</td>
<td>100</td>
<td>50</td>
</tr>
</tbody>
</table>

#### Table 2. Number, variety, and propagation method of nine Community Seed Banks with the ECHO Asia Network of Community Seed Banks.

<table>
<thead>
<tr>
<th>Seed Bank</th>
<th>Varieties Stored</th>
<th>Varieties Distributed</th>
<th>Source of Seed</th>
<th>Storage Method(s)</th>
<th>Seeds of Highest Demand</th>
</tr>
</thead>
<tbody>
<tr>
<td>Baan Na Thung Kula</td>
<td>100</td>
<td>65</td>
<td>†GOBM</td>
<td>Plastic Bottles in the Refrigerator</td>
<td>Roselle; Okra; Pumpkin; Yard Long Bean; Bush Bean</td>
</tr>
<tr>
<td>Doku</td>
<td>50</td>
<td>30</td>
<td>†ROS</td>
<td>Airtight Containers in the Freezer</td>
<td>Sorghum; Millet; Crotalaria</td>
</tr>
<tr>
<td>ECHO Asia</td>
<td>850</td>
<td>175</td>
<td>†Trd; †Dtd</td>
<td>Vacuum Sealed Bags in Insulated Cold Storage Room</td>
<td>Cover Crops; Eggplant; Tomato; Legumes</td>
</tr>
<tr>
<td>Kabelu Center</td>
<td>50</td>
<td>10</td>
<td>†Dtd</td>
<td>Vacuum Sealed with Bicycle Pump</td>
<td>Eggplant; Tomato; Chili</td>
</tr>
<tr>
<td>Phattalung</td>
<td>55</td>
<td>55</td>
<td>†Dtd</td>
<td>Glass jars inside of an earthbag room</td>
<td>Cucumber; Eggplant; Winged Bean; Papaya</td>
</tr>
<tr>
<td>Saman Chai Khet</td>
<td>100</td>
<td>50</td>
<td>†Dtd</td>
<td>Plastic Bags in the Refrigerator</td>
<td>Okra; Winged bean; Yard Long Bean</td>
</tr>
</tbody>
</table>

†GOBM – Grown Out By Members; †ROS – Reproduce On-Site; †Trd – Traded; †Dtd – Donated
STRENGTHS
Local Wisdom of Staff
Local Storage Technology/Ideas
Support from NGO's & Organizations
Offer Agricultural Training to Customers

WEAKNESSES
Lack of Government Seed Policy
No Storage/Inventory Tracking System
Funding

OPPORTUNITIES
Enter Organic Value Chain
Farmer Crop Improvement/Selection
Advocacy
Social Media Promotion
Income/Profit

THREATS
Multinational Companies
Seed Biodiversity Loss
Hybrid Seeds
Seed Laws and Regulations
Natural Disasters

SWOT
Needs Assessment with CSB Managers
How Does This Relate to Agroecology?

- Preservation (and Improvement) of Crop Biodiversity
- Planting/Planning Options for Crop Rotation
- Local Access → Resiliency during times of crisis
- Community Empowerment
Thank You!

Visit our website and online repository of technical resources at www.echocommunity.org

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Visit us at the ECHO Asia Small Farm Resource Center & Seed Bank