Forest business incubation
Towards sustainable forest and farm producer organisation (FFPO) businesses that ensure climate resilient landscapes

Duncan Macqueen and Anna Bolin (Eds)
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<th>Description</th>
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<td><strong>1.</strong></td>
<td>Conceptualisation</td>
</tr>
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<td><strong>2.</strong></td>
<td>Development of infrastructure</td>
</tr>
<tr>
<td><strong>3.</strong></td>
<td>Establishment of client relationships</td>
</tr>
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<td><strong>4.</strong></td>
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<th>Description</th>
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<td><strong>1.</strong></td>
<td>Importance of a clear business plan</td>
</tr>
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<td><strong>2.</strong></td>
<td>The need for strong leadership</td>
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<td><strong>3.</strong></td>
<td>Flexibility in responding to client needs</td>
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<th>Description</th>
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<td>Evaluation of business incubator performance</td>
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<td><strong>3.</strong></td>
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<tbody>
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<td>Inkomoko in Tanzania</td>
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<td><strong>3.</strong></td>
<td>Be Green Trade in Malaysia</td>
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### Table 2.1 Extract from AgBIT’s results framework 2015

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<th>Component</th>
<th>Description</th>
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<tr>
<td><strong>1.</strong></td>
<td>Financial sustainability</td>
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<td><strong>2.</strong></td>
<td>Business growth and expansion</td>
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<td><strong>3.</strong></td>
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<td>Consultancy services</td>
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<td><strong>2.</strong></td>
<td>Training programmes</td>
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<td><strong>3.</strong></td>
<td>Access to finance</td>
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<tr>
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<th>Description</th>
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<td><strong>1.</strong></td>
<td>Taka Farm</td>
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<td><strong>2.</strong></td>
<td>Njia Lumber</td>
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<tr>
<td><strong>3.</strong></td>
<td>Mbula Honey</td>
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<td><strong>1.</strong></td>
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<td>Inadequate market research</td>
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<td><strong>3.</strong></td>
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<thead>
<tr>
<th>Organisation</th>
<th>Description</th>
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<td><strong>1.</strong></td>
<td>Agricultureal Research Council of Tanzania</td>
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<td><strong>2.</strong></td>
<td>University of Dar es Salaam</td>
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<td><strong>3.</strong></td>
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### Table 6.2 Selection criteria example

<table>
<thead>
<tr>
<th>Criteria</th>
<th>Description</th>
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<td><strong>1.</strong></td>
<td>Experience in the sector</td>
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<td><strong>2.</strong></td>
<td>Proven track record</td>
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<tr>
<td><strong>3.</strong></td>
<td>Ability to scale operations</td>
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</table>

### Table 6.3 Selection process example

<table>
<thead>
<tr>
<th>Process</th>
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<tr>
<td><strong>1.</strong></td>
<td>Initial screening</td>
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<td><strong>2.</strong></td>
<td>In-depth assessment</td>
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<td><strong>3.</strong></td>
<td>Final selection</td>
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<th>Challenge</th>
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<td><strong>2.</strong></td>
<td>Market access</td>
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<td><strong>3.</strong></td>
<td>Capacity building</td>
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### Table 8.1 Number of enterprises incubated per year

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<th>Year</th>
<th>Number</th>
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<tr>
<td><strong>2015</strong></td>
<td>100</td>
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<tr>
<td><strong>2016</strong></td>
<td>120</td>
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<tr>
<td><strong>2017</strong></td>
<td>130</td>
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<th>Description</th>
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<td>Resource scarcity</td>
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<td><strong>2.</strong></td>
<td>Political instability</td>
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<td><strong>3.</strong></td>
<td>Limited access to markets</td>
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<th>Description</th>
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<td><strong>2.</strong></td>
<td>Certification services</td>
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<td><strong>3.</strong></td>
<td>Branding and marketing</td>
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<th>Indicator</th>
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<td><strong>1.</strong></td>
<td>Increased revenue</td>
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<td><strong>2.</strong></td>
<td>Enhanced market share</td>
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<td><strong>3.</strong></td>
<td>Improved operational efficiency</td>
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- Chart showing factor impact

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## Acronyms, initials and abbreviations

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<td>Artisanal Dermofactor Laboratory (ADA Industries), Bolivia</td>
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<td>AEC</td>
<td>African Entrepreneur Collective</td>
</tr>
<tr>
<td>AEC RT</td>
<td>African Entrepreneur Collective Rwanda Trustee</td>
</tr>
<tr>
<td>AgBIT</td>
<td>Agribusiness Incubation Trust, Zambia</td>
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<tr>
<td>AIFWA</td>
<td>All India Women's Farmers' Association</td>
</tr>
<tr>
<td>ANSAB</td>
<td>Asia Network for Sustainable Agriculture and Bioresources</td>
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<tr>
<td>ANOFCG</td>
<td>National Alliance of Community Forestry Organisations of Guatemala (Alianza Nacional de Organizaciones Forestales Comunitarias de Guatemala)</td>
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<tr>
<td>ASEAN</td>
<td>Association of Southeast Asian Nations</td>
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<tr>
<td>B2B</td>
<td>Business to business</td>
</tr>
<tr>
<td>BDS</td>
<td>Business development service</td>
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<td>BLU</td>
<td>Public Service Agency (badan layanan umum), Indonesia</td>
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<tr>
<td>BNI 46 CSR</td>
<td>Bank Negara Indonesia Corporate Social Responsibility</td>
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<td>CADEX</td>
<td>Santa Cruz Chamber of Exporters, Logistics and Investment Promotion (La Cámara de Exportadores, Logística y Promoción de Inversiones), Bolivia</td>
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<tr>
<td>CAINCO</td>
<td>Chamber of Industry, Commerce, Services and Tourism (Cámara de Industria, Comercio, Servicios y Turismo), Bolivia</td>
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<td>CAO</td>
<td>Eastern Lowlands Chamber of Agriculture (Cámara Agropecuaria del Oriente), Bolivia</td>
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<td>CBFE</td>
<td>Community-based forest enterprise, Indonesia</td>
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<td>CBHE</td>
<td>Cambodian Federation for Bee Conservation and Community-Based Wild Honey Enterprises</td>
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<td>CBNEs</td>
<td>Community-based NTFP enterprises</td>
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<td>CDFIs</td>
<td>Community-development financial institutions, Rwanda</td>
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<td>CEF</td>
<td>Community Empowerment Facilities, Indonesia</td>
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<td>CEO</td>
<td>Chief executive officer</td>
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<tr>
<td>CFR</td>
<td>Central forest reserves, Uganda</td>
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<td>CLAPS</td>
<td>Community livelihoods assessment and product selection workshop</td>
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<tr>
<td>CFUG</td>
<td>Community forest-user group</td>
</tr>
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<td>CSO</td>
<td>Civil society organisation</td>
</tr>
<tr>
<td>CSR</td>
<td>Corporate social responsibility</td>
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<tr>
<td>ECA</td>
<td>Ecosystem-based commercial agriculture</td>
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<td>Enterprise development officers, EXCEED</td>
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<td>EII</td>
<td>Earth Innovation Institute</td>
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<td>ERNA</td>
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<td>Acronym</td>
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<td>Foundation for the Conservation of the Chiquitano Forest (Fundación para la Conservación del Bosque Chiquitano), Bolivia</td>
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<td>FCP</td>
<td>Farmer Cluster Programme, Zambia</td>
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<tr>
<td>FDI</td>
<td>Foreign direct investment</td>
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<td>FECPDI</td>
<td>Santa Cruz Federation of People with Disabilities (Federación Cruceña de Personas con Discapacidad), Bolivia</td>
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<td>FEDA</td>
<td>Forestry Entrepreneurial Development Agency, Mexico</td>
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<td>FEDECOVERA</td>
<td>Las Verapaces Cooperatives Federation (Federación de Cooperativas de Las Verapaces), Guatemala</td>
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<tr>
<td>FFF</td>
<td>Forest and Farm Facility</td>
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<td>FFPOs</td>
<td>Forest and farm producer organisations</td>
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<td>Farmer field schools</td>
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<td>FMP</td>
<td>Forest management plan</td>
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<td>Forest Stewardship Council</td>
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<tr>
<td>FTE</td>
<td>Business Work Foundation (Fundación Trabajo Empresa), Bolivia</td>
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<tr>
<td>GIS</td>
<td>Geographic information systems</td>
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<tr>
<td>GIZ</td>
<td>German Agency for International Cooperation</td>
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<td>GoN</td>
<td>Government of Norway</td>
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<td>GoU</td>
<td>Government of Uganda</td>
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<td>Ha</td>
<td>Hectare</td>
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<td>HBTL</td>
<td>Himalayan Bio Trade Limited, Nepal</td>
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<td>HPS&amp;B</td>
<td>High Performance Services and Business Ltd, Rwanda</td>
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<td>HR</td>
<td>Human resources</td>
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<td>GTN</td>
<td>Grassroots Trading Network, India</td>
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<td>ICRISAT</td>
<td>International Crops Research Institute for the Semi-Arid Tropics</td>
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<td>ICTs</td>
<td>Information and communications technologies</td>
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<td>IDB</td>
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<td>IFAD</td>
<td>International Fund for Agricultural Development</td>
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<td>IICA</td>
<td>Inter-American Institute for Cooperation on Agriculture</td>
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<td>IIED</td>
<td>International Institute for Environment and Development</td>
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<td>IMHDE</td>
<td>Intervention model for the promotion of human development through entrepreneurship, Reforestamos, Mexico</td>
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<td>INACOP</td>
<td>National Cooperatives Institute (Instituto Nacional de Cooperativas),</td>
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<td></td>
<td>Guatemala</td>
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<td>IP</td>
<td>Intellectual property</td>
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<td>Intellectual property rights</td>
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<td>IPs</td>
<td>Indigenous peoples</td>
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<td>ITS</td>
<td>Impact tracking system, ANSAB, Nepal</td>
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<td>IUCN</td>
<td>International Union for Conservation of Nature</td>
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<td>Javlec</td>
<td>Yayasan Javlec Indonesia (formerly the Java Learning Centre)</td>
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<tr>
<td>JMHI</td>
<td>Indonesian Forest Honey Network (Jarigan Madu Hutan Indonesia)</td>
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<td>JMHS</td>
<td>Sumbawa Forest Honey Network (Jarigan Madu Hutan Sumbawa)</td>
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<td>KWML</td>
<td>Manunggal Sustainable Forest Cooperative (Koperasi Wana Manunggal Lestari), Indonesia</td>
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<tr>
<td>M&amp;E</td>
<td>Monitoring and evaluation</td>
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<tr>
<td>Acronym</td>
<td>Full Form</td>
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<td>MIS</td>
<td>Market information system</td>
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<td>MW&amp;E</td>
<td>Ministry of Water and Environment, Uganda</td>
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<td>National Business Incubation Association</td>
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<td>NDCs</td>
<td>Nationally determined contributions</td>
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<td>NEHHPA</td>
<td>Nepal Herbs and Herbal Products Association</td>
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<td>NFA</td>
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<td>NTFP-EP</td>
<td>Non-Timber Forest Products Exchange Programme, South and Southeast Asia</td>
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<td>ODA</td>
<td>Overseas development assistance</td>
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<td>PARARA</td>
<td>Panen Raya Nusantara Festival, Indonesia</td>
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<td>PFHN</td>
<td>Philippine Forest Honey Network</td>
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<td>PGS Rattan</td>
<td>Participatory Guarantee System Certified Rattan, Indonesia</td>
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<td>PM&amp;E</td>
<td>Participatory monitoring and evaluation</td>
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<td>Public Private Alliance</td>
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<td>PTRI</td>
<td>Philippine Textile Research Institute</td>
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<td>R&amp;D</td>
<td>Research and development</td>
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<td>RECOFTC</td>
<td>The Center for People and Forests</td>
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<td>RED CIDEM</td>
<td>Citizen Network for Business Development, Mexico (Red Ciudadana para el Desarrollo Empresarial de México)</td>
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<tr>
<td>REDD+</td>
<td>Reduced emissions from deforestation and forest degradation and the role of conservation, sustainable management of forests and enhancement of forest carbon stocks in developing countries</td>
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<td>RUDI</td>
<td>Rural and Urban Development of India</td>
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<td>RWF</td>
<td>Rwandan franc</td>
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<td>Sustainable Development Goals</td>
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<td>SEWA</td>
<td>Self-Employed Women's Association, India</td>
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<td>Self-help group</td>
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<td>Small and medium enterprises</td>
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<td>Standard operating procedures</td>
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<td>Sawlog Production Grant Scheme, Uganda</td>
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<td>SRM</td>
<td>Sustainable resource management</td>
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<td>SVLK</td>
<td>Timber legality verification system (sistem verificasi legalitas kayu), Indonesia</td>
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<td>United Nations</td>
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<td>UniArte</td>
<td>Earth Artisans Union (Unión de Artesanos de la Tierra), Bolivia</td>
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<tr>
<td>USP</td>
<td>Unique selling proposition</td>
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<td>UTGA</td>
<td>Uganda Timber Growers Association</td>
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<td>VBI</td>
<td>Virtual business incubation</td>
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<td>WWF</td>
<td>Worldwide Fund for Nature</td>
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Summary

Forest business incubation is a support process that accelerates the successful development of sustainable businesses in forest landscapes. There is much to develop. The aggregate gross annual value from smallholder producers within forest landscapes may be as much as US$1.3 trillion.

Forest business incubation should be a key mechanism to implement the Paris Agreement on climate and the Sustainable Development Goals (SDGs). It can strengthen economic inclusion of forest and farm producer organisation (FFPO) businesses, increase rural incomes to reduce poverty, diversify those incomes to improve climate resilience, and incentivise forest restoration and sustainable management to mitigate climate change. It can also help improve product availability for established businesses and customers, pool lower-risk investment opportunities for financiers, and help inform policymakers on how best to deliver a win-win-win for the economy, society and the environment. It is that important!

Business incubation practice generally has expanded rapidly in recent years. Since the first recorded business incubator was founded in 1959, establishment has risen sharply to more than 7,000 today – primarily in urban centres. They are variably financed through client fees, other business income, public and private grants, and loans. Over time the concept has evolved from primarily one of shared space (first generation) to shared space and mentoring (second generation) to shared space, mentoring and networking (third generation). Business incubators respond to needs that especially occur in newer business such as the lack of premises, facilities, market information, technological knowledge, business-management experience, procedures, finance and legitimacy.

Remote forest landscapes present challenges for business incubation. Beyond exacerbating basic business support needs, such landscapes offer low densities of educated entrepreneurs, high logistical costs, scarce infrastructure to differentiate products, and few capable business mentors. These challenges may explain the limited penetration of business incubation thinking into forest landscapes. Forest landscapes also require a different type of service delivery model, because shared space is not often practical, requiring much more attention to on-site client visits, virtual services and field exchanges.

The content of this book seeks to show how such challenges can be overcome. Chapter 1 begins by defining and introducing ‘business incubation’ and explaining why forest business incubation might be so important. It also specifies why forest business incubation is so challengingly different from models of urban business incubation. In the subsequent Chapters 2–12, detailed case studies are presented of attempts to deliver business incubation services in forest landscapes. Each case study introduces the incubator and its context, describes its institutional design, details the services it offers, outlines how the incubator-client engagement process is managed, comments on how impact is measured, and concludes with some thoughts and tips on best practice. Finally,
Chapter 13 offers some analysis of the data presented by the preceding case studies – and some observations and conclusions about how best to develop forest business incubation in the service of both forests and people.

Attempts to provide forest business incubation provide useful sources of learning. A long history of cooperative forest business incubation has been augmented by more recent NGO incubators, and most recently by the wave of dedicated for-profit agribusiness incubators working at least in rural if not fully forest landscapes. An immediate observation was that few of these ‘forest business incubation’ cases were able to select just very promising clients, on account of the low numbers of potential clients. The most common strategy of engaging clients was to engage a mix of start-ups, early-stage and mature ‘lead-firm’ businesses (the latter to act as aggregators and processors of material coming from several or many local FFPO businesses). While some serviced less and others more, most incubators served 20–60 clients per year – occasionally in tightly defined forest subsectors, but mostly with carefully tailored servicing of quite diverse clients.

Structure and staffing within forest business incubators is generally managed by a chief executive (a core business specialist) and overseen by some form of advisory board. It is usually divisible into internal administration and finance alongside external services which might include very many areas. The incubator’s core staff may be as few as 5–10 in newer smaller incubators, to 40–50 or more in larger, more established incubators. In almost all cases, these core staff were complemented by a large number of draw-down experts in various fields for which services were demanded. Forest business incubators tend to have quite high numbers of field staff who require mobility – and therefore require higher levels of funding than their urban incubator counterparts.

The high cost implications of forest business incubation make financing a key concern. The most common pattern of incubator financing was through a mix of public grants (eg projects) and some client payments for services. Some incubators added income from private sources (grants and loans) or from the sales of their own products and services (eg in incubators run by forest and farm producer organisations themselves). In selecting clients, there was a strong emphasis on community ownership, participation and benefits of the business and the potential impacts – in part because many of the forest business incubators were set up with broader social and environmental agendas and draw heavily on development aid finance.

In terms of services offered by forest business incubators, some are quite common to all incubators: business training and planning, accounting and financial management, and support for market needs assessment. More specifically, forest business incubation also regularly offers services in resource management or technology sourcing and upgrading. Perhaps less obviously, because many businesses in the forest landscape involve collective or group ownership to achieve economies of scale (or buy-in to collective community resources) training in leadership and organisational management are frequently required. For production from multiple grouped smallholdings, or through multiple community members, quality-assurance issues become an important service area.
Networking often complements the expertise of core staff members. Forest business incubators tend often to develop networks for technology expertise, market promotion functions, legal compliance support and certification.

Most forest business incubators carry out some form of preliminary assessment of the client business, which then forms a baseline against which to measure progress and assess when to graduate the business from further incubator support. Many track clients after graduation against parameters such as sales, customers, employment, new funding raised and new products launched. Many also assess broader impacts of their support on forest management capacity in the client businesses and the impact of their support on the forest area that has been established or has come under sustainable management (e.g., hectares of planted or sustainably managed forest). Some measurement of social impacts also takes place such as human capacity development, advances in women and youth entrepreneurship, or social impacts through sector support.

The most frequently quoted success factors included: clarity of vision, roles and responsibilities; building relationships between the different parties; a holistic value-chain approach involving many actors to link remote forest landscape production with markets; a long-term commitment to forest business incubation; careful selection of clients; and finally, a customised approach to those clients.

Since the economics of business incubation in forest landscapes work against a purely for-profit model, and reliance on short-term project funding is also problematic, the book concludes with three options for building more financially sustainable forest business incubation:

- Greater channelling of development aid and/or climate finance into professional forest business incubation (e.g., through REDD+ implementation finance).
- Stronger efforts to establish second-tier FFPOs (aggregation businesses) that harness the returns from profitable forest business itself to finance forest business incubation.
- More concerted and sustainable support through government services, for example in the Chinese one-stop-shop forest ownership management service centres to deal with land registration, disputed land titles, cooperative establishment and access to credit and insurance with significant investment in capacity development — including, for example, in traditional agricultural and forest knowledge, understorey crops and ecotourism.

Support for forest business incubation from a combination of development and climate finance, channelled through second-tier FFPO businesses and supported by government services could potentially be game-changing or transformational. The conceptual beauty of forest business incubation mediated through and for locally controlled forest businesses is that it necessarily aligns many separate agendas under one roof. It must make business work — and so it must secure rights and legality, advance sustainable forest use, develop market access, and deliver social and economic inclusion and benefits and so on. This is what might make forest business incubation a win-win-win for society, the economy and the environment.
A rattan-splitting business in the Wuyan community, Kachin, Myanmar

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Developing a framework for business incubation options in forest landscapes

Duncan Macqueen and Anna Bolin

Over 1.5 billion people inhabit forest landscapes globally. While mostly poor smallholders, the value of their combined production in forest landscapes reaches almost US$1.3 trillion. Forests are also crucial in slowing climate change – but only if managed sustainably. This chapter describes how better business incubation which nurtures sustainable forest businesses is a clear priority. Better business incubation can reduce poverty while incentivising forest landscape restoration and protection at scale, thereby helping achieve both sustainable development and climate action goals. The chapter also introduces the country case studies in this book. Each documents how business incubators are serving forest landscapes, what tactics they use to optimise their role, and how they are helping to overcome challenges in remote operating environments. The final chapter draws out key lessons for business incubation in forest landscapes.

1.1 Why the interest in locally controlled forest and farm business incubation?

The gaseous, liquid and physical effluents from growing human populations and economies is changing the finite planetary environment in which we live. Ninety-seven per cent of scientists agree that climate warming is both serious and manmade (NASA 2017). Statistically, scientists are as sure of this as the fact that smoking causes lung cancer: in other words, very sure.

Wide disparities in wealth mean that some humans can adapt comfortably to these changes. Others are less able, notably the poor. Forest landscapes are inhabited by 1.5 billion people, mostly smallholders among whom there is a high incidence of poverty. Nevertheless, aggregate gross annual value of these smallholder crops – fuelwood, charcoal, timber and non-timber forest products (NTFPs) – lies between US$869 billion and US$1.29 trillion in 2017 dollars (Verdone 2017). There is much that can be done to increase the value of such production through business incubation. Critically, adaptation to climate change requires diverse options. It is not just that ecologically diverse tree-based crops are more robust in the face of climate change. Economically diverse market options give resilience in the face of any single market failure. In forest landscapes, therefore, business incubation would ideally deliver both ecological and economic diversity.

Forest landscapes are also critical to absorbing carbon dioxide at scale which reduces the pace of climate change, but only if they can be protected and restored. The challenge is to deliver livelihood improvements to the forest-dependent poor in ways that help
adaptation to climate change, while also protecting and restoring forests. Sustainable smallholder forest and farm businesses are a crucial part of the solution. The 2030 Agenda for Sustainable Development\(^1\) and the Paris Agreement on climate\(^2\) both target this more integrated response to climate change and inclusive economic growth. In terms of business incubation in forest landscapes, therefore, the challenge is twofold: how to build the collective forest business organisations of the forest-dependent poor to achieve carbon sequestration at scale, while also maintaining the mosaic of diverse ecological and economic options that allow for climate resilience.

The Forest and Farm Facility (FFF) which commissioned this book has a Phase II goal of ‘Climate resilient landscapes and improved livelihoods’. This directly addresses the challenge laid out above (FFF 2017). FFF helps organise and empower smallholder forest and farm producers and indigenous peoples and their organisations for sustainable business and policy engagement. These smallholder producers and indigenous peoples are the ‘missing links’ that are needed to translate Sustainable Development Goals (SDGs) and nationally determined contributions (NDCs) on climate into practice.

1. The 2030 Agenda for Sustainable Development was adopted by world leaders in September 2015 at an historic UN Summit. See www.un.org/sustainabledevelopment/development-agenda
2. The Paris Agreement is an agreement within the United Nations Framework Convention on Climate Change (UNFCCC) dealing with greenhouse gas emissions mitigation, adaptation and finance starting in the year 2020. See http://unfccc.int/paris_agreement/items/9485.php
The strength in numbers of smallholder producers is particularly potent in their member-based FFPOs and businesses. Yet, while the participation of smallholder and FFPO representatives in consultative processes is deemed necessary, insufficient effort is given to building their capacity for sustainable enterprise. As a result, their potential to transform forest landscapes from impoverished degradation to enriched sustainability is being missed. Attention is particularly required to address the barriers facing women, youth and the unique cultural context and rights of indigenous peoples.

At the heart of the transformative change envisaged is the need to nurture sustainable businesses that incentivise forest protection and restoration in forest landscapes. While FFF has established a credible track record in sustainable business start-ups, it is now keen to accelerate the development of successful fledgling businesses – to focus on business incubation. This follows the recognition that growth in value generation and employment comes primarily from expansion in existing firms rather than through new start-ups where failure rates are high (Shane 2009). Moreover, business incubation increases the durability of firms, with 87 per cent of firms that had received incubation remaining in business after four years, compared to only 44 per cent for non-incubated businesses (Molnar et al. 1997).

The development of better business incubators for the vast population of forest and farm smallholders is clearly a priority for attaining both the SDGs and NDCs, sustainable development and climate action together. Perhaps less obvious are the advantages that better business incubators might have in:

- Improving product availability for established businesses and customers,
- Pooling lower-risk investment opportunities for financiers, and
- Informing policymakers of how best to facilitate business development.

For these reasons, FFF has commissioned the Forest Connect Alliance3 through the International Institute for Environment and Development (IIED) to develop this book, assessing the wide literature and current practice of business incubation beyond and within the forest landscape sector. The aim is to draw out lessons and recommendations which will shape business incubation efforts especially by umbrella FFPOs themselves.

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3. Forest Connect has an international steering committee, and is co-managed by IIED, the Food and Agriculture Organization of the United Nations (FAO), The Center for People and Forests (RECOFTC) and the Earth Innovation Institute (EII). Forest Connect is a knowledge network for agencies that supports locally controlled forest enterprises. It aims to reduce poverty and maintain forest landscapes by better linking such enterprises, not only to each other, but also to markets, financial and business support services and to decision makers, policymakers and policy processes. See: www.iied.org/forest-connect
1.2 What is business incubation?

Business incubation is defined (adapted from NBIA 2007) as:

[A] business support process that accelerates the successful development of start-up and fledgling businesses. It does so by providing entrepreneurs with an array of targeted resources and services. These services are usually developed or orchestrated by a business incubator management structure and offered both in the business incubator and through its network of contacts. A business incubator’s main goal is to produce successful firms that will leave the programme financially viable and freestanding. These incubator graduates have the potential to create jobs, revitalise neighbourhoods, commercialise new technologies, and strengthen local and national economies.

We view as synonymous with the concept of business incubator terms such as industrial parks, research parks, science parks, hubs, spokes, hatcheries, hives, seedbeds, germinators, graduates, grow-on spaces, enterprise centres, technopoles, knowledge centres, ideas labs, innovation centres, business accelerators, networked incubators and so on (Theodorakopoulos et al. 2014). While the names differ, the concepts are much the same. On the other hand, business incubation does differ from professional service firms (which provide a narrow set of services to businesses over variable geographies) and equity financing (which tends to pick non-clustered targets for investment, even if the accompanying services to those particular businesses are quite comprehensive) (Dee et al. 2011). The notion of ‘clustering’ and ‘array of resources and services’ are particular to business incubation.

The first business incubator was reputedly established as the Batavia Industrial Centre in New York in 1959 when a real-estate developer could not let a large building and, unable to fill it with a single tenant, decided to let to a range of tenants who needed business advice or capital (Adkins 2001). The academic interest in business incubation only began to emerge in the mid-1990s (Albort-Morant and Ribeiro-Soriano 2015). Over time, the academic literature has moved from early questions such as ‘What is an incubator and how do we develop one?’ or ‘How should incubators select entrepreneurs?’ to more advanced ones such as ‘How does the nature of connectivity influence success in business incubation?’ and ‘What constitutes an incubator with walls or a virtual incubator?’ (Hackett and Dilts 2004).

There are a range of organisational types and motives for providing business incubation (Allen and McClusky 1990; infoDev 2010a) of which the second and third are most pertinent to the work of FFF:

- **For-profit real-estate developers**: To attract tenants and thereby appreciate real-estate values and potential investment or technology transfer opportunities,

- **For-profit business development firms**: To increase capital investment and product-development opportunities (these could include umbrella FFPOs who serve their member FFPOs),

- **Non-profit development-oriented organisations (including government institutions)**: To create jobs, generate sustainable incomes, diversify economies, bolster the tax base or utilise vacant facilities, and
• **Non-profit academic incubators:** To commercialise university research and foster faculty-industry collaboration, strengthen service missions and thereby create goodwill between the institution and the community.

As noted above, some of the motivations for business incubation in forest landscapes may go beyond purely economic or social impacts and include environmental/climate impacts too.

Business incubators tend to restrict their services to a defined intervention period. During this intervention period the incubator aims to accelerate the entrepreneurial process. An important point is that there is a striking positive correlation between business start-ups and business failures, for example a correlation of 0.77 in the USA. There are a variety of reasons for this, but if one were to generalise, the answer lies in many of the start-ups coming from non-entrepreneurial types who target easy-entry but highly competitive segments of the market (Shane 2009). There is a very strong correlation between firm age and survival (Haltiwanger et al. 1999). This means that the more entrepreneurial firms survive by doing something a bit special the longer they tend to go on surviving.

So, the business incubation period should ideally not coincide with start-ups, but instead target entrepreneurs with more interesting ideas at some point after they have already started up as shown in Figure 1.1 (adapted from Monkman 2009). The precise resources and services offered will of course vary depending on the type of ‘incubatee’ businesses selected – such that the services indicated in Figure 1.1 are illustrative only.

![Figure 1.1 How business incubation resources and services make a difference](image)
But it is not only through the supply of resources and services that business incubation accelerates the entrepreneurial process. Business incubators also play a critical role in simplifying relationships by providing networking functions on behalf of their incubatee businesses, as shown in Figure 1.2 and adapted from Monkman (2009).

Figure 1.2 How networking through a business incubator makes a difference

The history of the business incubation concept has often been associated with shared physical space, but as information technology services have grown, there has also developed a literature on incubators without walls or virtual business incubation (VBI) in which the term ‘virtual’ is used in the sense of ‘location independent’. Like their physical space counterparts, VBIs deliver resources and services to their clients to accelerate the entrepreneurial process with a mix of business training, financial investment and networking support – the latter either through outreach or bringing people together at events (Stam and Buschmann 2012). In both physical space and virtual business incubators, the costs of providing incubation (eg the technical and facilitation staff and other costs) are either met entirely by the clients or by mixing client- and donor-income streams.

Finance for the business incubation process can come from a number of sources as shown in Figure 1.3, including:

- Client fees (eg for services provided)
- Income from own product sales (eg value-added processing of client products)
- Private grants, loans or equity (eg buyer investment or bank loans), and
- Public grants, loans or equity (eg projects).

Useful guidance for financing business incubators exists (infoDev 2010b) as part of a 12-module guidance package developed through a major infoDev incubator support programme (infoDev 2009).
One key point is that, in comparative research, not-for-profit business incubators tended to outperform for-profit models to such an extent that all but one of the top-performing incubators (in a study with more than 100 respondents) were not-for-profit (Lewis et al. 2011). In other words, if the incubator is concerned primarily with covering its own costs, this is a strong disadvantage. Instead, keeping the focus on generating employment, fostering an entrepreneurial climate in the region, diversifying the local economy, building or accelerating new business sectors or retaining business in the region are much more highly correlated with success.

Incubators are now widespread: there are estimated to be more than 7,000 worldwide (Mian 2016). Practical experience has been distilled into some key principles of business incubation in one business incubator guide (infoDev 2010a):

- Realise that the business incubator is itself a dynamic model of sustainable and efficient business operation and must therefore be managed as a business-like organisation.
- Focus the energy and resources of the incubator on assisting companies throughout their growth process.
- Develop a sophisticated range of services and programmes directed at businesses according to their needs and stages of development.
- Develop a network that the incubator can rely on for good-quality information and mentorship in areas beyond the in-house capacity of the incubator.
1.3 Why is business incubation needed for locally controlled forest and farm enterprises?

Business incubation responds to needs that especially occur in new start-ups or fledgling businesses. Across the 34 countries in the Global Entrepreneurship Monitor dataset, the typical start-up founded between 1998 and 2003 required US$11,400 in capital (Shane 2009). But it is not just capital that they need. There are several constraints that typically affect such businesses irrespective of the sectors in which they operate (Bruneel et al. 2012):

- Lack of premises and facilities (eg meeting rooms, reception services etc),
- Lack of business-management experience, plans, rules, procedures and strategies,
- Lack of financial capital,
- Lack of technological knowledge,
- Lack of market information networks, and
- Lack of legitimacy.

These constraints tend to be exacerbated in remote rural locations – the norm for locally controlled forest and farm enterprises. The reasons are not hard to find:

- The density of forest and farm entrepreneurs is low on account of the geographical dispersal across remote forest landscapes.
- It is difficult for geographically dispersed forest and farm businesses to share physical space, except in processing hubs which aggregate the product from many smallholder producers.
- The general level of education in remote rural areas is low (and 'brain drain' to urban areas is high), such that business support services involve a longer learning curve for potential forest and farm entrepreneurs.
- The availability of capable business mediators in rural areas, and the salaries they might command, are much lower than for urban contexts.
- The relatively low entry requirements of forest and farm businesses mean that product innovation and upgrading to establish acceptable profit margins is challenging.

Despite various attempts to develop business incubators in remote rural locations (eg Laukkanen and Niittykangas 2003, Jordaan et al. 2003) the challenging nature of the environment remains (Atherton and Hannon 2006). It is for this reason that it is worth looking in more detail at how business incubators attempting this work actually function in forest landscapes. The case studies in subsequent chapters attempt to shed light on how the challenging nature of the forest landscape environment has been handled.

Another approach to building business capacity has been through the use of exchanges, notably the experience of farmer field schools (FFS), which from the late 1980s have graduated more than 12 million farmers in 90 countries (Waddington and White 2014). However, the impact of FFS are mixed (ibid; Larsen and Lilleør 2014; Neilson and McKenzie 2016) and in particular on business outcomes, which was often not the main

4. See www.gemconsortium.org/data
objective of FFS, which were predominantly focused on production, food security, and social and community objectives (Waddington and White 2014).

Cooperatives are another example of a rural institution that has traditionally played an important role as rural service provider. However, in the past 20 years many cooperatives have gone through a transformation process, moving towards providing processing and marketing services as a core business activity alongside some of the more traditional social and technical service functions (Bijman 2016).

One important principle of business incubation is that it has to be tailored to the needs of the particular sub-sector and firm being served. There is no one incubator, practice, policy or service that is guaranteed to bring success – no magic bullet (Lewis et al. 2011). It is the relationships that the business incubation management (or ‘mediator’) can foster between the client and helpful buyers, suppliers, services and authorities that is all important. But the modality of establishing these relationships in remote forest landscapes has important implications for how business incubation might be developed there. For example, there would seem to be some advantage in building incubation capacity into umbrella FFPO businesses at regional or national level, as these are likely to have close existing relationship with the local businesses of their FFPO members.
Of course, business incubation need not be restricted to the cooperative sector, but is equally relevant to corporations concerned with the sustainability in their supply chains. For example, in Indonesia, Mars Inc. have been piloting a business-oriented farmer outreach programme under the Mars Inc. Sustainable Cocoa Initiative. The model involves establishing knowledge hubs at the regional level financed by the company, which provides training and demonstration of latest technologies, and the setup of lead farmer’s enterprises at the local level, financed through a start-up loan from a partner micro-finance institution. The knowledge hub provides on-going business incubation support to the lead farmer’s enterprise, who in turn uses that knowledge to develop services and inputs to sell to other cocoa producers in his or her area. This corporate approach has been judged more effective than previous donor or government-led FFS programmes seeking to improve smallholder cocoa farmer practices (Neilson and McKenzie 2016).

Nevertheless, top-performing incubators do tend to share the same management characteristics. They are clear about their mission statement and who they serve. They carefully select entrepreneurs with whom to work that have a sectoral and cultural fit. They carefully review entrepreneur needs on entry – and try to pick winners – and actively promote those with whom they choose to work. They have robust payment plans for any fees to be collected from entrepreneurial clients and a clear exit strategy based on realistic criteria. All of these elements can be considered best practice (Lewis et al. 2011).

### 1.4 What institutional options need consideration?

The concept of what business incubators can offer to entrepreneurial businesses has evolved over time (Bruneel et al. 2012). In its earliest documented form, the ‘first generation’ emphasis was mainly on sharing space and resources to reduce overhead costs. But the benefits of on-site coaching and training support were soon realised and became normalised in second-generation business incubators. By the early 2000s onwards, a third generation of business incubators had evolved, with a much greater emphasis on networking with input providers, financial networks and customers (see Table 1.1).

<table>
<thead>
<tr>
<th></th>
<th></th>
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<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Offering</td>
<td>• Shared space and resources&lt;br&gt;• Economies of scale through reduced overheads/facilities</td>
<td>• Coaching and training support&lt;br&gt;• Accelerating the learning curve through learning by doing</td>
<td>• Access to business, technological and financial networks&lt;br&gt;• Access to external resources, knowledge and legitimacy</td>
</tr>
</tbody>
</table>
Coupled with these conceptual advances, there have been a range of models defined by more practical considerations. For example, Kimambo (2005) notes four types of business incubator institutional set-ups:

- **Sheltered estate services**: Physical shared space only (not strictly business incubation at all).
- **With-walls business incubation**: Shared physical space and business services.
- **Incubation without walls**: Clustered businesses (no physical shared space) but with shared business services.
- **Virtual business incubation**: Business services provided to customers irrespective of their location.

Once again, the latter two types are clearly most relevant in forest landscapes due to the difficulty of shared-space business incubation facilities.

Lewis et al. (2011) merge the latter two categories and add a further two:

- **International incubators**: Whose function is to provide specialised services to enable international business to enter a particular market.
- **Accelerators**: With-walls incubators who focus on late-stage incubation for advanced firms (although they acknowledge that many people use incubators indiscriminately and interchangeably).

Allpabambu, Ecuador, is a family-run company that sells bamboo products to local and export markets.
Since locally controlled forest and farm enterprises are likely to need at least some form of incubation without walls or virtual business incubation, because of their necessarily dispersed nature (e.g. spatially separate natural resources are required for production) it is worth noting existing guidance on this (infoDev 2010c) and lessons emerging from recent studies on virtual business incubation summarised in Table 1.2 (adapted from Stam and Buschmann 2012).

<table>
<thead>
<tr>
<th>Nature of virtual business incubation service</th>
<th>Lessons</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>On-site visits</strong> (either travelling to the entrepreneur or bringing entrepreneurs to a training site)</td>
<td>New entrepreneurs value face-to-face peer learning but this requires good facilitation and increases travel costs. It is difficult to arrange such that trainers/incubatees see the real circumstances under which each other is working</td>
</tr>
<tr>
<td><strong>Exchanges</strong> (taking potential entrepreneurs to see successful businesses in other sites)</td>
<td>In forest landscapes, trust plays an important role in learning – and it is often true that forest farmers will learn most readily from seeing the practical work of other forest farmers. Learning about business no exception</td>
</tr>
<tr>
<td><strong>Websites and e-learning</strong> (including online training courses)</td>
<td>Critical here are the motivation, skills and access to use e-learning materials. These can be costly to set up and to update, and for which social media can encourage participation, but are a poor substitute for face-to-face interaction</td>
</tr>
<tr>
<td><strong>1-on-1 interaction</strong>s using ICTs (phone, email and Skype)</td>
<td>Support of this sort requires significant management scheduling and relies on trust. Trust requires time and preferably face-to-face contact at the start to build. Trust is especially important for complex coaching that requires revelations about sensitive situations</td>
</tr>
<tr>
<td><strong>Online recruitment</strong> (of local mentors, volunteers and incubatees)</td>
<td>Local partners are a great help in VBI, and getting local presence and support can be done remotely with a well-thought-out strategy for recruitment, branding of the local services provided, and social media to maintain and check quality</td>
</tr>
<tr>
<td><strong>Virtual communities</strong> and events (for peer-to-peer interactions, invitations to events and news)</td>
<td>Mobilising incubatees to interact and participate in joint events is challenging and usually requires a mix of training events and then active virtual networking as a response, and if well facilitated can help to inspire incubatees, link them to partners or investors and build their networks</td>
</tr>
<tr>
<td><strong>Crowdsourcing and crowdfunding</strong> (to contribute knowledge or funding online)</td>
<td>Providing a platform for crowds to become active is a sophisticated challenge (although existing platforms do exist) which may work best in advanced countries. The trick is to keep the request for advice or funding (the pitch) clearly defined and the site active and regular</td>
</tr>
</tbody>
</table>
The stage of market development at which a country is also has a strong bearing on the likely availability and quality of information and communications technologies (ICTs). Countries at a low stage of market development, and especially in their remoter regions, are also likely to face exacerbated difficulties in mobile communication (e.g., degree of mobile phone coverage and internet bandwidth). Virtual business incubators, in addition to needing the core competencies of entrepreneurial management (as is required in physical space incubators), must also find suitable expertise in ICTs.

1.5 What networking options need consideration?

As noted in the preceding section, as the business incubator concept has evolved, the emphasis on networking has increased. As noted by one commentator, ‘Most business incubators provide office space, funding and basic services. The better ones can offer an extensive network of powerful business connections, enabling fledgling start-ups to beat their competitors to market’ (Hansen et al. 2000).

The rationale for such networking can be found in the diversity of areas which any business must command to be successful in the marketplace – especially for businesses drawing on forest landscapes. For example, the business incubator may need to help businesses with issues such as land and legality, finance and insurance, business capacity development, market information, technical advice, support for social organisational, and technology research and development. It is unlikely that any single unit will have all of those skills in house. As a result, forming and maintaining networks of useful contacts is critical (see Figure 1.4).

Figure 1.4 Important areas in which business incubators may develop core staff capacity or procure capacity through networking to other institutions

![Diagram showing important areas in which business incubators may develop core staff capacity or procure capacity through networking to other institutions.](image-url)
As a pathway to creating such a network, one important component of incubator development is the establishment of an internal advisory board, which can be drawn on to provide particular services. On that board, the following types of expertise have been shown to correlate with success (Lewis et al. 2011):

- A successful business graduate from that same incubator or other experienced entrepreneur,
- A corporate executive,
- A technology transfer specialist in the field relevant to the business,
- An accounting expert,
- A general legal expert with knowledge of necessary government authorities (and potentially an intellectual property specialist depending on the sub-sector targeted),
- A local government economic development specialist,
- A university official in an area relevant to the businesses in view, and
- A local chamber of commerce representative.

So, in addition to any permanent staff, it is important for the incubator to network and identify a set of people with the required skillsets who are prepared to provide their inputs on a paid or pro-bono basis.

The link with government services and local universities is also an important consideration. In comparative studies of business incubators, only three of the top performers operated without support from government (Lewis et al. 2011). So, in addition to any anchor donor, it is important to involve and thereby commit local government services and/or universities to the incubation programme. Better-funded incubators typically perform better than less-well-funded competitors especially if they have local supportive links.

1.6 What service delivery options need consideration?

Beyond the institutional decisions about how the incubator is funded, who should be recruited to perform what roles, and what additional networking might be required, there are also important considerations about what services are offered and the process by which that happens. Getting the delivery right involves paying attention to a number of areas that have been summarised in the literature (Bergek and Norrman 2008; infoDev 2010d; Theodorakopoulos et al. 2014) and include the following.

1.6.1 Selection

Incubation selection policies vary. They may involve picking weak-but-promising businesses either based on ideas or entrepreneur basis. They may also either try to pick winners against strict criteria or adopt a less-strict survival-of-the-fittest approach. Almost always, selection criteria can improve prospects by focusing on a homogenous sector-specific grouping for whom services can be tailored, although this only works if the incubator can afford to turn away potential tenants (Aerts et al. 2007). It is also likely to depend on the funding and financial independence of the incubator. For example, in the parallel farmer field schools, many have focused more on meeting efficiency rather than
equity objectives, as a way of increasing the success probability of their programmes. But as a result, impacts on poverty reduction have been modest (Phillips et al. 2014).

1.6.2 Infrastructure
This refers to shared space and resources – and the appropriateness of these resources. On average, USA business incubators provided space for 25 clients, with an average of three anchor tenants and an average length of tenancy of 33 months (Monkman 2009). While physical interactions are enhanced by shared space, there are disadvantages in cost and suitability for some clients. For some business models there may also be a need for shared storage or processing facilities, in which the incubator may play a role. Virtual business incubators can provide remote services through extension workers, online tools and off-site advisory services (Stam and Buschmann 2012). Whatever the best option, successful business incubators tend to spend significant time and resources on advertising their clients and marketing both them and the business incubation programme itself. That latter need should be factored into thinking on necessary infrastructure.

1.6.3 Business support
Support services might include:
- Entrepreneurial training from business basics to more advanced business management,
- Administrative support such as helping clients with internet access, administrative services, office equipment and training in business etiquette,
- Institutional and legal advice, for example on regulations, exporting, securing strong relationships with government or local higher-education institutions,
- Research and development (R&D) partnerships for technology upgrading and development support,
- Production assistance from R&D to prototype orders and going to full-scale production,
- Networking (internal and external) to improve increased access to investment capital, and
- Mentorship programmes, for example with members of the advisory board.

Incubator business-support policies vary. Some may adopt a reactive and episodic, entrepreneur-led approach to coaching. Others may involve more proactive approaches with varying degrees of pre-prepared coaching.

1.6.4 Mediation
This refers to the relationships between an incubator manager to entrepreneurs (internal relationships) and business networks (external relationships). These relationships depend on the mediator’s knowledge of the entrepreneurs, legal requirements, markets, technologies, financial capital providers and human capacities. Their approach may focus on improving prospects within a regional network, or on a particular technology. Getting the right manager for the incubator is absolutely essential and the extent of their local networks and business contacts is one very important component to assess in their recruitment.
1.6.5 Graduation
This refers to the policy for incubatee exit or graduation. Usually, incubators support entrepreneurs for a period of up to about three years. There are five mutually exclusive entrepreneur outcome states (Hackett and Dilts 2004):

- Surviving and growing profitably
- Surviving and growing and on a path to profitability
- Surviving but not growing and not profitable or only marginally so
- Terminated while in the incubator with minimised losses
- Terminated while in the incubator with large losses

By the mid-2000s, most USA incubators had moved from graduation policies based simply on time limits, to those involving achieved milestones or based on growth (Monkman 2009). Examples of graduation criteria include outgrowing incubator location or need for stand-alone location, hiring a certain number of employees, achieving positive cash flow, merging with another company, obtaining short- or long-term funding, and/or establishing an independent board of directors.

1.6.6 Performance
This relates to the degree to which an incubator monitors performance and against what criteria. A good incubator should regularly assess the progress of incubatees. This can involve any number of checks, including whether the incubatee is following their business plan, whether they have recruited staff to meet company growth objectives, whether they have developed a network of advisors and professionals (eg lawyers, accountants, sales and marketing advisors etc), whether they have started to develop sales revenues, whether they have enough capital to survive for the next six months, and/or whether the management is able to run the business without incubator advice etc.

A typical practice is to divide the entrepreneurial process into a number of stages and then set targets for reaching each stage:

- **Seed stage:** Developing the idea or concept
- **Start-up stage:** A marketable product or service exists
- **Proof of concept stage:** Orders placed and sales revenue developing
- **Graduation:** Positive cash flow, employment and sales growth.

It should be noted that the services sought by incubatees vary significantly by sector, and by their maturity. For example, in an analysis of services sought by start-up companies in Cambridge (Dee et al. 2011), the top four options include:

- **Functional skills:** Marketing
- **Functional skills:** Information technology
- **Functional skills:** Legal/government legislation
- **Coaching** on understanding market opportunities.
In the same analysis, companies with existing experience sought the following priority services:

- Strategic information on market opportunities
- Strategic information on customers
- Related research and development activities
- Distribution channels.

These differences are illustrative of the rapid evolution of resource and service needs as an enterprise develops their know-how, and the consequent need for flexibility in providing resources and business services during incubation as the entrepreneurial process evolves.

**Figure 1.5 The entrepreneurial cycle of development**

1.6.7 Outcome

What were the results of the business incubation? Research has shown that top-performing incubators tend more often to collect and keep a database of the outcomes of their business incubation on participating entrepreneurs and businesses (Lewis et al. 2011). The sorts of information that are kept include graduate firm revenues, employment, survival rates, and information specific to each business and its activities and programmes. Not only does this help the incubator articulate its impact to possible funders, but it also forms a learning resource from which to benefit in the future.
1.7 What performance-measurement options need considering?

Overall, the evidence for the direct beneficial impacts of business incubation is strong, although the data from which such assertions are made tend to be biased by the need for incubators to show success. For example, the National Business Incubation Association (NBIA) estimates that the approximate 1,100 incubators in the USA assisted more than 27,000 companies employing 1 million workers and generating more than US$17 billion in 2005 alone (Knopp 2007). In the European Union, it is estimated that its approximate 900 incubators generate roughly 40,000 jobs per year (CSES 2002). Similar analyses elsewhere, for example in Turkey, confirm that incubated firms outperform non-incubated firms in employment and sales growth (Şehitoğlu and Özdemir 2013). It is also estimated that the indirect positive benefits of business incubation are also substantial (to service industries trading with incubatees) – ranging from 0.48 to 1.5 times the direct impacts of incubation (Markley and McNamara 1996; CSES 2002; Dee et al. 2011).

Nevertheless, while business incubation can accelerate the entrepreneurial process of business development, it can also lead to ‘life-support’ which only extends the time to business failure.

There is not much consensus on evaluating business incubator performance. This is because performance must be related to the expected goals of the business incubator – and these vary (Bergek and Norrman 2008). It is therefore vital to clarify the goals of a particular incubation. But it is also important to evaluate business incubation that might have substantially similar goals but very different approaches to attaining them (Mian 1997).

A number of key indicators are used to assess incubator performance against their goals – which may vary depending on the priorities of the sponsor (Dee et al. 2011; Theodorakopoulos et al. 2014) and whether the incubator or incubatee is in focus.

**Incubator:**
- Business incubator space or occupancy rate
- Level of funding received
- New firms supported
- Graduated firms
- Impact on sponsors’ objectives (eg graduates hired, consultancies undertaken, prestige gained)

**Incubatee:**
- Survival rates of incubatees (eg according to the five graduation states described above)
- Sales growth of incubatees
- Employment growth of incubatees
- Other measures of profitability, finance raised and tax growth
• Input measures of innovation such as R&D expenditure
• Output measures of innovation such as numbers of patents or product launches

It is perhaps worth commenting on the somewhat limited social and environmental ambitions of some of these incubators (perhaps because of the rather urban origins of the business incubation concept). For business incubators in forest landscapes, one would expect to find some indicators relating to sustainability at the very least, and perhaps to avoided deforestation or forest restoration at the more ambitious end of the spectrum.

1.8 Conclusions on a framework for case-study research in forest landscapes

Business incubation efforts within the forest landscape sector lag far behind their industrial and technological counterparts. Nevertheless, there has been significant progress since the early 1990s in support for locally controlled forest and farm enterprises. Several entities around the world have been providing increasingly sophisticated arrays of business support to such enterprises, often in remote areas – some of which would loosely fall into the category of incubators without walls or virtual business incubation. Many of these entities would not immediately define themselves as ‘business incubators’, although that is what they do. There is now an opportunity through FFF support to document how these incubators serving forest landscapes are working and what tactics they use to optimise their role and help overcome challenges in remote operating environments.

How each of these challenges can be overcome is the subject of the case studies of business incubation approaches that populate the subsequent chapters in this book. The final chapter draws out some key lessons to inform the practice of business incubation in forest landscapes that are both relevant to FFF and to the wider efforts around the 2030 Agenda on Sustainable Development and Paris Agreement on climate.

Each case study has been identified through interaction with FFF staff and facilitators and commissioned based on the analytical framework in Table 1.3.
Table 1.3 Analytical framework for capturing lessons from business incubators supporting forest and farm enterprise development in tropical countries

<table>
<thead>
<tr>
<th>Heading</th>
<th>Subheading</th>
<th>Research questions</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Introduction</td>
<td>1.1 Incubator</td>
<td>What is the name, history, ownership and financing of the incubator?</td>
</tr>
<tr>
<td></td>
<td>1.2 Context</td>
<td>What are the main features of the landscape, socio-political ecology and market in which incubation is taking place?</td>
</tr>
<tr>
<td></td>
<td>1.3 Target businesses</td>
<td>What types of locally controlled forest and farm business is the incubator servicing? How many clients does it service at any one time? What are the main challenges those clients face – and what services are they demanding as a result?</td>
</tr>
<tr>
<td>2. Institutional design</td>
<td>2.1 Staffing and structure</td>
<td>What organisation structure and staff does the incubator have? (Please insert organogram)</td>
</tr>
<tr>
<td></td>
<td>2.2 Advisory board</td>
<td>What advisory board does it use and what sets of expertise are represented on this? How else does the incubator acquire specialist expertise in the fields of entrepreneurship, business management, technology transfer, accounting, legal expertise, intellectual property and local government?</td>
</tr>
<tr>
<td></td>
<td>2.3 Networks</td>
<td>What other individuals or networks does it maintain to deliver its services?</td>
</tr>
<tr>
<td></td>
<td>2.4 Finance</td>
<td>What sources of income does the incubator rely on, including training and other service-support fees, and what percentage of incubator costs are born by the clients?</td>
</tr>
<tr>
<td>3. Services offered</td>
<td>3.1 Services offered</td>
<td>What are the main resources and services offered to the incubatees? (Please describe any shared physical space, shared inputs, training, fixed advisory services in different areas, coaching or mentoring)</td>
</tr>
<tr>
<td></td>
<td>3.2 Service delivery</td>
<td>Through what processes are these services delivered? (In-house training, external training, e-learning (social media, web platforms), published guidance etc)</td>
</tr>
<tr>
<td></td>
<td>3.3 Linking</td>
<td>How does the incubator make available its networks to its clients so as to help them access government authorities, input providers, markets, financial investment?</td>
</tr>
<tr>
<td>Heading</td>
<td>Subheading</td>
<td>Research questions</td>
</tr>
<tr>
<td>-------------------------------</td>
<td>---------------------------</td>
<td>-------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>4. Incubation management</td>
<td>4.1 Selection</td>
<td>What outreach and screening processes are used to select entrepreneurial clients to whom services are offered?</td>
</tr>
<tr>
<td></td>
<td>4.2 Performance oversight</td>
<td>What initial and subsequent checks are made to assess client needs and set and measure progress against targets?</td>
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<tr>
<td></td>
<td>4.3 Graduation</td>
<td>What criteria do you use to assess when a client no longer is eligible for support?</td>
</tr>
<tr>
<td></td>
<td>4.4 Outcome evaluation</td>
<td>What data do you keep on clients after graduation and how do you use this to refine services offered? (employment, sales, products, investments etc)</td>
</tr>
<tr>
<td>5. Impact</td>
<td>5.1 Overall assessment</td>
<td>What measures do you use to measure your success? (Provide statistics on the success of the incubation services offered as far as possible)</td>
</tr>
<tr>
<td></td>
<td>5.2 Successes</td>
<td>With use of a specific example, describe the key factors of the client and your incubation process you feel led to one notable success</td>
</tr>
<tr>
<td></td>
<td>5.3 Failures</td>
<td>With use of a specific example, describe the key factors of the client and your incubation process that you feel contributed to one specific failure</td>
</tr>
<tr>
<td></td>
<td>5.4 Lessons for other incubators</td>
<td>What lessons or tactics (dos and don'ts) from your work do you wish to share with other incubators?</td>
</tr>
<tr>
<td>6. Conclusions</td>
<td>6.1 Relevance</td>
<td>Describe from your context and perspective how important you feel business incubation to be</td>
</tr>
<tr>
<td></td>
<td>6.2 Future prospects</td>
<td>Outline your vision for how to develop the incubation process further within your specific country context – including institutional positioning and financing of incubation services</td>
</tr>
<tr>
<td></td>
<td>6.3 Recommendations to policymakers</td>
<td>Use this final section to make any brief points to relevant decision makers about how to improve the impact of business incubation in your context or globally</td>
</tr>
</tbody>
</table>
In 2017, the structural template outlined in Table 1.3 was sent to business incubators in 11 countries. Authors followed the template and attempted to document their approach to business incubation – both to illustrate their own capability, but also to help share knowledge on the ways in which business incubation in forest landscapes is being carried out.

In terms of the selection methodology, from a long list drawn up by members of FFF and the Forest Connect Alliance, an attempt was made to document case studies from for-profit business development firms, non-profit development-oriented organisations (e.g., NGOs), and business incubation services owned and run by forest and farm producer organisation (FFPOs). Preference was given to organisations that most closely matched our definition of business incubation, or that had been providing services akin to business incubation for a considerable period of time, and where there were clear activities in forest landscapes.

The geographical focus was primarily on non-industrial economies (mostly in tropical countries) spanning Asia, Africa and Latin America in roughly even shares. The case studies are briefly summarised in Table 1.4. Fuller descriptions are provided in each of the subsequent chapters, again arranged alphabetically.
<table>
<thead>
<tr>
<th>Chapter number</th>
<th>Incubator name</th>
<th>Business model</th>
<th>Geographic location</th>
<th>Experience</th>
</tr>
</thead>
<tbody>
<tr>
<td>2</td>
<td>Agribusiness Incubation Trust Limited (AgBIT)</td>
<td>For-profit company, agribusiness specific, value chain specific</td>
<td>Zambia</td>
<td>5 years</td>
</tr>
<tr>
<td>3</td>
<td>Asia Network for Sustainable Agriculture and Bioresources (ANSAB)</td>
<td>Not-for-profit NGO, agribusiness and forest focus, value chain generalist</td>
<td>Nepal</td>
<td>25 years</td>
</tr>
<tr>
<td>4</td>
<td>Be Green Trade</td>
<td>Not-for-profit foundation, forest focus, value chain generalist</td>
<td>Bolivia</td>
<td>5 years</td>
</tr>
<tr>
<td>5</td>
<td>FEDECOVERA (Las Verapaces Cooperatives Federation)</td>
<td>For-profit second-tier producer organisation (cooperative), forest and agribusiness focus, value chain generalist</td>
<td>Guatemala</td>
<td>41 years</td>
</tr>
<tr>
<td>6</td>
<td>Inkomoko</td>
<td>For-profit company, agribusiness specific, value chain generalist</td>
<td>Rwanda</td>
<td>5 years</td>
</tr>
<tr>
<td>7</td>
<td>Javlec (Yayasan Javlec Indonesia)</td>
<td>Not-for-profit NGO, forest specific, value chain generalist</td>
<td>Indonesia</td>
<td>18 years</td>
</tr>
<tr>
<td>8</td>
<td>NTFP-EP (Non-Timber Forest Products Exchange Programme)</td>
<td>Not-for-profit NGO, forest specific, value chain specific</td>
<td>Cambodia, India, Indonesia, Malaysia, Philippines</td>
<td>13 years</td>
</tr>
<tr>
<td>9</td>
<td>PlanJunto</td>
<td>For-profit social business, forest specific, value chain generalist</td>
<td>Ecuador</td>
<td>4 years</td>
</tr>
<tr>
<td>10</td>
<td>Reforestamos Mexico AC and FEDA</td>
<td>Not-for-profit NGO, forest specific, value chain generalist</td>
<td>Mexico</td>
<td>4 years</td>
</tr>
<tr>
<td>11</td>
<td>The Sawlog Production Grant Scheme (SPGS)</td>
<td>Not-for-profit public-sector programme, forest specific, value chain specific</td>
<td>Uganda</td>
<td>15 years</td>
</tr>
<tr>
<td>12</td>
<td>Self-Employed Women’s Association (SEWA)</td>
<td>Not-for-profit second-tier producer organisation (association), forest and agribusiness focus, value chain generalist</td>
<td>India and 19 other Asian countries</td>
<td>45 years</td>
</tr>
</tbody>
</table>
Nursery facility at the AgBIT Incubation Hub in Zambia. AgBIT has plans to establish separate agribusiness incubation hubs for each priority value chain in the long term.

© Augustine Tembo
Agribusiness Incubation Trust (AgBIT) is a leading business incubator in Zambia and the only one in the country focused on providing business incubation services in the agribusiness sector. AgBIT’s scope of agribusiness includes several value chains: horticulture (fruits and vegetables), crops, livestock, dairy, fisheries and agroforestry. AgBIT has been able to demonstrate that business incubation is an important vehicle for fostering the development and growth of start-ups and other SMEs — and for catalysing entrepreneurship development in general in a developing country. This chapter discusses AgBIT’s experiences and the challenges it faces in sustaining itself as a successful business incubator.

2.1 Introduction

2.1.1 Incubator
The business incubator was established in 2012 with initial support from the Danish Ministry of Foreign Affairs (Danida) through the Universities, Business and Research in Agricultural Innovation (UniBRAIN) programme managed by the Forum for Agricultural Research in Africa (FARA). AgBIT is a public-private partnership initiative bringing together business, university and research communities to create an ecosystem for the successful development and growth of agribusiness start-ups, small and medium enterprises (SMEs) and smallholder farmers in the country.

While AgBIT is registered as an autonomous company limited by guarantee, the AgBIT consortium comprises Frontier Development Associates Limited, Zambia Agriculture Research Institute (ZARI), University of Zambia, Mulungushi University, and the Natural Resources Development College (NRDC). The incubator has also established a strong wider partnership with other private-sector agribusiness value chain actors, government institutions, and local and international organisations. AgBIT’s management is overseen by a strong board of directors drawn from consortium member institutions in the public and private sectors.

AgBIT’s financing comes from donor grant funding, fees paid by incubatee businesses, sales income from its horticulture technology demonstration facility, consultancy and training fees.

AgBIT provides its business incubation services to mostly start-ups, SMEs and other enterprises in the agribusiness sector. While it focuses on recent start-ups, AgBIT has
extended its outreach programmes to universities and agricultural colleges where it targets and encourages students with innovative ideas to take advantage of the services offered at the incubator to nurture their business ideas, and to start and grow their businesses. Business incubation services have also been developed for smallholder farmers through the incubator’s Farmer Cluster Programme (FCP). The incubation services are designed to reduce the risk of failure of the fledgling enterprises (the incubatees) through a careful assessment of incubatee business models and risk profiles to tailor a bundle of services to minimise identified risks and increase each incubatee’s chances of survival and growth.

2.1.2 Context
Zambia is a land-locked country in Southern Africa surrounded by eight countries: the Democratic Republic of Congo, Tanzania, Malawi, Mozambique, Zimbabwe, Botswana, Namibia, and Angola. The country’s population stands at 16 million. For more than a decade (2000–2010) the country attained macroeconomic stability and achieved impressive real growth averaging 7.7 per cent per annum and lifting Zambia above the threshold of lower middle-income countries (AfDB 2016). However, the country’s economic growth slowed down to 3–4 per cent per annum owing to lower copper prices compounded by energy deficits. Zambia’s dependency on the copper industry makes its economy highly vulnerable to price fluctuations in that commodity. Despite the post-2000 policy initiatives to diversify the economy by building stronger manufacturing and agriculture sectors, mining remains the dominant export sector. While agriculture yielded positive growth rates in 2000–2014, the sector’s contribution to GDP declined from 23.8 per cent in 2000 to 6.8 per cent in 2014, while the share of mining increased from 4.2 per cent to 14.6 per cent during the same period.
Zambia ranked 97 of 189 in the 2016 Doing Business Report, moving 6 places down from the previous year due to decline in its trading across borders (World Bank 2016b). Inflation has been maintained in single digits since the start of 2017, despite rising to a peak of over 23 per cent in mid-2016 (Trading Economics 2018).

Despite improvements in economic performance, poverty remains high and widespread, with more than half of the population still living below the poverty line (AfDB 2016). The percentage distribution of the population by level of poverty in 2015 showed that 40.8 per cent of the population was extremely poor while 13.6 per cent was moderately poor (CSO 2015). The country’s economic growth has not necessarily translated into significant poverty reduction, especially in rural areas. Informal employment remains high, accounting for more than 80 per cent of the total number of people employed.

The country’s Seventh National Development Plan (2017–2021) (Republic of Zambia 2017) places high priority on economic diversification to a more agriculture-driven growth. The plan also identifies poor entrepreneurship culture and low levels of innovation among the key negative traits that may be detrimental to achieving rapid progress in development. The country’s weak entrepreneurship and innovation culture is further evidenced in the 2016 Global Innovation Index which ranked Zambia 125th out of 128 countries (WIPO et al. 2016). The plan, among other things, places critical importance on the fostering and development of an entrepreneurial and innovation culture to transform the national development pathways.

As the case is in many other developing countries, start-ups and SMEs in Zambia face many challenges to growth ranging from lack of access to finance, technology, markets and business development services (BDS), to poor access to skilled human resources. Business incubation has demonstrated significant positive results in helping SMEs and start-ups as well as smallholder producers address some of these challenges.

2.1.3 Target businesses

AgBIT has provided business incubation services to enterprises in the horticulture subsector since 2013. In 2014, the incubator also developed its flagship Farmer Cluster Programme (FCP). The FCP is a market-driven, value chain-focused development programme designed to provide business incubation services to smallholder farmers clustered around a specific value chain and geographical proximity. The programme also identifies and nurtures other actors within the clusters, particularly SMEs along the selected value chains to increase access to services, address identified gaps in the value chain, and increase competitiveness.

AgBIT has to date established four farmer clusters in the horticulture sector in Zambia, bringing some 650 smallholder and emergent producers into competitive mainstream supply chains and enabling them to access large markets. In Mansa district, the programme has enabled 400 vegetable producers to supply quality fresh vegetables to retailers Freshmark/Shoprite – profitably and consistently. Two other vegetable clusters have been developed in Shibuyunji and Chongwe districts, each with 40 producers accessing major food retail markets in Lusaka, while the fourth cluster in Ikelenge
A district in the northwest part of the country is focused on pineapple value chains with more than 120 producers supplying local and export markets through a local dried pineapple-processing company also supported by the incubator through its business incubation programme.

Currently, AgBIT has capacity to provide business incubation services to more than 30 entrepreneurs and 400 emerging farmers at a time. Cluster-based business incubation services are provided for a period of nine to 12 months, while the regular incubation programme takes three to nine months (depending on the stage at which the incubatees enter the incubation programme, their identified business gaps and capacity development needs). Based on an initial enterprise review for each incubatee, specific outputs, targets and milestones of the business incubation process are pre-agreed between the incubator and incubatees. These are regularly monitored to assess progress towards their attainment within the agreed incubation period and to inform incubator managers whether adjustments need to be made to the processes to achieve set targets.

Buyers from a food retail company facilitating training in grading and quality management for young farmer entrepreneurs at the AgBIT demonstration centre

The main challenges faced by incubator clients, and for which they demand services, include access to markets, finance, inputs, technology, equipment, market information, business development services, and extension services. AgBIT provides these services either directly, or through linkages to its consortium members and other business partners and networks. Business incubation invariably includes mentorship of clients through the incubator’s wide network of business mentors and coaches. Mentorship may take one-on-one on-site mentorship sessions or small group mentorship sessions for start-
up incubatees and farmers with similar business capacity-development needs. Mentor-mentee matching is carefully established by the incubator’s management considering several factors, importantly the fit between mentees’ capacity gaps and the mentor’s practical skills and experience in the relevant area of mentorship. Mentor-mentee relationships and mentorship performance is assessed using a two-way feedback system that tracks feedback from both the client businesses and the mentors, as well as regular monitoring by incubator staff. This ensures the quality and effectiveness of all client mentorship sessions.

2.2 Institutional design

2.2.1 Staffing and structure

AgBIT is managed by a lean team of highly experienced professionals led by the chief executive officer (CEO) and overseen by an independent board of directors and supported by a wide network of mentors and coaches, and expertise drawn from the incubator consortium. Figure 2.1 presents the current structure of the organisation.

Figure 2.1 Organogram of AgBIT, Zambia
2.2.2 Advisory board

AgBIT has a nine-member advisory board drawn from among the consortium members and other industry experts in the fields of entrepreneurship development, business management, technology transfer, legal expertise, and intellectual property (IP). In addition, AgBIT has entered into agreements with many local and international partners representing a wide range of specialist fields relevant to its clients. For instance, the incubator facilitates pro bono legal expertise and IP management services to its clients through an agreement with an international organisation. On the other hand, AgBIT’s strong partnerships with the International Crops Research Institute for the Semi-Arid Tropics Agribusiness Incubation Platform (ICRISAT-AIP), the Centre for Coordination of Agricultural Research and Development for Southern Africa (CCARDESA) and other regional and national research and technology development institutes widens the incubator’s capacity for technology transfer. While AgBIT recognises the importance of agroforestry for its clients, especially those in the farmer clusters, in this early formative stage AgBIT has not focused on agroforestry. Hence there has been no relationship with specialist institutions such as the World Agroforestry Centre (ICRAF) but going forward, AgBIT is now already identifying possible technical collaborations with such institutes.

2.2.3 Networks

To effectively deliver business incubation services, AgBIT maintains various networks. These range from individual mentors, coaches and consultants to institutional networks with other agribusiness incubators, incubator associations, universities and colleges, local and international research institutes, financial services providers, equipment suppliers, input suppliers, commodity off-taker markets and outgrower scheme operators, to other business development services providers. Maintaining such networks, identified during the incubatee enterprise review, has enabled the incubator not only to provide services to its clients but also to facilitate access to additional services not provided directly by the incubator. The network contacts identified are later followed up to further investigate possible areas of collaboration to address the incubatee’s gaps or gaps in the value chain.

2.2.4 Finance

AgBIT’s income comes from a variety of sources including donor grant funding, fees paid by incubatee businesses, sales income from its horticulture technology demonstration facility, consultancies and training fees. About 10 per cent of the incubator’s total income comes from business incubation clients. This includes incubation service fees and facilitation fees. Around 16 per cent of income comes from consultancy and training fees, while about 12 per cent is generated from the incubator’s sales of products from its horticulture technology demonstration facilities. Donor grant funding currently still accounts for the largest part of its income, at about 62 per cent.
A field day at AgBIT, where producers get to see the performance of various seed varieties

While client payment for incubation services still accounts for a relatively small component of incubator incomes, there has been a steady rise in clients appreciating the value of business incubation services and who are willing to pay for the services. An entrenched culture of ‘free services’ offered by various business development services providers in the past has only served negatively in the incubator’s efforts to increase the share of its income coming from business incubation clients. However, as part of the incubator’s new strategy for 2018–2022, AgBIT has developed a strong sustainability plan that emphasises increased internally generated incomes (from incubation, training, consultancy, facilitation fees and sales) to reduce the proportion of its dependence on donor grants to below 40 per cent by 2022.

2.3 Services offered

2.3.1 Services offered

AgBIT provides a range of business incubation services to clients in a three-stage process as depicted in Figure 2.2. Incubatees also have access to shared physical space at the AgBIT incubation facility located in Silverest, east of Lusaka. Incubatees entering the incubation process in Phase I are generally start-up businesses or SMEs with a good business idea which has already been tested in the market, but which lack the management or financial capacity to grow their business. Support to these clients usually involves help in clearly defining their business model and revenue streams, business plan
development, and regulatory compliance. Some incubatees in this category also access shared physical space at the incubator. During the incubator period, those incubatees have access to offices, internet and workstations at AgBIT premises. This is so that they can conduct tests using the product development facilities, while closely interacting with their mentors.

Phase II clients are growth-oriented businesses whose products or services have gained significant market traction and those that have graduated from the Phase I stage. Services provided to clients in this stage include, among others, equipment/technology sourcing, marketing services and finance facilitation. Phase III clients, on the other hand, are generally well-established growth-oriented businesses demanding specific business development services such as new product development, finance facilitation or management capacity development.

**Figure 2.2 AgBIT’s business incubation stages and services provided**

<table>
<thead>
<tr>
<th>Start-up/seed stage</th>
<th>Growth stage</th>
<th>High growth stage/post-incubation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Phase I</td>
<td>Phase II</td>
<td>Phase III</td>
</tr>
<tr>
<td>• Regulatory compliance support</td>
<td>• IP protection and management</td>
<td>• Advisory board</td>
</tr>
<tr>
<td>• Financial management</td>
<td>• Brand development</td>
<td>• Fund sourcing</td>
</tr>
<tr>
<td>• Business plan development</td>
<td>• Marketing services</td>
<td>• Identifying investment/joint venture partners</td>
</tr>
<tr>
<td>• Market assessment and validation</td>
<td>• Negotiated group BDS services (auditing, management accounts, tax, branding etc)</td>
<td>• New product development</td>
</tr>
<tr>
<td>• Management capacity building</td>
<td>• Equipment/technology sourcing</td>
<td>• Additional management capacity building</td>
</tr>
<tr>
<td>• Mentoring and coaching</td>
<td>• Additional mentoring and coaching</td>
<td>• Advisory board</td>
</tr>
<tr>
<td>• Product development</td>
<td>• Branding and marketing support</td>
<td>• Seed fund/fund sourcing</td>
</tr>
<tr>
<td>• Plant layout design and technology assessment</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

In addition, under the Farmer Cluster Programme specifically designed for smallholder producers, AgBIT provides market-driven, value chain-centred cluster development services to smallholder farmers and other agri-entrepreneurs along the selected value chain, such as agro-dealers, aggregators and distributors. The services at the cluster level focus on increasing productivity and building supply chain reliability by increasing producer economies of scale through aggregation, enhancing quality assurance, improving food safety measures, developing cluster-level traceability systems and improving supply consistency. The farmer clusters have registered farmer organisations such as associations and cooperatives. To ensure that the supply chain is efficient, crop aggregation systems are set up to ensure both that quality specifications are met and
that the right production quantities match market demand and so improve the viability of the collective enterprise. In certain cases, cluster development entails direct assistance in bringing farmers together to be organised and set up as cooperatives or to extend membership by helping the existing cooperative to recruit additional farmers. In addition, AgBIT has developed a practical hands-on farmer training programme designed to build local extension systems within each producer cluster. AgBIT also facilitates market linkages, improved access to inputs, finance, and business development services for the cluster participants.

2.3.2 Service delivery
AgBIT delivers business incubation services through a combination of in-house and external training, as well as on-farm mentorship for smallholder farmers. The incubator also conducts a six-month practical hands-on training for selected farmer trainees from each cluster at the incubator’s horticulture technology demonstration facility. The training builds the capacity of selected farmers who later serve to enhance local extension delivery in their respective clusters. The incubator plans to deliver more e-learning training and mentorship services to off-site and remote rural clients from 2018 onwards.

2.3.3 Linking
AgBIT maintains an updated database of its key partners and networks including government authorities, equipment manufacturers/suppliers, input suppliers, markets, financial services providers, mentors and coaches. The data are made available to incubatees for purposes of facilitating business linkages. AgBIT regularly holds business pitching and business-to-business sessions to which key partners are invited. This exposes its client enterprises to business networks and facilitates deal making. AgBIT’s mentorship programme also taps heavily into its partner networks, with mentor-mentee matching being facilitated by the incubator managers based on identified capacity-development needs of client enterprises.

2.4 Incubation management
2.4.1 Selection
The incubator has a continuous client recruitment process. Calls for applications from agribusiness entrepreneurs to its incubation programme are also issued at least twice a year. These calls are issued through various electronic and print media, and the incubator’s own website and social media platforms. Several of the incubator’s clients are also referred by past and current clients or partners.

To apply, applicants complete a simple standard application form which is electronically transmitted or submitted physically to the incubator offices. The applications are screened based on established criteria, such as innovation, current stage of business, market growth potential, potential socioeconomic impact of the business, experience and management capacity of owners etc. This initial screening is done by AgBIT’s internal staff with the help of two or three external mentors.
The applicants are then invited to pitch their businesses before a panel comprising of experts drawn from the incubator’s partner network, mentors and incubator managers. Promising entrepreneurs selected following the business pitching sign pre-incubation and non-disclosure agreements before commencement of business incubation. AgBIT receives applications from all over the country. However, AgBIT does not have its own accommodation facilities to offer to incubatees coming from outside Lusaka. Once applications are received and processed, programmes are arranged for each enterprise or a group of enterprises with similar needs so that incubation services are provided at the incubator. For more distant clients, services are arranged virtually and the incubatee only connects with mentors online.

2.4.2 Performance oversight

Business incubation commences with an initial enterprise review conducted for each incubatee to identify growth opportunities, needs and gaps that need to be addressed to facilitate successful growth. The enterprise review also identifies which gaps can be addressed directly through business incubation and which gaps can be addressed through other linkages.

Based on the enterprise review for each business, specific milestones and outputs of the business incubation process are agreed between the incubator and the business. AgBIT then signs up the incubatees and the specific activities, milestones and outputs are outlined in an incubation agreement. These milestones and outputs are regularly monitored to assess progress towards their successful completion. Feedback from mentors, coaches and graduate interns attached to the business is also regularly incorporated into the overall assessment of progress towards set targets. In addition, incubatees give scheduled presentations on the status of their business. Business pitching sessions also give incubator managers an opportunity to assess progress while providing incubatees with expert advice on areas of potential improvement.

2.4.3 Graduation

Incubatees graduate when they achieve set targets and milestones. These milestones differ from business to business depending on the stage of the business, the needs identified at the start of the business incubation process, and the capacity of the business to sustain their business growth without further support from the incubator. Specific criteria used may include completion of a business plan, increased numbers of new customers reached, increased sales, new funding raised, new investments, completed new product development and launches, new employment created, fulfilment of specific regulatory compliance requirements, and improved management capacity, among others.

In some cases, incubatees only graduate after an extension of the initial incubation period. In other cases, incubatees exit without graduation when agreed targets have not been achieved, and/or the entrepreneur’s commitment to achievement of targets or business growth is lacking. In yet other cases, incubatees exit without graduation when the cost of service provision cannot be sustained by the incubator with commensurate business growth by the incubatee. To date, AgBIT has achieved a 72 per cent graduation rate for its incubatees.
2.4.4 Outcome evaluation

AgBIT maintains data on each graduated client on various parameters including sales, customer acquisition and maintenance, employment, new funding raised, new product launches, and other business growth statistics. The data help the incubator to track performance of past clients over time to enable the incubator further to refine its service offering. Client performance is also tracked to enable the incubator to compile best practices generally responsible for client business growth, which in turn become valuable in mentoring new clients in similar businesses or sectors.

2.5 Impact

2.5.1 Overall assessment

AgBIT uses various measures to measure the success of its incubation services. Parameters which are utilised to assess incubatee performance and graduation are also employed in measuring the success of the incubator. Importantly, AgBIT has a results framework with performance indicators that the incubator uses to measure its own performance against set targets. Table 2.1 is an extract from the incubator’s results framework in 2015.

<p>| Table 2.1 Extract from AgBIT’s results framework 2015 |
|--------------------------------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|
| Indicator                            | Targets         | Achieved        |
| Number of start-up businesses incubated | 5    | 10   | 40   | 7    | 15   | 38   |
| Number of jobs created by start-up incubatees | 20   | 40   | 160  | 16   | 47   | 166  |
| - Of which full-time                  | 4    | 8    | 32   | 8    | 18   | 46   |
| - Of which part-time                  | 16   | 32   | 128  | 8    | 29   | 120  |
| Annual income (revenue) generated by incubator start-ups (US$) | 20,000 | 60,000 | 320,000 | 22,000 | 98,952 | 309,500 |
| Number of start-ups fulfilling specific regulatory requirements prior to not met | 5     | 8    | 30   |
| Number of start-ups with completed business plan | 5     | 10   | 40   | 7    | 14   | 36   |
| Number of existing businesses that are supported to either expand, diversify or enter new markets | 15    | 30   | 40   | 8    | 15   | 45   |
| Number of households benefiting as suppliers to supported agribusinesses | 200   | 300   | 600   | 302   | 450   | 790   |</p>
<table>
<thead>
<tr>
<th>Indicator</th>
<th>Targets</th>
<th>Achieved</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of assisted existing businesses reporting increased income, decreased cost of production or decreased operational time</td>
<td>5</td>
<td>15</td>
</tr>
<tr>
<td>Percentage of incubatees successfully graduating within nine months</td>
<td>60%</td>
<td>70%</td>
</tr>
<tr>
<td>Number of university/college students/graduates that benefit from improved education through internships and attachments</td>
<td>50</td>
<td>100</td>
</tr>
<tr>
<td>- Of whom are female</td>
<td>20</td>
<td>40</td>
</tr>
<tr>
<td>- Of whom are 35 years and under</td>
<td>25</td>
<td>50</td>
</tr>
<tr>
<td>Number of targeted graduates (interns) who have established own businesses with support from incubator within one year of graduation</td>
<td>8</td>
<td>14</td>
</tr>
<tr>
<td>- Of whom are female</td>
<td>2</td>
<td>4</td>
</tr>
<tr>
<td>- Of whom are 35 years and under</td>
<td>4</td>
<td>7</td>
</tr>
<tr>
<td>Number of targeted graduates (interns) who are employed within six months of graduation</td>
<td>16</td>
<td>30</td>
</tr>
<tr>
<td>- Of whom are female</td>
<td>6</td>
<td>10</td>
</tr>
<tr>
<td>- Of whom are 35 years and under</td>
<td>8</td>
<td>15</td>
</tr>
<tr>
<td>Number of farmers accessing improved/formal markets</td>
<td>200</td>
<td>300</td>
</tr>
<tr>
<td>Number of farmers reporting increased incomes because of farmer incubation services (FCP)</td>
<td>150</td>
<td>225</td>
</tr>
<tr>
<td>Number of farmers reporting increased/timely access to required production inputs</td>
<td>200</td>
<td>300</td>
</tr>
<tr>
<td>Number of farmers accessing improved/timely extension services and on-farm training</td>
<td>200</td>
<td>300</td>
</tr>
<tr>
<td>Number of technologies (inventions, innovations and improved management practices) taken up by incubatees for commercialisation</td>
<td>3</td>
<td>3</td>
</tr>
</tbody>
</table>
2.5.2 Successes

Charles Mweene is a 47-year-old vegetable farmer from Chongwe who has participated in the AgBIT Farmer Cluster Programme since 2014. Having demonstrated zeal in pursuing farming as a business rather than a mere subsistence activity, and encouraging youths in his community to take up high-value vegetable production as a serious income-generating venture, Charles was selected by his cluster to participate in the AgBIT farmer trainee programme.

Charles joined this programme in 2015. The programme, which runs in six-month cycles, was designed to support the FCP through intensive hands-on training in high-value horticulture production at AgBIT’s horticulture technologies demonstration centre in Lusaka. Participants are selected by their respective clusters to participate in the training to acquire practical skills that are required to succeed in the horticulture value chain and to later serve as knowledge transfer and extension agents in their clusters. This promotes and strengthens local extension systems that are critical to the successful operations of a cluster targeting high-end markets that demand high-quality, consistent and timely supplies.

Charles completed two six-month cycles. The first was training in high-value vegetable production and the second focused specifically on quality seedling production. During the two cycles, Charles acquired skills in vegetable production under greenhouse and open-field production systems. He acquired practical skills in good agricultural practices, crop production techniques, integrated pest and disease management, soil fertility management, water management, post-harvest management, and fresh produce quality management. He also participated in several farmer field days organised at the demonstration centre by AgBIT in collaboration with seed and fertiliser companies, agro-chemical suppliers and equipment suppliers. Charles also acquired soft skills in business management including farm planning, budgeting, recordkeeping, market research, costing and pricing.

Since graduating from the farmer trainee programme in 2016, Charles has established his own seedling business supplying on average 40,000 seedlings per month to vegetable producers within his cluster and beyond. He has employed five workers whom he has trained in seedling production and selling while he manages the business. He also provides extension services to other farmers in the cluster and technical advice to his seedling customers.

With monthly sales of US$2,500–3,000, Charles has emerged as an entrepreneur to be reckoned with in his community. He is not only able to meet his family needs such as paying for his seven children’s education and health care, but also continues to grow his business. Charles has also become an inspiration to other farmers, particularly young farmers who are encouraged to take agribusiness beyond subsistence levels. When asked what he credits the rapid growth of his business to, Charles proudly responded, ‘The hands-on skills training and mentorship I received from AgBIT, especially in seedling production, opened my mind to the opportunities to make money from farming.’ He added, ‘I also realised that if I devoted myself fully to this business, I can help hundreds of other...’
farmers who have challenges in obtaining affordable quality seedlings.

Charles plans to expand his business in 2018 by acquiring an additional piece of land where he can both produce high-value vegetables and use it as a demonstration farm to give practical training to other farmers, especially young farmers. He intends to sink a borehole on the farm and install a pump, reservoir tank and irrigation equipment. He also has plans to construct some greenhouses on the farm.

2.5.3 Challenges or failures to learn from

One of the perceived failures was the very long timeframe it took to develop a sustainable incubator – still a work in progress after four years, despite having visited several incubators within the continent and outside (South Africa and India), where AgBIT staff received incubator mentorship. During that training, it was clearly observed that sustainability in forest landscapes was also not achieved by most of the incubators in a four-year period. The key challenge underpinning this situation is the heavy dependence on grant funding from donors due to the limited capacity to generate revenues from client fees directly.

Staff noted from the incubator training and peer-to-peer exchange visits, that even incubators that were seemingly sustainable had had substantial government financial support. In those cases, governments had prioritised their operations such that a budget allocation for business incubation was granted. To help businesses move from start-ups to becoming fully functional and bankable, there are significant investments that need to be made of a developmental sort, involving basic education and capacity building and technical assistance through mentorship, either directly provided by incubator staff or indirectly through bought-in network service providers. Such basic but necessary development services are not readily provided by private-sector players – such as the buyers of products from the incubatees.

AgBIT in its formative years struggled to meet these demands and did not have a track record nor the success stories to attract additional partnerships from developmental institutions including the government. There is now a track record of success but, unfortunately, the initial funding from the founding donor has ended and new support is yet to be negotiated.
Additionally, a major challenge is that most developmental organisations (e.g., NGOs) provide free support to SMEs. This poses a challenge to an incubator whose business model demands charging the incubatees to realise meaningful income to sustain itself. It has been observed that there is no willingness by the clients to pay. This is especially the case for business planning services which take a long time to be appreciated. As such, the temptation is to provide most services on pro bono terms. Without sufficient funds to continue supporting the clients, recovering funds for the services provided on a pro bono basis is a challenge.

We therefore learnt that in forest landscapes, initial funding to incubators should be for a longer period: preferably five to ten years and not just three. Secondly, there is a need for ongoing government or donor development grants or climate finance to compensate for the low density of paying clients in rural areas from inception.

2.5.4 Lessons for other incubators

In planning an agribusiness incubator, many factors must be considered. Some of these include the following:

- **Partner selection:** A careful selection of incubator partners with a good alignment of goals is critical to ensure the smooth running of the incubator. Compatibility issues and long-term misaligned goals can pose a challenge to the effective management of the incubator.

- **Networks:** It is critical for a business incubator to build a strong network of mentors, coaches and consultants, and have in place mentor-mentee feedback mechanisms.

- **Ecosystem:** Business incubation will thrive best when there is a supportive entrepreneurial ecosystem that includes good government policies that favour small business growth, a thriving financial system (including venture capital, angel investors, development banks and banks with a strong focus on SMEs/agribusiness), and other business advisory services providers, etc. To succeed, an agribusiness incubator must establish strong relationships in the whole ecosystem.

- **Client selection:** Careful selection of entrepreneurs/incubatees is critical to successful business incubation, especially when dealing with start-up businesses.

- **Clear entry and graduation criteria:** Set clear entry and graduation criteria, mutually agreed upon with clients at the start of the incubation process.

- **Clustering:** For a business incubator providing incubation services to smallholder producers, clustering of farmers around specific value chains can be a highly useful approach to effectively providing services that can enable the producers to access more-profitable high-end markets and increase access to inputs and finance.

- **Revenue streams and sustainability:** It is important for a business incubator to identify multiple revenue streams, which may include external grant funding, incubation service fees, consultancy fees and other internally generated income. Even when the socioeconomic impact of business incubation is large, providing business incubation services to start-ups, SMEs and smallholder farmers can be costly and it can take a long time for the incubator to become financially self-sustaining. Incubator managers therefore must carefully plan the incubator’s revenue streams and if possible establish multiple funding options.
2.6 Conclusions

2.6.1 Relevance
AgBIT has been able to demonstrate that business incubation is an important vehicle for fostering the development and growth of start-ups and other small and medium enterprises and catalysing entrepreneurship development in general in a developing country. This can potentially play a decisive role in improving economic, social and environmental sustainability at a landscape level (e.g. contributing to forest landscape restoration goals or climate actions). To be able to do this, an incubator must have a good management team in place and must build a strong network of collaborators especially with businesses, financial institutions, government, mentors and other business development services providers.

AgBIT has also demonstrated that with careful planning, agribusiness incubators can play a critical role in agribusiness value-chain development and enabling smallholder producers to participate profitably in competitive supply chains through market-driven, value chain-centred farmer clustering approaches. To achieve this, AgBIT has developed strong linkages with various actors along its selected value chains including markets, input manufacturers/suppliers, equipment suppliers, extension services and other business development services while strengthening the business capacities of targeted beneficiaries such as agro-dealers, aggregators and the smallholder producers themselves.

It has also been shown that business incubation can significantly increase the number of youth engaging in entrepreneurial activities, thereby helping deal with the challenge of youth unemployment affecting many African countries. By working closely with colleges, universities, technical education facilities, and vocational and entrepreneurship training centres, business incubators can develop a pipeline of potential entrepreneurs whose business ideas and innovations can be nurtured and developed through business incubation.

2.6.2 Future prospects
As part of its five-year strategic plan for 2018–2022, AgBIT has prioritised many strategic actions to enhance its institutional positioning and increase the impact of its incubation services. Some of the identified priorities include:

- **Further developing and expanding its successful FCP** beyond the horticulture sub-sector to other value chains including the aquaculture, poultry and livestock value chains. The farmer clusters engaged in horticulture and high-value crops require farming techniques that reduce costs and revitalise their natural resources to ensure the sustainability of their enterprises. With the right partnerships, there is a need to integrate sustainable agroforestry practices for short- and long-term benefits. AgBIT will continue to pursue a market-driven, value chain-centred approach to the provision of business incubation services for selected value chains, with plans to establish separate agribusiness incubation hubs for each priority value chain in the long term.
• **Developing new and strengthening existing financial partnerships** with a view to increasing access to finance for clients graduating from the business incubation programme.

• **Leveraging stronger collaboration with external partners** such as business chambers and associations, other enterprise support institutions, and technical education and vocational training institutes in the country should help create a sustainable pipeline of clients to be developed through business incubation to become bankable and investment-ready enterprises.

• **Developing virtual incubation platforms** (web and mobile) to broaden its capacity to provide incubation services to remotely located entrepreneurs while lowering the cost of service provision.

• **Broadening the incubator’s revenue streams** while streamlining the efficiency of the most promising ones, eg the FCP.

### 2.6.3 Recommendations to policymakers

Business incubation can only thrive and yield optimal benefits in fostering innovation and small enterprise growth when there is a supportive ecosystem that includes SME-friendly policies, a thriving financial system and business support services, among others. Business incubators need to work closely with, and receive sustained support from, national governments, research and training institutes and the private sector to create this enabling ecosystem for the full benefits of business incubation services for socioeconomic development to be realised.

Fostering close cooperation between sector or agro-industry associations and agribusiness incubators can enable developing countries to bring large numbers of smallholder producers to participate profitably in competitive and sustainable value chains and catalyse agroforestry transformations in Africa for the benefit of both people and the environment.

Business incubation can play a critical role in fostering innovation and the growth of small business enterprises, reducing the failure rates of start-ups, enabling smallholder producers to participate profitably in competitive value chains, and educating youth unemployment in developing countries. But it must be noted that in many cases, it can take long periods before an incubator becomes fully financially sustainable – if indeed this is possible without ongoing developmental support. However, the multiplier effects on each of these socioeconomic factors are often huge, warranting increased investment into the development and growth of business incubators by multilateral and bilateral development agencies, climate finance programmes, foundations, national and local governments, and the private sector.
A local woman tending charcoal briquettes drying in the sun. ANSAB provided technical and business development services to the enterprise

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ANSAB: developing community-based farm and forest-based enterprises in Nepal

by Bhishma P Subedi, Sudarshan C Khanal and Puspa L Ghimire

Nepal is rich in biological and cultural diversity, including many natural resources on which rural communities rely. Yet despite this, Nepal is one of the world’s poorest countries. Since the early 1990s, the Asia Network for Sustainable Agriculture and Bioresources (ANSAB) in Nepal realised that the conservation and sustainable use of bio-resources had great potential to address the livelihood needs of small farmers. In this chapter, the authors explore how business incubation can stimulate the growth and sustainability of locally controlled farm and forest-based enterprises. They advocate for developing holistic programmes which address specific needs and gaps, such as identifying value chains with business potential and providing technical support, leadership and initial support from government and development organisations, and delegating responsibility and ownership to local communities.

3.1 Introduction

3.1.1 Incubator

ANSAB in Nepal has been promoting the development of natural resource-based enterprises since the early 1990s. This is part of its larger programme to create incentives for conservation and sustainable community development. Through ANSAB, a number of businesses utilising forest and farm resources have been incubated and graduated and now function well, with some exemplary outcomes. ANSAB’s approach to developing community-based farm and forest enterprises is presented in Figure 3.1.

ANSAB is a competent, professional, and value-based institution for enterprise-oriented natural resource management in Nepal. It was established in 1992 by Appropriate Technology International and the Ministry of Agriculture of Nepal. Initial financial support helped create small-scale technology development and extension programmes to generate knowledge and build capacity in the agriculture and forestry sectors. The preliminary projects focused on tissue culture, bio-fertiliser, research and capacity building in Nepal, Sri Lanka, India, the Philippines and Indonesia.

ANSAB realised that the conservation and sustainable use of bio-resources had great potential to address the livelihood needs of small farmers. It expanded its focus to include micro, small and medium enterprise (SME) development and natural resource management. It is also registered as ANSAB Nepal with the district administration office in Kathmandu.
ANSAB is a not-for-profit civil society organisation governed by a board of directors elected by its general assembly. The board of directors reviews the organisation’s programme activities and decides on action plans at annual general meetings with its general members, central management committee, officials and staff representing various divisions. Financing is mostly from project-based funding that it generates through the development of programmes and projects. ANSAB also receives funding from national and international donors, including government agencies, bilateral and multilateral donors, United Nations agencies, private foundations and individuals.
3.1.2 Context

Nepal embraces some unique geographical regions including tropical plains (the Tarai) along the Indian border in the south, an extensive range of mid-mountains, and the trans-Himalayan mountains bordering Tibet in the north. As a result of this topographic and climatic variation, Nepal hosts a wide diversity of natural resource products, upon which rural communities rely for food, medicines and other products. For example, Nepal has documented over 7,000 species of flowering plants, many of which are important for both subsistence and commercial purposes (GoN 1988). The agroforestry sector has also a huge untapped potential for generating economic value of legally produced and sustainable products and services. A recent national-level study has shown that the forestry sector alone (if its full potential is harnessed) could generate economic value worth NRs 373 billion (about US$ 3.7 billion). This is a many-fold increase from its present value. It could also create the equivalent of 1.38 million full-time jobs in Nepal (Subedi et al. 2014).

The latest national census shows that the population of the country is about 26.5 million with an annual population growth rate of 1.6 per cent and median age of 21.6 years (CBS 2012). The economically active population of the country is about 64 per cent with only 4.5 per cent of the population aged more than 65 years. People in the country are diversified into many social, ethnic and language groups living in climatically hot areas in the south and cold areas in the north. There are 125 ethnic groups and 123 spoken languages documented by the latest census in 2011. These groups have developed and managed to adapt their livelihood strategies to changes in environmental and socioeconomic conditions. This has created, over a long history of time, a multitude of artefacts and practices contributing to cultural wealth.

In spite of the country's rich biological and cultural diversity with a high proportion of its population economically active, Nepal is one of the world's poorest countries. It has a gross domestic product (GDP) of about US$740 per capita. Almost one fourth of the population lives below the absolute poverty line (World Bank 2016a). Nepal has a primarily agrarian economy with the agriculture sector accounting for over 30 per cent of its total GDP and employing about two-thirds of the total labour force (MoF 2016). Trading business dominates the non-agriculture sector with wholesale and retail contributing to about 14 per cent of the total GDP in 2015–16 (MoF 2016). While enterprise activities (especially processing and value addition) are limited, the investment from the private sector in the farm and forestry sector is very limited, which in turn is limiting the growth of the sector. The limited investment is understandable in the sector as long-term supply chains have not been developed. While there are cases of natural resource-based enterprises being developed at community level using government and development-sector assistance, there are only a limited number of success cases. A significant number of enterprises cease operations once external support is removed.

To develop natural resource-based enterprises, there have been a few notable business incubation programmes initiated by government, development organisations and the private sector. Over the past few decades, industrial zones and special economic zones have been created by the government, but these have mostly focused on industrial development and attracting large foreign and national investors with the aim of increasing exports.
It is only in the past decade that ‘incubation programmes’ have been introduced in Nepal, which aim to transform innovative ideas in the areas of small and micro industries into competitive enterprises. Most of these programmes are grant based and have become inactive after time. For example, the Business Incubation Programme was established in 2006 and operated under the Department of Cottage and Small Industries. It aimed to graduate successful enterprises by providing incubating facilities and helping small and micro industries to improve and upgrade systems and processes. But in practice, this programme is now inactive. More recently in April 2017, the Project for Agricultural Commercialisation and Trade (PACT) under the Ministry of Agricultural Development has set up an Agri-business Incubation Centre (ABIC) with financial assistance from the World Bank. It plans to support over 150 SMEs over the next 18 months by providing a customised suite of services, including coaching, training, market linkages and investment facilitation. A few incubation efforts have also been initiated by the private sector and have been providing spaces and business advisory support to potential entrepreneurs and enterprises.

In this context, ANSAB’s approach and ongoing support programme for natural resource-based enterprises have been providing essential business-support resources and services to community-based farm and forest enterprises, helping them to establish linkages to remunerative value chains. ANSAB’s experiences could offer useful lessons for successful business incubation approaches.

**3.1.3 Target businesses**

ANSAB has been providing its services to locally controlled forest and farm businesses as part of its larger programme, and incubation is an inherent part of this process. The targeted sectors are:

- Community forestry, especially non-timber forest products (NTFPs)
- Agriculture, especially ecosystem-based commercial agriculture (ECA)
- Biomass-based energy, and
- Ecosystem services, especially ecotourism.

In addition, ANSAB has been working in the timber sector, including macro-level research and policy recommendations. However, considering the limited participation of smallholders in large-scale timber industry due to their limited investment capacity and the cumbersome legal formalities involved, ANSAB has targeted community-based small-scale timber enterprises and in particular, the sectors which are accessible to smallholders and have the potential for income and employment generation.

ANSAB generally provides services to one or a few enterprises at a time. The enterprises supported by ANSAB are mostly community based and are based on natural products. The challenges these clients face include a lack of understanding of business development and of concepts to do with the value chain, and challenges related to the enabling environment, the availability of appropriate technology, access to finance and reliable markets.
3.2 Institutional design

3.2.1 Staffing and structure
ANSAB’s pro-poor economic development programme aims to create or strengthen environmentally sustainable businesses that benefit the poorest of the poor while promoting social justice, equity, and good governance. ANSAB has been designing and implementing initiatives to accelerate the entrepreneurial process in the farm and forestry sector. ANSAB’s organisational structure is presented in Figure 3.2. With the overall guidance and supervision of the organisation’s executive director, the programme has a pool of competent regular staff who work in a participatory way with the communities and enterprises who are ANSAB’s clients. ANSAB helps its clients to deal with enterprise issues that allow natural product enterprises to prosper and which promote biodiversity conservation and social equity. Because the organisation is mostly financed by grants, the number of staff varies over time. ANSAB receives advice and support from its advisory board and its other divisions as needed.

3.2.2 Advisory board
ANSAB’s advisory board consists of international experts representing private industry and various fields of expertise including community-based conservation, small and medium farm and forest-based enterprises, rural development, policy formulation, and the promotion of innovation and entrepreneurship. The advisory board provides strategic input on a voluntary basis to both the board of directors and the management team. Its role is

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**Figure 3.2 Organogram of ANSAB**

![Organogram of ANSAB](image)
to maintain the organisation’s achievements and improve its effectiveness, outreach and impact. The members of the board also advise ANSAB’s programmes on the development of relevant projects, recommend ideas or concepts for grant proposals, propose relevant institutions for collaboration, and assist with targeting potential funding agencies.

ANSAB also uses expertise from its pool of staff for relevant support. When needed, ANSAB seeks advisory support from former entrepreneurs who have graduated after receiving incubation support, and from former personnel previously trained by the organisation and who are currently working as practitioners and professionals in their respective fields. The support from ANSAB staff and its networks has been helpful to incubees in providing resources and services such as preparing business plans, enterprise registration, advising on different relevant financial products, and accessing market information.

3.2.3 Networks
ANSAB uses its wide network to deliver its services. It maintains a database of more than 200 supporting experts and relevant organisations, and actively seeks to expand the number of relevant experts who wish to be included in its network. Furthermore, ANSAB coordinates a number of multistakeholder platforms such as the Nepal NTFP Network (NNN), the Public Private Alliance (PPA) for Certification and Sustainable Marketing of NTFPs, and the ECA Forum. These platforms are important in bringing together relevant stakeholders including government agencies. They serve as spaces to share knowledge and experiences, bridge gaps in understanding about grassroots realities, to discuss national policies and international standards, and reduce duplication of efforts and activities, thus linking the learning between organisations about both top-down and bottom-up approaches. ANSAB has also maintained a network of commodity-based federations and associations, such as the Federation of Community Forestry Users Nepal (FEFCOFUN), Nepal Herbs and Herbal Products Association (NEHHPA), Jadibuti Association of Nepal (JABAN), the Federation of Forest Based Industry and Trade (FenFIT) and the Briquette/Charcoal Producer Association. This network provides advice and other forms of support as needed.

3.2.4 Finance
ANSAB finances its programmes through external grants and other internal resources. Training and other service fees to the incubatee are mostly subsidised (project based) and sometimes fee based. The fees vary between 50 and 100 per cent depending on the nature of the support provided and the capacity of the clients. For example, village-based entrepreneurs and enterprise managers are offered essential support services free of cost most of the time, including some service packages – whereas national-level entrepreneurs and enterprise managers pay a fee for services, especially for structured trainings. ANSAB also provides equity funds1 to a very small number of enterprises which have the potential for having positive socioeconomic and environmental community impacts, but which lack the capacity to access mainstream financing.

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1. For equity support, a percentage of the shareholding is made over to ANSAB during the establishment of an enterprise. However, this condition is mostly waived for community-based enterprises, such as those which have been established for specific development purposes eg to test new models or to act as demonstration projects. If support is provided for establishing an enterprise which is demonstrating a proof of concept, then the shares held by ANSAB are partly or fully restored to the organisation’s fund. The duration of an equity fund is based primarily on the business plan, and normally ranges from 5 to 10 years. The equity fund is managed by an equity fund management committee within ANSAB.
3.3 Services offered

3.3.1 Services offered

ANSAB offers its expertise and services through targeted initiatives/projects for the development of farm and forest-based enterprises, especially community-level enterprises based on natural products, ecosystem services and bioenergy. These enterprises include community-level production and processing enterprises, the lead firms coordinating the value chain, and the associated business development service (BDS) providers in the farm and forestry sector. The support is provided based on the interest, capacity and needs of the entrepreneurial clients.

ANSAB introduced the idea and practice of involving lead firms to promote greater integration of SMEs into value chains. These lead firms organise the chain by addressing the specific bottlenecks that SMEs usually face, especially when marketing their products. These lead firms were developed by grooming existing enterprises and facilitating their forward and backward linkages to the targeted farm and forestry-based SMEs. Lead firms function as dynamic market actors, have a clearly stated value-chain vision, and are involved in the organisation of the different phases of the chain by consolidating production enterprises, providing the production enterprises with access to technology, finance, skill trainings and infrastructure maintenance, and organising markets.

ANSAB’s focus is on providing material and capacity-building support to accelerate the entrepreneurial process. Given the nature of locally controlled farm and forest-based enterprises, smallholders face difficulties receiving financial and non-financial business development services. Therefore, ANSAB provides material support and capacity-building services (technical skills and business management) to improve the performance of enterprises, their access to markets, ability to compete, and participation in the value chain. This includes a mix of business training, financial investment, networking support, market development, and other essential support.

During project implementation, the incubation support services that ANSAB provides are mostly onsite rather than shared physical spaces. If there is not any specific onsite project, the
entrepreneur visits the ANSAB office or ANSAB's staff visit the enterprise site to provide support. The services offered vary depending on the stage of enterprise development:

- Enterprises at the initial stage of development usually require assistance in the development of latent entrepreneurship, identifying opportunities, and participatory planning including product, process and business model innovation.
- Enterprises which are developed but need incubation support are offered services for the development of supply-chain management and assistance in business management.
- Established enterprises with products, markets and business model are supported for their continuous growth and socioeconomic and environmental commitments.

Services include mainly training and mentoring at the beginning and advisory and market-development support as the enterprises become established and advance to the next stages. ANSAB's services include assessment of key bottlenecks for enterprise operation and success, business planning, financial support (such as development of financial products in collaboration with bank and financial institutions, and providing initial equity funds and ‘silent guarantees'2), marketing support (market research, marketing strategy, identifying target markets, market mix), and building constituencies and forums for policy advocacy and reform. In some cases, initial support for developing infrastructure and equipment has also been considered to reduce upfront costs.

3.3.2 Service delivery

These services have been provided to enterprises/entrepreneurs mainly through hands-on training and mentoring to provide the necessary knowledge, skills and tools. ANSAB has well-documented and published toolkits and manuals on community organising, enterprise development, entrepreneurship development, business planning, and marketing information systems among others. Relevant training from other external agencies is also organised as needed.

ANSAB has maintained an online database of small and medium forest-based enterprises in Nepal and regularly disseminates pricing information for 33 forest products and high-value crops through its marketing information system. The pricing information system has also been used by some interest groups, mainly NEHHPA, an agriculture magazine and a television programme for dissemination through their channels.

3.3.3 Linking

ANSAB's database of contacts and networks are made available to its clients to help them to access essential business development services, markets and further networking support. ANSAB has a wide network of business development service providers, business membership organisations, universities, and international companies that it works with on a case-by-case basis. These networks have been helpful to the enterprises in areas such as information flow, bulk purchasing, international expert advice, product development,

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2. With a silent guarantee, the bank disburses loans to the borrower enterprise on the basis of a guarantee from a third party. The third party provides a commitment to the bank that it will pay back the loan if the borrower organisation is unable to. There is a provision that the bank holds the required amount of money from the third-party organisation's bank account until the payment is made.
financial product development, information and social media management. They also help to establish communication channels and support initial negotiations to enter into international markets. A notable example includes how ANSAB helped to linked Himalayan Bio Trade Limited (HBTL) (a national-level natural products marketing company) with Aveda Corporation, an international personal-care products company based in the USA. Aveda advised HBTL on the production of quality natural-resource products and potential international markets. Since 2007, Aveda has featured Nepali handmade lokta paper (*Daphne ssp*) in its holiday-line products and has purchased handmade paper certified by the Forest Stewardship Council (FSC) and produced by rural communities in Nepal. In another national-level case, ANSAB worked closely with banks and related institutions in Nepal on appropriate financial product development and linking these institutions to rural enterprises.

ANSAB continuously uses its widely referenced policy platforms, including NNN and others professional networks to support enterprises. NNN members include over 50 organisations and 300 individuals. The network focuses on policy and practical issues relating to NTFPs at national level through periodic meetings, sharing of activities and organising task forces. The ground-breaking initiatives of including NTFPs in community forest management, and the handing over of rights and responsibilities of these government-owned lands to community forest-user groups (CFUGs) were greatly accelerated through the network.

In addition, ANSAB has provided its client enterprises with linkages to experts and volunteers from professional organisations and universities from around the globe to help these enterprises to prepare marketing strategies and conduct market research.

### 3.4 Incubation management

#### 3.4.1 Selection

ANSAB reaches out to its potential clients, particularly rural people starting natural product-based enterprises, through different channels. These include other ANSAB local projects, networks including associations, lead enterprises and forums and ANSAB’s website, marketing information system and newsletters. ANSAB looks for clients from its programme areas that need incubation support while developing programmes/projects and generating funds. As potential clients express an interest in becoming incubatees, the key point that ANSAB takes into consideration when considering who to select for offering services to is the appropriate match between the prospective client’s capacity and needs, and ANSAB’s mission and resources.

While selecting its entrepreneurial clients at the local level, ANSAB uses the following criteria:

- Does the candidate have leadership experience in enterprise development?
- Is the candidate young and energetic? (They can be with or without leadership experience but must exhibit good vision and leadership skills) and/or
- Does the local entrepreneur have a good social image?
For the selection and development of lead firms, their long-term value-chain vision and commitment to social and environment is considered.

### 3.4.2 Performance oversight

The assessment of client needs is done through a thorough review of the availability of resources, their supply potential, market demand and the client’s business interest and capacity. The client organisation sets the targets jointly, developing the business plan with ANSAB. Progress is measured against the targets set in the plan. For example, one of its clients, Himalayan Naturals, exceeded its sales to over 2 million briquettes in its first five years of operation and has now expanded its production lines to include pellets and stoves in its business plan.

### 3.4.3 Graduation

There is no clear-cut line for the discontinuation of support. However, once the institutional set-up of the enterprise is finalised, with a clear mechanism of ownership and benefit-sharing among the actors, and they start their operations according to their business plan, limiting support for these enterprises is considered. Financial support will not be provided once the production, supply and market chain are established, and once the enterprises are capable of accessing needed financial and non-financial business development services. Appropriate technical and advisory support will be provided regularly to the enterprises to help sustain growth and upgrade the business with new opportunities.

### 3.4.4 Outcome evaluation

ANSAB closely monitors the enterprises it supports, and measures their effectiveness on the ground through a detailed impact tracking system (ITS) even after their graduation. ANSAB maintains and updates these enterprises on a yearly basis, where the enterprises provide information based on their yearly outcomes. Lead firms are used for collecting the information from the enterprises. For those enterprises whose information could not be collected for a specified year, their past years’ information from the ITS is used for the detailed analysis of the effectiveness of ANSAB programmes, measuring on-the-ground effectiveness of its programmes, as well as the effectiveness/success of the enterprises it has supported.

Through the ITS, specific outcomes are measured in terms of total monetary benefits to primary producers and collectors, number of economic participants in the value chain, and the forest area under improved management. Indicators for these outcomes are the sales, production, persons involved, forest area under improved management, and capacity building and training activities benefitting local communities. This will help ANSAB to identify the scope of its support to the enterprises (mostly advisory to improve their performance) and also assess the impacts generated from ANSAB-supported programmes.
3.5 Impact

3.5.1 Overall assessment
The success of ANSAB’s client enterprises is measured considering their economic viability, environmental impact and socioeconomic contribution. ANSAB has developed and strengthened a total of 1,196 economic entities involved in the production and value addition of forest and farm products, and their trading both at national and international levels. These economic entities include over 65 regional and national processing and marketing enterprises, including HBTL (a national-level lead firm for FSC-certified essential oils and loka handmade paper), Himalayan Naturals (a leading national company marketing charcoal briquettes) and Ashapuri Organic (a major distributor of organic dried herbs, herbal teas, fresh mushrooms and fresh vegetables and fruits in Kathmandu and to some extent abroad). ANSAB’s ITS shows that the economic entities generated US$ 7.31 million in annual total monetary benefits in 2014 to 84,553 economic participants in rural communities through enterprise development activities, and improved marketing.

3.5.2 Successes
One of ANSAB’s success stories is HBTL, a company processing and marketing natural products which was established in 2000 by ANSAB. It is currently owned by a consortium of community-based forest enterprises of Nepal. Since its establishment, HBTL has been providing a marketing platform to community-based natural products enterprises and has remained as a committed lead firm for FSC-certified handmade paper and essential oils. Supported by ANSAB’s equity fund during its establishment, HBTL has its own office and processing, printing and packaging sites in Kathmandu.

Its operations are in profit, with an annual revenue of about US$600,000 in 2014. Furthermore, HBTL embraces socially and environmentally responsible approaches to its business practices. It markets its natural products – which are sustainably harvested from community-managed forests and processed by community-owned enterprises – to domestic and international markets including the USA and Europe. HBTL’s success benefits about 15,000 rural poor by empowering them to fight poverty and improve their living standards, while protecting Nepal’s unique biodiversity and taking positive action in addressing global climate change.
The following briefly describe the key factors behind HBTL’s success:

**The right products and unique selling proposition (USP) for the right markets:** The potential products were primarily selected based on supply potential and market demand. Considering the size of supply and speciality quality of the products, ANSAB targeted high-value niche markets for the products from HBTL. The USP of HBTL products are that they are high-quality with a story of environmental sustainability and social equity. To ensure this, ANSAB introduced FSC and organic certification schemes, among others, that built consumers’ confidence in the quality of the products with the added value of social and environmental safeguards and contributions.

**An innovative enterprise model with clear shareholding and equitable benefit-sharing mechanism:** HBTL embraces a community–private partnership model and the business includes community members involved in production activities with a structured shareholding and benefit-sharing mechanism. ANSAB introduced the business model to overcome the deficiency of the two previous enterprise models. This new model involved the participation of community members themselves in marketing their products, where the marketing costs were high. It also involved private traders to collect and market the products, where the major challenge was trust between the community members and the private traders. The current business model has also helped to increase motivation among the community members to become involved in protecting their natural resources by sustainably harvesting *lokta*, medicinal and aromatic plants (MAPs), and other NTFPs and in their primary processing at the local level.

**Sustainable availability of raw materials and their legal access:** HBTL organises the FSC certification for handmade paper and essential oils and has remained as a committed lead firm. It has been closely working with the community-level enterprises and CFUGs for the long-term ecologically sustainable supply of the targeted natural products in sufficient quantities. With Nepal’s community forestry programme, there is a legal provision of access to forests products, which has provided a favourable policy environment for the sourcing of raw materials along with the development of enterprises at community level. With ANSAB’s facilitation, the CFUGs have incorporated enterprise activities, such as producing handmade paper from *lokta*, essential oils from aromatic plants and other merchandise using natural products into their overall forest-management plans, which in turn are sold to HBTL once produced.

**Committed leadership and entrepreneurial capacity of the team:** After the establishment of HBTL, ANSAB itself managed the enterprise for the initial two years and then handed over management to a member from Dolakha district, someone who was both trusted and selected by the community-based enterprises. In the two years of his association with HBTL, he showed both leadership and entrepreneurial skills, while ANSAB remained as an advisor to the company. HBTL currently has people with knowledge and experience of enterprise operations and with technical expertise, who have developed different paper products, essential oils and other natural products for domestic and international markets.
Mutual collaboration and partnership with communities, development programmes and other enterprises: HBTL’s enterprise model involves direct collaboration with communities which has helped secure the supply base. It has been closely working with ANSAB and some other development agencies such as the German Agency for International Cooperation (GIZ). This has been helpful in creating a conducive policy environment and accessing development money for building the capacity of the enterprise and communities. HBTL’s partnerships with other enterprises at national and international level, such as Aveda, have helped to increase its consumer base while diversifying products and markets.

3.5.3 Failure
There are cases where even a successfully established company may not run smoothly when a number of factors do not work during its operation. Such is the case of one community-based handmade paper enterprise, Malika Handmade Paper Pvt Limited. It was successfully established with full participation of the community. The enterprise had an assured supply of raw materials and market. Yet it is struggling to remain in continuous operation due to improper management and incentive structures.

Malika was established in 1995 in Bajhang district as a community-owned enterprise. A feasibility study conducted in the district considering biological, social, economic and technological criteria with the participation of local community members showed a handmade paper enterprise as one of the most viable options for local-level income generation. The enterprise was established with an investment of US$12,617 with the support of a 50 per cent equity fund from ANSAB and equal shareholding for the 240 members of Binayak Pimidanda community forest-user group. With technical support from ANSAB for sustainable harvesting and processing of lokta bark and for marketing the paper, the CFUG managed the enterprise and operated successfully during its initial few years of operation. For its overall performance, it was featured in the Food and Agriculture Organization of the United Nations (FAO) 2005 landmark publication *In search of excellence: exemplary forest management in Asia and the Pacific.*

The enterprise managed profit in the initial years of operation. However, the individual members found the profit not significant enough when divided equally among the group members. Furthermore, there was an alternative opportunity of collecting new NTFPs with higher incentives following new market demands, especially *yarsagumba* (*Ophiocordyceps sinensis*) and *satuwa* (*Paris polyphylla*), diverting a significant number of members from the groups to collect these plants instead. Such disincentives among the community members who were actively involved in enterprise operations led to the closure of the enterprise for few years.

A number of meetings with CFUG members and local-level potential entrepreneurs was conducted to address the cause of the enterprise’s closure. After a series of discussions, the CFUG members unanimously agreed to contract out the company to a private entrepreneur. An entrepreneur was selected and he operated the company at a profit, paying a fair share to the CFUG until last year. Then the entrepreneur suddenly misappropriated the enterprise’s funds and failed to pay the *lokta* producers. This shows
that while the involvement of a private entrepreneur was an important factor for the successful operation of enterprise, identifying and selecting a responsible and reputable private entrepreneur is essential for the enterprise's sustainability. In the absence of a good leader, the enterprise is currently struggling due to lack of proper management in spite of being well connected with a national company for marketing.

### 3.5.4 Lessons for other incubators

Many lessons can be drawn from ANSAB’s experiences of facilitating the development of farm and forest-based enterprises and accelerating their entrepreneurial process, that could be useful to others in designing a successful incubation programme.

**Consider the whole picture while providing incubation support:** There are a number of factors strongly associated with enterprise genesis, operation and growth that need facilitation, such as market, policy, technological and institutional support. The single-intervention approach (for example providing training or specific resources) will not be sufficient for the success of an enterprise, and especially natural product-based enterprises that usually involve smallholders. A holistic approach should consider the capacity of the incubatee, the business potential of the value chain, critical services, business development services, market development and linkages. These should be integrated into the incubation support programme. There are no shortcuts if the incubatee enterprise is to be successfully integrated into a remunerative value chain and for sustainability to be achieved.

**Intervention approaches should be evidence based and realistic in the given context:** Business incubation programmes have been gaining popularity in Nepal and other developing countries recently. There is an increasing number of organisations established in these countries which are focusing on business incubation. The incubation programmes, however, are mostly influenced by similar programmes abroad and adopt intervention approaches mostly based on the available literature. It is critical that the incubation approach should be evidence based, considering the local context and triangulated and verified with real experience.

**Consider all the important factors for success while designing an incubation service:** Major success factors that could determine the context and which need to be considered include the nature and characteristics of biodiversity (commercial value, production and production capacity, threats), local communities (property rights, production of goods, benefits and services, and institutional and technical capabilities to manage biological resources and enterprises), and enterprise (market, technology, financial and other business development services). The incubator should consider at least the eight requirements for the success of natural resource-based enterprises seen in Box 3.1.
3.6 Conclusions

3.6.1 Relevance
Most locally controlled farm and forest-based enterprises involve rural smallholders with little entrepreneurial experience. These enterprises require proper facilitation and technical assistance, especially for sustainable forest and farm management and development, governance and growth of the value chain. A general incubation approach (which considers providing incubator space, business support services and networking opportunities) does not seem to produce the desired results in the context of smallholders and local community-based enterprises, and where the value chain is not developed or fully functioning. A better incubation approach is needed: one which also considers increasing the capacity of smallholders and their enterprises while developing a value chain. It should facilitate locally controlled enterprises to survive, grow and become sustainable.

3.6.2 Future prospects
In Nepal, business incubating services are limited in general and are lacking in the agriculture and forestry sectors in particular. Existing business incubators mainly provide services to technology start-ups and simple trade businesses. There is very limited

Box 3.1 Requirements for success for natural resource-based enterprises

- **Raw material availability**: A long-term biologically sustainable supply of the targeted natural product in sufficient quantities is necessary for the enterprise activity to be financially viable.
- **Legal access to and control over the natural resources**: Collectors should be able to manage natural products harvesting and incorporate the enterprise activity into their overall forest-management plans. Enterprise activities must comply with a range of legal requirements.
- **Equitable distribution of benefits**: If community members do not feel the benefits are being distributed fairly there will be less incentive to protect the natural resources. The overall raw-material source could become threatened as well as the commercial activity and the ecosystem’s biodiversity.
- **Appropriate processing technology**: Is the technology compatible with the prevailing infrastructure and human resource conditions at the chosen location? Conditions to be considered include: transport and storage facilities, equipment/machinery availability, power or fuel required for the processing activity, and technical skills.
- **Good management**: People with knowledge and experience of managing proposed activities should be available to run the enterprise or they should be closely involved in its operations.
- **Commercial sustainability (economic or financial viability)**: Commercial sustainability is a simple concept. Sell the product at a price and volume that covers all the costs associated with the natural product enterprise with enough money leftover as profit.
- **Access to capital**: Start-up capital and ongoing working capital is needed for the enterprise.
- **Available and accessible market for the products**: Is there a market for the available quantity and quality of product? Is there adequate demand at the expected selling price? Who will buy the products?

Source: ANSAB and EWW (2003).
Involvement of donors and incubators working in the farm and forestry sector, with no long-term and only limited supply-chain development. Furthermore, the few business incubation programmes which are in the sector are mostly grant based and have still not devised appropriate activities and training built on real experiences.

In this context, the appropriate option is to develop a business hub to support farm and forest-based enterprises. This should simultaneously generate knowledge through research and act as a facilitator to improve the policy and regulatory environment, organise communities to develop enterprises, analyse the entire value chain, understand and meet the end market requirements for prioritised products, facilitate the business development services market development and linkages, build the capacity of each group of stakeholders (community-based enterprises, national enterprises, service providers, government and value chain facilitators), and identify critical services and facilitate the process of service delivery. It is unlikely that this function could be undertaken by a business membership organisation (such as an association or federation) or a private enterprise. Business membership organisations focus mainly on policy advocacy and as pressure groups, rather than providing technical services. Private enterprises focus on the profitable operation of their specialised business.
Instead, a business hub could be developed building on the strengths of existing technical service providers that provide practical support to locally controlled farm and forest-based enterprises, and could be supported by public and grant funding in the initial phase. This could be developed and managed as a separate department or centre within an existing organisation. ANSAB has good experiences of working with a multistakeholder alliance – the Public-Private Alliance for Certification and Marketing of NTFPs – that has brought together farmers, forest managers, domestic enterprises, international buyers, certification agencies, government, donors and non-governmental organisations (NGOs). The alliance has established a market for Nepal’s products, such as handmade paper marketed to the USA, while meeting international standards of forest stewardship and sustainability. Similarly, there are some lead firms that have clearly stated value chain vision and have been organising farm and forest-based value chains and markets (Subedi and Khanal 2014). Some notable lead firms include HBTL for FSC-certified essential oils and *lokta* handmade paper, Himalayan Naturals for briquettes, and Ashapuri Organic for organic dried herbs, herbal teas, mushrooms and vegetables. The alliances and lead firms could provide real incubation services building on real experiences.

3.6.3 Recommendations to policymakers

Business incubation can be an effective tool to stimulate the growth and sustainability of enterprises. But there is no shortcut for facilitating locally controlled farm and forest-based enterprises to thrive. These enterprises are mostly dominated by smallholders with little entrepreneurial experience and no properly developed value chain for their products. Innovations in terms of products (devising new products), processes (improving existing products) or business models (management and incentive structures) could be captured by business incubation programmes to increase impact by promoting entrepreneurship activities, value chain development and the enabling environment.

The focus should be on developing programmes that are holistic and capable of providing all components of the business ecosystem rather than focusing on one or a few areas of special interest so that any specific needs and gaps in a given situation can be addressed. Some of the main activities should be the identification of value chains with business potential, provision of leadership along with the delegation of responsibility and ownership to local communities, and the provision of initial support from government and development organisations to establish business incubators and provide partial funding until enterprises can sustain themselves. Technical support should be provided to the programmes and the incubators by professionals with practical knowledge and experience in the field.
A member of Kirah Design polishes a wooden bowl

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Be Green Trade: providing a shared space to support micro and small entrepreneurs in Bolivia

by René Salomón Vargas

Although many countries have already made huge strides in promoting entrepreneurs, in countries like Bolivia, developing innovation ecosystems requires spaces that may often be publicly funded or subsidised, as part of government policies to promote and foster local economic development. The Be Green Trade is a business incubator and market developer which provides a shared physical space to support micro and small business entrepreneurs to launch start-ups and develop their businesses. Over the last five years, Be Green Trade has hosted about 40 start-ups and has directly created 815 jobs within those 40 enterprises using its shared space. Its client focus is on businesses involved in wood production, especially turning recycled wood into works of art, as well as the production, processing and marketing of food from the forest.

4.1 Introduction

Be Green Trade was established by the Business Work Foundation (Fundación Trabajo Empresa or FTE), a Bolivian non-profit institution created as an instrument of economic and social development, with a mixed directorate formed by representatives of the state, the municipality, private enterprise and civil society. Be Green Trade was formally established in 2013, although it had existed before as an informal initiative. It is now both a programme of market development work and a shared physical space occupying a 5,000m² site in the industrial park in the city of Santa Cruz de la Sierra. Clients pay a small monthly payment (US$4 per m²) to stay in the incubator space, where they are able to access a range of business support services.

4.1.1 The incubator

FTE was founded in 2002 with the aim of taking forward an integrated development project for the Department of Santa Cruz in Bolivia. FTE’s purpose is structured around the following three strategic areas of work: economic development, sustainable human development, and the development and strengthening of micro and small businesses. Some significant initiatives the FTE has set up include a job exchange, the business incubator and market developer Be Green Trade, and a training and technological development centre.

Several of FTE’s achievements depended on a network of institutions involved in the foundation’s steering committee. Members include representatives from the autonomous
departmental government of Santa Cruz, the autonomous municipal government of the city of Santa Cruz, the Chamber of Industry, Commerce, Services and Tourism (Cámara de Industria, Comercio, Servicios y Turismo or CAINCO), the Eastern Lowlands Chamber of Agriculture (Cámara Agropecuaria del Oriente or CAO), the Santa Cruz Chamber of Exporters, Logistics and Investment Promotion (La Cámara de Exportadores, Logística y Promoción de Inversiones or CADEX), Gabriel René Moreno Autonomous University (UAGRM) and the Santa Cruz Federation of People with Disabilities (Federación Cruceña de Personas con Discapacidad or FECRUPDI).

This chapter describes one of FTE’s most recent initiatives, the Be Green Trade business incubator which forms one part of an associated initiative Market Developer: Access to Markets for Bolivian Timber and Non-Timber Forest Products. It is important to note that for the purposes of this case study, we consider as a single entity what are in fact two conceptually separate but practically integrated initiatives developed by the FTE:

- The work of the market developer (a programmatic service to develop markets through various networks and to obtain the institutional backing of several foundations and socially responsible companies for companies within and outside the business incubator), and
- The physical space of the business incubator itself within an industrial park.

The market developer programme was set up to support micro and small businesses in different regions of the department of Santa Cruz (Valles, Chiquitania, Guarayos, Cordillera) to market their products in the food, crafts and wood sectors. The business incubator was organised as a shared space to support entrepreneurs interested in developing their start-up businesses. The two are now so integrated that it makes sense to consider them together.

The history of these two initiatives began in around 2008 when a group of 40 artisans from Chiquitania and other regions joined forces. Their aim was to build their capacities to increase sales of their products and develop business and management skills. They operated in a shared space in an industrial park for three years with support from the FTE (the space effectively becoming a business incubator). Once that group had consolidated their business and successfully carried out their first sales (and even exports) of their craft products, they decided to end their stay. They then went on to set up an independent organisation called the Earth Artisans Union (Unión de Artesanos de la Tierra or UniArte).¹

Later in 2012, various foundations who had experience in biotrade² were invited by FTE to analyse the current situation in the sector with the aim of promoting green businesses (making products using recycled materials, timber and NTFPs with an emphasis on biotrade, etc). The organisations included the Worldwide Fund for Nature

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¹ See www.facebook.com/uniarte.bolivia
² ‘Biotrade’ refers to all activities involved in the gathering, production and marketing of products and services derived from local biodiversity, the production of which abides by the principles of social, environmental and economic sustainability, with three objectives: conservation, the sustainable use of biodiversity and the fair distribution of benefits.
(WWF), the Foundation for the Conservation of the Chiquitano Forest (Fundación para la Conservación del Bosque Chiquitano or FCBC), the Friends of Nature Foundation (Fundación Amigos de la Naturaleza or FAN), the Foundation for Development (Fundación para el Desarrollo Economico y Social or FUNDES), the Avina Foundation, the Swisscontact Foundation, the Friends of Corporate Social Responsibility (Amigos de la Responsabilidad Social Empresarial or AmigaRSE), private-sector businesses and expert professionals.

These organisations discussed the issue of marketing, and they all agreed that it was a common problem at the time and that individual efforts to address it were insufficient. They analysed the possibility of new collective marketing alternatives. They assessed how tasks in the value chain could be redistributed sustainably for each of the product categories that enterprises were engaged in at the time. They then came up with ideas for an integrated programme of market development and business incubation.

This led to FTE presenting a project proposal to the Inter-American Institute for Cooperation on Agriculture (IICA) in 2012. The project, Market Developer: Access to Markets for Bolivian Timber and Non-Timber Forest Products, was approved and implementation began in April 2013. Although that project ended the following year, the initiative it established continues to be implemented uninterrupted. The overall objective of the market developer initiative was to contribute to the efficiency and sustainability of
forest producers’ micro and small businesses and add value to Bolivian forest products by facilitating access to markets for timber and NTFPs.³

Be Green Trade was set up as part of the market developer initiative. It involves both physical space and programmes that support the development of green business initiatives and the consolidation of start-ups related to the use of NTFPs, especially fruit and other forest products. Be Green Trade also brings together forest products offered by a group of microenterprises and producer associations. It promotes marketing channels under the title of ‘Be Forest – Points’. These channels work to benefit the producer by negotiating better payment conditions and fair prices. It also promotes responsible consumerism through its Be Forest campaign. Producers make a monthly contribution to cover some operating costs and give a sales commission to the market developer.

4.1.2 Context

Be Green Trade evolved from work done by various organisations from regions of Bolivia rich in biodiversity, especially those whose geographical, physiographic and climate conditions make Bolivia one of the world’s top 15 megadiverse countries (Ibisch and Mérida 2003). These public and private organisations have been working on the conservation of species diversity and promoting ecosystem development, placing emphasis on forests as the primary source of income for local people. Natural resources such as almonds, Brazil nuts, cocoa, fruit and palm leaves are used and marketed by indigenous and rural communities. They are supported mainly by NGOs, international projects and municipal governments committed to promoting capacity development and income generation through production and conservation projects.

One earlier project was the National Biotrade Plan. Launched in 2008 by FAN, it was a national plan implemented with the government, and had some degree of success. It aimed to promote the gathering, production and marketing of products and services derived from local biodiversity, with an emphasis on social, environmental and economic sustainability and working towards three objectives: conservation, the sustainable use of biodiversity and the fair distribution of the benefits.

Several public and private organisations have developed strategies to promote the conservation of ecosystems (especially forests) and their species, and support the generation of alternative economic resources for the people who live in these regions. These initiatives have diversified to include numerous natural resources such as almonds, Brazil nuts, cocoa, fruit, palm leaves, caiman (a species of reptile), vicuña (a South American camel species), and bamboo which are now being used and marketed by indigenous and rural communities with the support of NGOs, foundations, local governments and international cooperation. One of the programmes that made the most progress in this area is the National Biotrade Programme, which was run by FAN until

³ Objectives for the project Gestora Comercial: Una Iniciativa para la Comercialización de Productos Maderables y no Maderables del Bosque. Funded by the Inter-American Institute for Cooperation on Agriculture with the financial support of the Ministry of Foreign Affairs, Finland (MAEF), 2013.
mid-2008 and then moved into government hands. Nevertheless, FAN set up its own biotrade department, which continues supporting some forest products and services value chains today. The Chiquitano Dry Forest Foundation (FBSC) also works with forest products, with a particular focus on almonds from the Chiquitania region.

These initiatives to promote the sustainable use of biodiversity involve indigenous and rural communities. They come from various cultures and eco-regions. Many decide to start marketing timber and NTFPs – which may or may not be processed in their own territories. They do so in the hope of generating additional income in the limited local economy. These communities also have a range of traditional knowledge related to the management of natural resources. Such knowledge is very valuable, but in many cases it is gradually being lost. For this reason, these initiatives not only promote the conservation of biological diversity but also the recovery of traditional knowledge linked to cultural diversity.

Innovative businesses, sensitive to environmental issues, saw the market potential of natural or green products. They have started to use forest products as raw materials to make food, beauty, health and craft products. They have linked up with forest producers who, as we mentioned earlier, are making use of various forest resources thanks to the technical and financial support of NGOs, foundations and international cooperation.

The role played by the conservation NGOs and foundations is essential. As well as supporting rural communities in Bolivia to manage their natural resources, they are helping them to identify economic alternatives. This enables them to improve their living conditions. Several of these supporting organisations4 provide technical assistance (studies of species biology, management and use plans, health practices, studies of main assets, etc), but they also support the organisation of small community businesses. In addition, once good products have been developed, they help these community businesses to break into markets and sometimes assist with the marketing itself, although – as they themselves point out – with many limitations.

Nevertheless, despite all these organisations’ good intentions, they have come up against a significant bottleneck in marketing. The market does not value biodiversity. Consumers are usually not very aware of what products are made from or where products come from. They place very little value on the fact that they are produced by indigenous peoples. Both the price premium for quality and quantity are low because these are niche markets, with small-scale production systems.

Those involved with businesses making products of this type point to another negative factor: the government’s demand that they register as formal businesses. Additionally, there is competition from imported products from neighbouring countries and a lack of incentives to enable micro and small businesses to compete. Typical comments from producers might be: ‘it makes no difference whether you’re big or small when it comes

4. These include FAN, FCBC, Puma Foundation, FTE, WWF, Centre for Research and Promotion of Farmers (Centro de Investigación y Promoción del Campesinado or CIPCA), Wildlife Conservation Society (WCS) and others.
to paying taxes,’ ‘there is unfair competition from illegal businesses’ and ‘the import firms only work with large quantities’.

To justify the effort made by all these different actors, and to achieve economic, environmental and social sustainability, occasional sales at uncompetitive prices are not enough. This is especially the case when it seems easier to import than to produce. Producers, businesses and support organisations need timber and NTFPs to be recognised and valued in the national and international market – to be distinguished as ‘green products’ from a particular origin and production system. Products need to be linked to the cultures responsible for producing them, and governments need to support these efforts. In short, support is required for sufficient profits to be generated all along the chain and thus increase the income of the people involved, to improve product quality and, consequently, conserve the ecosystems that the raw materials come from. It is against that backdrop that the Be Green Trade business incubator/market developer was formed. It is not just about business incubation – but about developing the markets within which those businesses might thrive.

4.1.3 Target businesses

Be Green Trade has focused on places where economic development in certain communities has endangered protected areas, parks or forest reserves. In partnership with municipal governments its work has therefore concentrated on the processing of forest fruits (established to restore degraded areas). It has managed to incentivise new businesses in partnership with companies committed to the development of NTFPs.
Be Green Trade has directly benefited micro and small-scale producers over the last five years. To date, a total of 40 businesses have been supported and 815 direct jobs created, for 423 women and 392 men. Some 147 of them are young people under the age of 25. The indirect beneficiaries are the families and/or communities involved in the small-scale community enterprises, the producer associations and communities mentioned before, and enterprises that supply raw materials and/or primary products to the direct beneficiaries. Other beneficiaries – direct in some cases and indirect in others – are the facilitator organisations and their teams or employees (if relevant) who are involved and participate in the project by providing services (see also Table 4.1).

4.2 Institutional design

4.2.1 Staffing and structure

As a business incubator and market developer, Be Green Trade’s structure is provided by its business model, which is to keep an ear to the market and act as the voice of the producer to the market. Knowing how to interpret what the market requires and being able to communicate the market’s real demand to forest businesses and the organisations that support them (facilitators) is one of its main roles. This enables it to assist and/or facilitate product development so that markets can be opened up and accessed (main objective). This is done by identifying existing forest products, getting specialists to sound out the market for them, and then communicating the results to the forest businesses and their facilitators.

The organisational structure of Be Green Trade is simple and linear. Management is overseen by the FTE steering committee. The management structure is supported by facilitators – on the technical side to improve supply – and on the market supply side by those who focus on the commercial area of marketing. The work of the former includes systems of processing and adding value, while the latter concentrates on marketing.5

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5. See www.begreentrade.com
As Figure 4.2 shows, the structure of Be Green Trade includes two types of technical assistance. One is the processing of forest products and is often part of the responsibilities of the institutions, NGOs or municipal governments which provide the support of their technical specialists. The other is technical assistance in marketing, which is provided by professionals from companies that assist with market development and are an important link in the commercial chain.

**In addition, the structure includes the communities and micro and small enterprises that participate actively in the supply of products with value added, which are shown in the third column of the diagram. For example, in the municipality of Concepción we have women producing *cusi* oil (used in products such as food and skincare) who belong to the Palmarito de la Frontera Women’s Association (Rémillard et al. 2012).**

### 4.2.2 Advisory council

Be Green Trade falls under the work of FTE. Therefore, the FTE steering committee, which is involved in various areas of the organisational structure, are the people who set the institutional guidelines for Be Green Trade. The guiding principles of the incubator’s work are defined by the areas of competence of members of the steering committee, either individually or together. These members include civil society representatives, in this case from the business sector: CAINCO, CAO, CADEX, and FECRUPDI. They also include public-sector representatives from the municipal government of Santa Cruz, the departmental government of Santa Cruz as the sub-national body, and the UAGRM. At a more operational level, insights are also fed in from the beneficiaries themselves and the technical staff, both from local municipalities and from the organisations that support these businesses in the field.

The experience of the facilitators (drawn from projects implemented in various regions and now focused on looking for a way forward together) means that the work is done in a collaborative way. For example, the Chiquitano Dry Forest Foundation is promoting the production of Chiquitano almonds. But since both the production and the marketing side
need to be managed, Be Green Trade therefore plays an important role in marketing. Even though for the time being the quantities sold are not large and nearly all the almonds are sold in the region itself, this is one of the regional products offered by Be Green Trade. This can be observed in marketing information used to promote this type of product and others.\(^6\)

Although from the beginning funding was available to hire some technical staff for the launch of Be Green Trade, today the FTE manages to support the initiative much more through its partnerships. These involve partnerships with universities and professional associations, and companies interested in marketing forest products. They help by providing the support of their professional staff. It is therefore important to highlight that the FTE's work and its relationships with public and private-sector organisations enables it to access the services of specialised professionals who complement their work as public employees with coordinated activities to support the incubator's beneficiaries.

The business ecosystem in Santa Cruz has taken huge steps forward in the area of technology but it is still in the early stages compared to other regions of the world. Although connectivity is one of the main bottlenecks, internet access is increasing by the day. The use of mobile phones and especially apps is not yet widespread, but there are small groups who are interested, and it is likely to increase rapidly in the near future.

Brand registration and patenting for specific processes and products must be done through the National Intellectual Property Service (Servicio Nacional de Propiedad Intelectual or SENAPI), but because of its administrative procedures it has so far not been the most efficient of services. Nevertheless, inter-institutional efforts are under way to encourage registration. Other institutions, such as the National Agriculture and Livestock Farming Service (Servicio Nacional de Sanidad Agropecuaria e Inocuidad Alimentaria or SENASAG)\(^7\) and the Ministry of Health, are responsible for supporting and registering processing facilities and procedures.

In promoting start-ups and community projects, municipal governments should provide assistance by contracting technical experts to provide support on various issues, but because they are public employees there is often no continuity. Nevertheless, the municipal government is a strong partner for activities carried out in rural municipalities. The challenge (especially with the municipal government of the city of Santa Cruz) has been to access these potential support processes and ensure they have a positive outcome.

### 4.2.3 Networks

Because key people are part of FTE's advisory structure, the incubator has a networking relationship with several universities and institutes, both in order to develop projects and to access technical assistance from their teaching staff and students.

With the Gabriel René Moreno Autonomous University, for example, specific product surveys have been carried out through the polytechnic, while the laboratories have been asked to conduct chemical analyses and other tests of samples. There is regular collaborative work on market research, graduate theses and other initiatives that

\(^6\) See eg www.begreen-shop.com

\(^7\) See www.senasag.gob.bo
complement the university students' training. Likewise, networks have been set up with companies and universities to support businesses by holding Startup Weekends\(^8\) to promote initiatives that will in future become sustainable businesses, including Startup Weekend Green, Startup Food Innovation and others.

The networks around Be Green Trade are principally the voice of the producers or represent them by communicating their voice to the market through actions to publicise, promote and sell the intangible values that characterise forest products in terms of social inclusion, gender equity, environmental conservation, cultural identity, job creation and others. This image is reinforced in sales policies as the networks seek to consolidate trade relations aligned with these values, with the aim of recognising the value of the forest, its people and culture. The networks that have been built in Be Green Trade's surrounding environment are interlinked, from the supply of products made by small-scale producers and communities, processing raw materials and adding value, to the demand from a market that requires constant improvements in the quality of the products offered and the sustainability of their supply in terms of quantity.

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8. See eg https://twitter.com/swsantacruz

Children displaying cusi seeds. The oil is used in food, cleaners and skincare products such as shampoo
The market developer also makes links with new facilitators (eg local NGOs) to help them meet product improvement requirements and pursue other needs such as funding, design information and so on to strengthen the forest businesses. Afterwards, producers are provided with ongoing information about market demand and trends so that they can identify a better advantage for their product.

### 4.2.4 Finance

FTE’s funds come from a variety of sources including public grants, private investments, fees for its services and even commercial loans. As far as funding is concerned, the strategic foundations for financial stability have been established. The general objective is to have a variety of sources of funding in order to avoid depending on a single source and ensure that financial resources are sufficient and stable enough to cover the initiatives’ funding requirements swiftly and adequately, as they arise over time.

#### Figure 4.3 Sources of funding identified in the long-term finance strategy

The management of financial sustainability can be divided into three processes or areas:

**Management of fundraising:** The sources of funding grouped under this process include international cooperation funds, private funds for development (NGOs, foundations, etc), public funds, corporate social responsibility (CSR) funds, and loans (investment funds, venture capital), as well as contributions from third-party shares in the cooperative, which earn interest.
Management of indirect investment: The indirect investment process seeks to take advantage of knowledge and experience to establish technical and financial complementarity with other organisations (which might include other NGOs, government programmes or private-sector actors). The management of indirect investment is based on developing good-quality links (partners rather than allies). The funds from indirect investment do not enter the organisation’s accounts.

Management of income generation: The income-generating process seeks to ensure that income is sustainable over time. Be Green Trade has identified two income-generating mechanisms: a percentage of income from sales that it facilitates through its marketing arm, and the contributions made by the client forest businesses to cover operating costs in the incubator. So far, these operating costs have been kept at a minimum, in part to cope when sales of many of the products have gone up or down. As of December 2017, one of the main sources of income has been the percentage commission on sales, which has enabled the marketing costs of the incubator to be more or less covered, and this is complemented by the payment for services received by the businesses when they use the space.

4.3 Services offered

4.3.1 Main services

The services offered by Be Green Trade can be divided into three main areas, which closely relate to the activities carried out within the FTE:

- Shared space and business interactions
- Market development services for businesses within and outside the incubator
- Specialised workshops and courses

The business incubator is located in an industrial park. This means that each business, depending on its activity, is provided with a space to develop its start-up. The space has a cost of US$4 per square metre. Added to this is a charge for electricity and water services, depending on what the business does and how much energy it requires. When businesses enter the incubator, the physical space they are offered needs to be compatible with the other businesses already within Be Green Trade. A prior analysis is therefore carried out, seeking to determine how advanced the business is, the type of activity it carries out, the investment it has made in equipment, and what other types of investment need to be made in the space before the business can start operating there. The agreement that gets signed stipulates that any adaptations will remain as the incubator’s property should the business leave and be unable to take them with it. The infrastructure installed in the 5,000m² area includes a leisure space, a café, a small sick room (not operating at the moment), toilets and showers for men and women, an artificial turf football pitch, and spaces for the businesses to use when they want to carry out activities outside. There is logistical support, surveillance and security 24 hours a day, all year round.

Support within and outside the incubator premises takes different forms depending on the agreement that gets signed, although the emphasis is on direct marketing or market
development services. This often starts with a business plan and capacity development within the business, when the process requires more time and human resources. The assistance process takes the form of mentoring or tailored advice (which is often not quantified financially or charged for). The actual aim is to consolidate the business in the best way possible, because the business's needs may often be at the technical, operational and administrative level, depending on how long the business has been going or the level it has reached.

Specialised workshops and courses are also run on business plans, keeping accounts, legal and general administrative matters, operational management and marketing. Although these activities are aimed at beneficiaries as a group, personalised and more in-depth work has been done when the beneficiary needs and is able to pay for it. Workshops run for the entrepreneurs have gone through a series of adjustments and adaptations to fit the needs of each group. In some cases, engineering graduates have also been involved and they have drawn up a series of manuals on industrial safety and International Organization for Standardization (ISO) standards. These have been validated by the businesses themselves and, of course, the university.

4.3.2 Service delivery
The services provision process is quite varied depending on the actors employed by or linked to Be Green Trade (see Table 4.1).

<table>
<thead>
<tr>
<th>Table 4.1 Activities and services offered by Be Green Trade</th>
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<tbody>
<tr>
<td>Support staff employed directly by the project in its sales team</td>
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<tr>
<td>Sales points</td>
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<tr>
<td>Freelance sales promoters</td>
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<tr>
<td>Technical assistance facilitators – development project implementing organisations</td>
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<tr>
<td>Networking and contact organisations</td>
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<tr>
<td>Traders</td>
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<tr>
<td>Private enterprises</td>
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<tr>
<td>Expert professionals</td>
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<td>Independent actors</td>
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</table>
Most of the work of providing direct support to the businesses focuses on training. This is most usually done in-house, which means that the work is much more productive and effective. Although the intention is to expand the range of ways in which training is provided, the use of online platforms or social media is not widely developed at the moment and this is a challenge to be addressed in the future.

Having acknowledged the potential and the weaknesses of forest products in terms of how to market them, Be Green Trade has identified market penetration and access strategies that involve publicity, promotion, marketing, legal support and other activities, with the aim of facilitating sales of these products. These form an important part of the incubator’s activities with clients. Optimising resources and minimising costs is another priority and there is a competitive advantage in not concentrating marketing efforts on a single product but rather on a portfolio of products.

One of the several priority requirements in this business development process through the incubator is access to finance. This means working with banks, savings and loans cooperatives, financial funds, international and national donors and investment funds (venture capital, angel investors, etc). Existing experiences of direct financial support to the NTFP sector are only in the very early stages so far.

However, it is important to mention that FTE has finalised an agreement with the Productive Development Bank (a second-tier financial institution) to promote access to seed capital. This will enable small-scale producers using the forest or mitigating deforestation by growing alternative crops to receive financing over the course of this year. In addition, in the future support will be provided to innovative initiatives that engage in processing and adding value to forest products and related technology.

Finally, Be Green Trade also provides support to client businesses to pursue legal registration to meet the legal requirements stipulated by the municipal government, such as operating licences, environmental licences and other documents required by the municipal, departmental and national authorities.

4.3.3 Linking

From the work done within FTE and the specific negotiations taken forward with the relevant authorities at the municipal, departmental and national level, it can be said that although businesses do not have a channel of communication open at every level of government, good work is being done at the local and departmental level. At the national level, it has always been more difficult to approach government bodies, but direct contact has been achieved with the Forests and Land Authority (Autoridad de Bosque y Tierra or ABT), the Plurinational Mother Earth Authority and the Vice-Ministry of Forest Development. In addition to these, there are the activities carried out with municipal authorities, forest officials and environment staff in municipal governments and the departmental government.
Furthermore, other relationships are being developed so that companies specialising in production and processing management can work with Be Green Trade’s client businesses directly and, through them, provide support to communities. The aim is to complement these business partnerships with financial resources to improve business innovations, with the financial supplement enabling them to increase their production and income. An agreement signed for this purpose with the Productive Development Bank is providing access to funding to support 50 small-scale producers to start with.

4.4 How the business incubator works

4.4.1 Selection

The selection process used by the incubator depends on each business’s market, products or service, as some of them already have a certain ability to access the market. Criteria are used to select those applicants who have the most knowledge and capacities to take forward their initiative. The aim is to select those with good prospects for success, because there are not enough resources within Be Green Trade to start from scratch, with nothing but the idea for the business. Client businesses often require access to seed capital or finance. Because of this, work has recently begun to strengthen the capacities not only of the beneficiaries inside the incubator but also applicants outside who require specific support.

During the process of consolidating the project funded by the IICA, more than 60 business initiatives were identified, 20 were pre-selected, and at the end of the process 10 of them were found to have the capacity to position themselves properly in the market and manage to develop. This did not mean that the others stopped working, and some were later included in the process and even came into the incubator as part of the initiatives supported by the FTE.

There are therefore various opportunities for accessing and entering the incubator. Emphasis is placed on wood production, especially turning recycled wood into works of art, as well as the production, processing and marketing of food from the forest. The businesses have been provided with the infrastructure to obtain certification and meet the legal requirements stipulated by the municipal government, such as operating licences, environmental licences and other documents required by the municipal, departmental and national authorities.

The existing funding channels need to be improved. When this happens, the incubator will be able to propose new options, placing emphasis on businesses that add value and have a high degree of innovation. This is reflected in the events organised to encourage the use of technology, innovation, and especially the use of green products.
4.4.2 Performance oversight

The incubator does not have streamlined, validated procedures for supervision. Monitoring is based on initial assessments and a signed agreement between staff of Be Green Trade and the client business – and often focuses on the level of business activities and the sales volume the business hopes to achieve over a certain period of time, as well as the business's interest in innovating or improving their yield or the quality of their product.

With regard to this, it should be reiterated that the work of the businesses depends on a range of variables, and all of them are potentially important. For example, during the Kirah Design⁹ business's stay in the incubator, it set criteria to show significant improvements in management, product development and processing. Although it is not possible to look at bank accounts very frequently to monitor the finances of each business in close detail, they were asked to at least show a purchases and sales flow chart or a table recording what they have sold over the month or whatever period of time is appropriate.

The agreement signed with the person running the business has to be updated to avoid problems with coverage and monitoring. Although this places certain obligations on the parties involved, it means that technical staff can exchange information, providing that this does not affect the business's interests.

Finally, the commitment to meet internal and/or shared obligations such as paying for electricity and water is monitored as the first parameter.

4.4.3 Graduation

The time the businesses stay in the incubator is an important consideration but not the main one. As in the case of every business, and especially when they are inside the incubator, they start by learning, developing and maturing. Added to this are the advantages they receive during their stay, such as training and participation in workshops and specialised trade fairs. Every business receives a certain amount of support when they are inside the incubator, and this implies that they must improve their knowledge and how they manage the business, their product and the market, otherwise they must give up the space so another applicant can use it.

The moment when the business graduates or its time inside the incubator comes to an end may be brought forward if the client business proves unreliable or does not make the obligatory payments on time. The sole condition in the agreement, which is explained to the people running the business before the agreement is signed, is that they must abide by the rules and make a commitment to use their business experience to support new applicants.

Various situations have been encountered as time goes by, including the business being abandoned, market failure or, conversely, the business being so successful that it needs to obtain a larger space of its own.

⁹ See https://kirahdesign.com
4.4.4 Outcome evaluation

A record is kept of each beneficiary’s progress. An immediate imperative is the registry of the client business’s commitment to meet internal and/or shared obligations such as paying for electricity and water. Likewise, a record is kept of all the activities the beneficiary carries out and the type of workshops or training they attend. Most importantly, the incubator staff are constantly in contact with them to find out about the problems or opportunities the businesses encounter as time goes by. Although no regular records of sales volumes and amounts are kept for each of the businesses in the incubator, the relationship with them means that the incubator knows what type of investments they are making and where they are aiming at in their strategies or business plans.

It should be pointed out that in order to improve evaluation processes it is necessary to systematise the information (not yet routine). This will enable the businesses passing through the incubator to be monitored and give us more possibilities for improving the service. The information should also be included in a database that will show how the businesses perform in the market, their innovation processes and thus their development as businesses.

4.5 Impact

4.5.1 Overall assessment: how do we measure success?

The incubator has been operating for some time, and the mechanisms for measuring its success are based on a performance evaluation system, focusing on the gathering and reviewing information procured from client businesses, alongside discussions with experts in the field about the development of the businesses and the services provided. A descriptive analysis of progress is maintained, conducted by a mentoring-type monitoring group. The members of this group are from like-minded organisations or professionals in the field, who were invited to join it.

With regard to the sustainability of the incubator itself, the main variables measured are the demand for the business model, its ability to access networks and markets, and how it adapts to the client businesses’ needs to ensure their progress. These are the elements that are looked at to measure the incubator’s success. What we can highlight is that over the last five years the incubator has worked with more than 40 businesses which have directly created 815 jobs, 51 per cent of which are for women and 80 per cent in indigenous and/or rural communities.

4.5.2 Successes

To describe the factors that can be considered undoubted successes over the course of the last few years, we can look at three types of business: craft products made by UniArte, wood products made by Kirah Design, and natural cleansing products such as shampoo and creams made by the Artisanal Dermofactor Laboratory (ADA Industries) (see Table 4.2).
<table>
<thead>
<tr>
<th>Details</th>
<th>UniArte</th>
<th>Kirah Design</th>
<th>ADA Industries</th>
</tr>
</thead>
<tbody>
<tr>
<td>Name of incubated business</td>
<td>UniArte</td>
<td>Kirah Design</td>
<td>ADA Industries</td>
</tr>
<tr>
<td>Entry process</td>
<td>January 2010</td>
<td>August 2014</td>
<td>Business outside the incubator from 2013 to now</td>
</tr>
<tr>
<td>Departure</td>
<td>December 2015</td>
<td>December 2018</td>
<td></td>
</tr>
<tr>
<td>Activity</td>
<td>Making crafts and products using materials from the forest</td>
<td>Transforming recycled wood into works of art</td>
<td>Making natural cleansing products such as shampoo and creams</td>
</tr>
<tr>
<td>Beneficiaries</td>
<td>100 artisans from indigenous communities (Guarayos, Chiquitanos, Ayoreos and Guaraníes) in several provinces of the Department of Santa Cruz</td>
<td>10 people directly and 25 indirectly (85 per cent women)</td>
<td>Four people directly and 20 communities who support the business by collecting raw materials such as cusi, buriti, almonds and others</td>
</tr>
<tr>
<td>Development of the business</td>
<td>Their workplace expanded to a 250m² workshop better suited to their needs. They received legal advice, training on business management, business development and markets, and they were supported to participate in fairs. They also participated in international trade fairs such as Colombia Artesanías, and managed to export to various countries around the world, principally the USA, Brazil, Spain and Italy</td>
<td>Kirah Design is a start-up that has been consolidated and is now considered a sustainable, socially responsible business. So far it has managed to consolidate its corporate market in Bolivia, and it also has various clients in Brazil, Argentina, the USA and Europe</td>
<td>They increased production and hence sales from 50 to 350 units per day. They now have their own space for production, and all the necessary authorisations to produce and market their products legally. They are also building a laboratory, which is in the process of being approved by the Ministry of Health. For the time being their main market is the Department of Santa Cruz</td>
</tr>
<tr>
<td>Current situation</td>
<td>They now sell their products from their own shop, are leaders of the Bolivian Artisans Confederation, and the 100 artisans are still working and have seen a positive increase in sales</td>
<td>They have increased their sales and are now in the process of gaining access to new markets. They have also diversified the products they offer</td>
<td>Because they do not have certain certificates that have to be issued by the Ministry of Health, they are limited at the moment to producing only for the local market</td>
</tr>
</tbody>
</table>
4.5.3 Failure
To provide an example showing the incubation process a client went through, and which tends to be the norm, we can list certain factors that may be encountered along the long road of setting up a business (Table 4.3). Often, the need to deal with immediate priorities prevents the businesses from completing the process, and they move from success to failure.

Table 4.3 Key factors in the client incubation process which contributed to a specific failing

<table>
<thead>
<tr>
<th>Details</th>
<th>Explanation and development of the business</th>
</tr>
</thead>
<tbody>
<tr>
<td>Name of incubated business</td>
<td>Product development</td>
</tr>
<tr>
<td>Jugos IOZU</td>
<td>A combination of fruit juices and soya milk fortified with other non-traditional ingredients such as tamarind, <em>buriti</em>, almonds, etc. The business managed to make some good combinations</td>
</tr>
</tbody>
</table>

Factors that caused the business to fail
One of the factors that led to the failure of the business was the lack of follow-up and constant monitoring of the needs and weaknesses of the start-up and especially the entrepreneur. This implies that we need to provide personalised follow-up. The other is that once an agreement had been signed with a multinational company, we did not support the entrepreneur enough to bolster their determination and encourage them to persevere in achieving their objectives.

4.5.4 Lessons for other incubators
The FTE’s Be Green Trade incubator provides constant support to businesses. Some are actively part of it and even use a space in the industrial park where they develop their business. In such situations, the work with the businesses is much closer and more dynamic. Even so, it is often not possible to work that closely with them because of a lack of time and/or failing to coordinate agendas properly to agree on regular times to provide them with support on various issues that may be specific to each business or general to all of them.

For this reason, it is necessary to organise a regular monitoring agenda between incubator and client. This means drawing up a schedule of activities (eg giving and receiving certain information) that may be important both for the businesses incubated and for the incubator itself. Moreover, it is often not the lack of financial resources that causes a business to stall halfway down the road.
There are other factors beyond business skills and marketing that need to be strengthened – including training entrepreneurs on basic issues such as personal development, self-esteem, good networking practice, accepting change, and processes that lead to innovation.

Finally, when client businesses get involved in the market they need to know that they must compete and be a winner based on clear business and market rules. Unfortunately, one of the hardest competitive battles in Bolivia is with illegal products and contraband. As individuals and entrepreneurs, it is beyond our organisation’s ability to put a stop to that scourge.

4.6 Conclusions

4.6.1 Relevance
To build and improve the productivity of client businesses, Be Green Trade’s experience shows that it is necessary to improve various aspects that foster creativity. In this way, the incubation process encourages businesses to look for new products and services so that they are able to adapt to the market, adjust to changes and thus be profitable and achieve their medium-term objectives. This means that the relevant role played by the incubator is always to encourage entrepreneurs to have new ideas and make innovative improvements, so that they are constantly on the lookout for new markets and better products.

4.6.2 Future prospects
One of the challenges Be Green Trade will be working towards is to achieve national coverage in order to combine local opportunities with national ones, with the ultimate aim of reaching global markets. To achieve this, we will have to train entrepreneurs with a broader vision so that they focus on creating high-growth businesses. Be Green Trade is committed to promoting an entrepreneurial culture and the internationalisation of the incubated businesses. One of the advantages we have is that we make use of mentoring networks and linkages between businesses. We are also the largest organisers of events like Startup Weekend Green that promote business development and others such as AroTech, Agro Future Challenge and Get in the Ring that have internationally competitive connotations and are held every year in the effort to complement the work of the incubator by promoting new businesses.

Access to sources of funding is an ongoing challenge in the region. There appear to be no new options for accessing funds for incubators such as Be Green Trade, as the government financial system is still very traditional and is not adequately directed towards promoting enterprises operating from inside an incubator. The opportunity to access seed capital to speed up their innovation and the development of their business still depends on being able to provide sufficient guarantees and meet procedural requirements that place the financial system beyond the reach of most of those who need it.

Attempting this type of work has enabled Be Green Trade to achieve an interesting position in the regional and national market, but this status is not sufficient to meet
growing demand. A critical problem is in Bolivia's entrepreneurial culture. People still tend to wait for a subsidy to reach them. Finding entrepreneurs in these sectors who are willing to invest their own money, take risks and launch into socially responsible, green, environmentally sustainable businesses is a constant challenge. We should not neglect to mention that every day we are seeing more socially responsible, environmentally sustainable initiatives and investments, but they are still the exception rather than the rule.

The FTE has managed to approach becoming a government institution that finances initiatives related to rural development and thus complements incubated businesses. It provides seed capital so that rural communities can become raw material suppliers. The next step is to consolidate this initiative and make it a means to bring together the forest, the communities that make use of its fruits, and those who can add value to them, whereby the financing obtained to run the incubator is part of the funding allocated to provide operating capital to both parties.

Finally, promoting economic development in the region through incubators could be a good response to the business dynamic in Santa Cruz and thus Bolivia. Although rural business initiatives do exist in the farming and forestry sector, making use of the forest in an integrated way without detracting from the timber industry is a challenge. Fruit is still seen as secondary and requires more attention, as it will support and be the future of the communities who live in the forest, which currently covers more than 55 per cent of the country's territory.

4.6.3 Recommendations for policymakers
Firstly, incubators need to have a staff team with enough experience of basic issues such as entrepreneurship and financial management. In other words, they need the skills and ability to diagnose problems in the client businesses. The team's work needs to be both defined and flexible, remembering that no entrepreneur has the necessary skills to develop their business in all its aspects: there are always weaknesses in specific areas. We should not forget that a good percentage of the entrepreneurs require an injection of support and encouragement in basic areas such as personal development and self-esteem, and an integrated vision of their opportunities as a business.

For these reasons, the teams that are set up need to be able to facilitate and encourage capacity building and have the patience required to transmit skills, knowing that the entrepreneurs learn from experience, from mistakes, from their peers and from the attributes that have enabled others to achieve success.

In this context, the transfer of knowledge and high-level technologies that the incubators can provide should be recognised. The capacity to boost innovative ideas through the involvement of young, well-educated people, requires national public policies that encourage young people to have an enquiring mind and be entrepreneurial from an early age. They should be accustomed to proposing changes and innovating, from the classroom to their professional education. However, this will not be possible unless we have professors at universities and institutes who are themselves entrepreneurs, and their teaching should focus on giving students freedom of action and thought.
The Be Green Trade incubator is one of a series of spaces that are being set up nowadays in many cities around the world. Fast-track programmes could be an interesting way to encourage entrepreneurs starting at university who merit incentive programmes with business development and access to capital.

Although many countries have already made huge strides in promoting entrepreneurs, in countries such as Bolivia, developing innovation ecosystems requires spaces that may often be publicly funded or subsidised to a certain extent, as an accompaniment to government policies to promote and foster local economic development. At the same time, it is important not to lose sight of the fact that business development must have a complementary relationship not only with technology, but also with the environment and social development. To achieve this, incubators such as the one we have described here need to receive more recognition and support as an important part of a country’s development, placing emphasis on the sustainable use of natural resources.
Ecotourism is helping to provide an additional source of income from forests

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FEDECOVERA: a cooperative business development experience in Guatemala

by Hugo Moran

This chapter describes the work of Las Verapaces Cooperatives Federation (Federación de Cooperativas de Las Verapaces Responsabilidad Limitada or FEDECOVERA), a second-tier cooperative organisation which brings together other first-tier cooperatives and non-cooperative producer organisations. FEDECOVERA was established as an umbrella processing and marketing agency for its member cooperatives for value chains in timber, coffee, cocoa, tea, cardamom and ecotourism. FEDECOVERA's enterprise and business development services are based on the structuring of these value chains, and services are provided at every stage of the chain, from small-scale producers upwards. This structure works as it enables good management of knowledge and resources and improved productivity – with the aim of accessing the most demanding international markets.

5.1 Introduction

FEDECOVERA is based in the municipality of Cobán in the department of Alta Verapaz in northern Guatemala, Central America. Legally registered as a limited liability partnership, it is an autonomous, second-tier cooperative organisation with its own capital. It brings together 37 first-tier cooperatives and it also serves more than 100 producer organisations that are not cooperatives. Its members belong to the Q’eqchi and Poqomchi Mayan ethnic groups.

The first cooperatives were set up in early 1968, and FEDECOVERA was founded on 23 February 1976. FEDECOVERA's experience as a cooperative business organisation focusing on social, economic and environmental development has meant that it has constantly worked hard to maintain and strengthen cooperatives and producer organisations (through institutional strengthening, strategic planning based on values and principles, representation, production chain development and effective services) and to secure the means of production (access to credit, legal certainty regarding land, technology and respect for the environment), taking into account quality, production volumes and cost competitiveness criteria, through industrialisation and processing to add value and by making connections with local, national and international markets.
The main economic activity is the production of the following crops under agroforestry arrangements: cardamom (*Elettaria cardamomum*), coffee (*Coffea arabica*), pine (*Pinus sp.*), allspice (*Pimenta dioica*), cocoa (*Theobroma cacao*), turmeric (*Curcuma longa*), tea (*Camellia sinensis*) and vegetables. Production models are both individual and collective, and other projects have been promoted in livestock farming, manufacturing, various services and agriculture in general. It is very important to emphasise that since 1997, FEDECOVERA has been promoting forestry as a business activity, likewise carried out both collectively and by individuals, as a means of diversification and a way to manage the environment and the landscape.

### 5.1.1 Incubator

Although FEDECOVERA does not consider itself a business incubator as such, it puts into practice many of the principles involved in business development processes. In some cases, this includes everything from setting up the cooperative, the idea for the project and its implementation, to technical support and marketing of the produce in local, national and international markets. The process of transforming FEDECOVERA began in 1989, with the objective to improve the financial, administrative, organisational and productive situation of both the organisation and its members, and consequently improve social and economic conditions for the people who belong to its member cooperatives. This led to the official adoption of a strategic plan whose vision is that **cooperatives generate productivity and competitiveness for sustainable development** and the commitment to fulfil the mission of being an autonomous cooperative business organisation that provides effective services.
At the local level, each first-tier cooperative has its own bylaws, which serve as a legal means of governance. One particular feature of the FEDECOVERA member cooperatives is that their land is collectively owned. This means that the owners of the land constitute the first-tier cooperative itself, and all their members have the right to work it. Within each cooperative there are two production arrangements: collective and individual. In the first, the cooperative is the owner of the means of production and the resulting produce, and in the second arrangement the owner is the individual cooperative member.

The FEDECOVERA system is a unified collective made up of cooperatives who join voluntarily. It is a democratic organisation managed according to its bylaws in a market economy setting. It seeks to meet the economic, social, cultural and environmental needs of all its member cooperatives and achieve their shared objectives.

The system is financed thanks to the sustainability and profitability of the businesses involved, based on productivity and the quality of the products placed on the market, as a consequence of the effectiveness of the services provided within the system. Projects are financed with the organisation's own funds (from the sale of services, marketing of produce and development of financial products), international cooperation funds and government funds.

5.1.2 Context
Guatemala has a population of 15.6 million. It is a multi-ethnic country with 25 languages, 22 of which are Mayan and according to official data, 41 per cent self-identify as indigenous (Ministerio de Educación 2009). Most of the workforce (32.3 per cent) is employed in agriculture, followed by trade (29 per cent) and manufacturing (13.7 per cent) (INE 2013). According to the World Bank (2018), economic growth in Guatemala has hovered around 3–4 per cent, very much lower than the rate aspired to in the 1996 Peace Agreements (7 per cent). The economy is driven by the predominance of informal labour, which is as high as 65 per cent.

Rates of education inequality in people over the age of 15, broken down by gender and area (rural or urban) continue to be high, and the average number of years of schooling overall (5.6) is still low. Indigenous people have an average of 4 years of schooling, and indigenous women less than four.

With regard to the environment, the Mesoamerican region is highly biodiverse and Guatemala in particular is one of the countries with the highest biodiversity. Its range of climates makes it potentially productive, but at the same time it is highly vulnerable, due to how natural resources have been exploited as well as the effects of climate change. FEDECOVERA's target groups are rural and indigenous people whose territories tend to be characterised by steep slopes, more suitable for forestry than agriculture. There are very few roads and poverty is widespread, but the population is young and keen to take advantage of opportunities. People are willing to work hard to achieve environmental sustainability and adaptation to climate change so that families and ecosystems become more resilient, as well as strengthening rural communities' livelihoods and their organisations based on business principles.
5.1.3 Target business
FEDECOVERA’s enterprise and business development services are based on the structuring of value chains, covering everything from the reproduction of plant species and varieties of plants that the market demands, to cultivation and post-harvest processes to add value to the primary product. These include: wet processing of coffee, which involves depulping and drying the parchment coffee beans; drying cardamom capsules; drying peppercorns; depulping cocoa, which involves separating the seeds from the pulp so that it can be sold in a form known as ‘baba’ followed by a process of fermenting and drying the beans; forest management, mainly the harvesting of timber by means of intermediate felling or thinning, and felling of the entire tree. There are also other businesses that are not part of the FEDECOVERA system’s own value chains. These include the production of vegetables such as tomatoes, sweet chilli and green beans, as well as eggs, chicken, pork and beef, and traditional textiles.

The structure of FEDECOVERA’s value chains comprises three well-defined segments. These form a whole in which there are synergies of cooperation, organisation, representation, entrepreneurship and identity. At the base of the chain are the small-scale producers who are seen as running their own micro-enterprises. They are independent and free to organise, produce and market their products as they see fit. The first-tier cooperative organisation comprises the second segment of the chain. When they become members of the cooperative, the small-scale producers acquire rights and receive benefits, but they also take on obligations and commitments that they are required to fulfil. They have the right to elect the leaders of their cooperative and to stand for election themselves, and each member has one vote. Members receive the services and benefits that their cooperative provides.

The next segment is the second-tier cooperative organisation (FEDECOVERA), where each cooperative is represented by its president and legal representative. They make up the general assembly, where each cooperative has one vote and they democratically elect the management council and the oversight committee.

This structure is perfect for the value chains as it enables good management of knowledge and resources for production and improved productivity in terms of quantity, quality and time, with the aim of accessing the most demanding international markets. Product sales take place throughout the system and value is added at every stage of the chain until the product reaches the final consumer. Likewise, services are provided at every stage of the chain, reaching down to the individual producers. See the diagram of the FEDECOVERA structure below.

In keeping with FEDECOVERA’s structure, the direct permanent clients are the 37 member cooperatives who receive services such as: general bookkeeping, credit services, planning, and technical training on production and business management. Services are also provided to individual members of the cooperatives, who receive at least one service, and to 100 non-cooperative groups and individual private clients, benefiting a total of 25,000 people.
The main challenges faced by the producers are: adaptation to climate change, planting varieties that are most resistant to pests and diseases, especially coffee rust (*Hemileia vastatrix*) and cardamom thrips (*Sciothrips cardamomi*), increasing productivity, reducing production costs, improving the quality of their products and strengthening business management.

To address these challenges, work is being done in the following areas:

- **Diversification**: The aim is to improve production systems and boost agroforestry, especially in tropical climates, where coffee or cardamom can be grown alongside valuable tree species such as mahogany (*Swietenia macrophylla*), cedar (*Cedrela odorata*), rosewood (*Dalbergia retusa*) and Santa María (*Calophyllum brasiliense*), together with cocoa, allspice and turmeric production, and take advantage of the government of Guatemala’s forestry incentives programme (Probosque)\(^1\) for industrial reforestation.

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1. Probosque is a national forestry programme that enables smallholder forest producers to access grants and technical services for establishing plantations, agroforestry systems, managing catchment areas and natural forests. The government of Guatemala allocates 1 per cent annually of the national budget for Probosque, which is set to run until 2048 under the mandate of the National Forestry Institute (Instituto Nacional de Bosques or INAB).
• **Technological innovation** to improve the use of firewood by introducing more efficient ovens, using solar power to dry coffee and cocoa (which also improves the quality of the product), and using biotechnology techniques to improve plant varieties by identifying ones that are highly productive and resistant to pests and diseases.

• **Technical assistance** for organic agriculture by providing training on crop and field management, management of agroecological products and ecosystem environments, knowledge management and transfer by funding scholarships for formal education, agricultural business training through the implementation of the Rural Agroforestry Business School (Escuela Rural de Negocios Agroforestales or ERNA, which provides training on agroforestry, business management and human development) and organisational strengthening through resource management and sustainable development projects.

5.2 Institutional design

5.2.1 Staff and structure
FEDECOVERA’s highest-level decision-making body is the general assembly, where each of its member cooperatives are represented by their presidents and/or legal representatives. The assembly democratically elects the board of directors and the oversight committee. In keeping with internal policies and bylaws, these in turn elect a general manager whose role is to manage the organisation’s general administrative processes, in line with its objectives. FEDECOVERA also has four executive managers: the finance and administration manager, production manager, marketing manager and the operations manager. Working with each of these managers are coordination teams covering administrative, technical and implementation matters.

Members of the National Alliance of Community Forestry Organisations of Guatemala (Alianza Nacional de Organizaciones Forestales Comunitarias de Guatemala or ANOFCG)
The organisation sees it as very important to maintain good communications with its member cooperatives, and its policy is therefore to employ staff who are fluent in its members' first languages. Accordingly, 97 per cent of the employees speak Q’eqchi and/or Poqomchi as well as the official language, Spanish. The work of the technical teams and promoters is based on the organisation’s agricultural production, forestry production and agroforestry production plans. Each cooperative is given technical assistance by staff with a specialist knowledge of coffee, cardamom, allspice, cocoa, turmeric and forestry production. These specialists also support the first-tier cooperatives’ management councils to take decisions on administrative, technical and production matters (see Figure 5.2).

**Figure 5.2 Organogram of FEDECOVERA**

5.2.2 **Advisory board**
FEDOCOVERA does not have an external advisory board but draws on a network of internal expert committees and advisory councils to address any organisational, administrative or technical needs that arise in the cooperatives or groups of producers.
In other words, if there are problems that need to be solved within the organisation, such as problems with land measurement, technical problems in production or processing, or new projects to be implemented, people with the requisite skills are sent to address these needs. The cooperatives also have committees dealing with specific activities, such as education, agriculture, forestry committees and water committees and a community development council, which act as consultation or advisory groups as necessary. FEDECOVERA provides support from its different committees and its multidisciplinary team of professional advisors.

FEDECOVERA is constantly gaining experience from the projects it takes forward to strengthen its value chains, the micro and small enterprise development projects supported by the government and NGOs, and from internal training, exchanges between cooperatives or federations, training provided by different trade associations, and its partnerships with national and international organisations and international cooperation agencies.

5.2.3 Networks
FEDECOVERA is actively engaged in several networks that relate to the specific interests of the cooperatives sector, its main commodities, finance and policy engagements. It is directly represented in different organisations, including:

- **Anacafé** Asociación Nacional del Café (National Coffee Association)
- **CONFECOOP** Confederación Guatemalteca de Federaciones Cooperativas (Guatemalan Confederation of Cooperatives Federations)
- **GMG** Gremial Forestal de Guatemala (Forest Guild of Guatemala)
- **ANOFCG** Alianza Nacional de Organizaciones Forestales Comunitarias de Guatemala (National Alliance of Community Forestry Organisations of Guatemala)
- **INACOP** Instituto Nacional de Cooperativas (National Cooperatives Institute)
- **ICA** International Cooperative Alliance
- **AMACACAO** Alianza Mesoamericana de Cacao (Mesoamerican Cocoa Partnership)
- **Banrural** Banco de Desarrollo Rural (Rural Development Bank)
- **Funcafé** Fundación de la Caficultura para el Desarrollo Rural (Foundation of Coffee for Rural Development)
- **AGEXPORT** Asociación Guatemalteca de Exportadores (Guatemalan Exporters Association)
- **CCC-CA** Confederación de Cooperativas del Caribe, Centro y Suramérica (Confederation of Cooperatives of the Caribbean, Central America and South America)
- **CCG** Cámara de Comercio de Guatemala (Guatemalan Chamber of Commerce)
- **AmCham** Cámara de Comercio Guatemalteco Americana (Guatemalan-American Chamber of Commerce)
- **CNMC** Consejo Nacional de Mujeres Cooperativistas (National Council of Women’s Cooperatives)
5.2.4 Finance
The sources of funding for FEDECOVERA's work are: its own funds, which it earns from its businesses and the services it provides to its member cooperatives and non-cooperative groups, as well as financial products, government support and international cooperation funds.

5.3 Services offered
5.3.1 Services offered
FEDECOVERA’s development model is based on structuring business value chains with a focus on agroforestry and the appropriate use of renewable natural resources. It offers its member cooperatives the support of permanent technical staff, tailored training programmes based on identified needs, assistance with planning new enterprises or ongoing projects, and personalised support and advice. It also offers other types of services such as shared storage facilities for products, inputs for establishing and maintaining plantations, and social services such as healthcare and education. More specifically, the services offered to its member cooperatives and groups of producers are:

- **Identifying needs and seeking solutions**: The ongoing support provided to the cooperatives means that needs are identified all the time. Once the people involved are aware of wanting to address these needs, solutions are proposed (assessments).
- **Project formulation**: Depending on the needs identified, a project to address them is proposed. Projects may be related to production or investment.
- **Applying for funding**: Funding is obtained through partnerships with national or international cooperation agencies or from government projects.
- **Credit facilities**: FEDECOVERA makes a credit system available to its members from a fund worth more than US$6.6 million, with a range of guarantee options and favourable interest rates. It can also be accessed by non-cooperative groups and individuals.
- **Training and technical assistance** on agriculture, livestock farming, forestry and the environment. FEDECOVERA has a multidisciplinary team with ample professional experience in the areas of production and administration.
- **Plant nursery services**: FEDECOVERA offers to supply tree and crop seedlings for industrial plantations, agroforestry systems and vegetable production. The nursery has the capacity to produce up to 3 million plants per year. It has produced more than 42 million plants over a 20-year period.
- **Legal advice**: The cooperatives are offered legal advice to solve territorial, legal, administrative and other problems.
- **Supplies store**: The store sells and distributes agricultural inputs, tools and office supplies to the cooperatives and the general public.
- **Maintenance and repairs workshop**: Any problem with machinery such as ovens, drying and coffee-processing equipment is sorted out by a team specialising in maintenance and repairs.
- **Product storage**: FEDECOVERA has a storage space suitable for coffee, cardamom and allspice.
• **Bookkeeping for cooperatives:** The cooperatives’ accounts are centralised by a team of accountants. This makes it possible to carry out all the accounts controls and ensure that the cooperatives meet their tax obligations and comply with administrative laws and national cooperative system regulations.

• **Geographic information systems (GIS):** Using a GIS system enables FEDECOVERA to keep checks on the land owned by the cooperatives. The information can be used to resolve disputes over land, as well as keeping an inventory of the areas used for agricultural crops, forestry and agroforestry, and protected areas of forest under conservation.

• **Health and dental care:** Medical and dental treatment is offered in the organisation's own clinics.

• **Project planning and development:** Planning services are provided for infrastructure, production and forest plantation and management projects.

• **Education support (at all levels):** FEDECOVERA has been running a scholarship programme for its members’ children, from primary school to university studies – 24 per cent of the 303 scholarships provided have gone to girls. More than 120 students from various secondary schools have worked as interns. In 2017, FEDECOVERA implemented the Rural Agroforestry Business School with the support of FAO and Helvetas. Aimed at young producers, it promotes community organisation and production with a focus on the appropriate management of natural resources based on market dynamics.

These services are constantly updated and added to every year, as they seek to meet the needs of the cooperatives and their members. Since the start of 2016, changes have been made to the organisational structure of FEDECOVERA to make better use of the human resources available, with the aim of offering clients more effective services. Depending on their needs, each client requests services to develop projects or enterprises. Priority is given to projects that strengthen value chains.

FEDECOVERA’s credit facility for cooperatives is committed to maintaining a permanent source of credit at a reasonable interest rate. The guarantees it accepts may be mortgaged property, trusts or collateral, depending on the client’s credit rating. FEDECOVERA’s financial services are inclusive: men and women, organisations or individuals can access them.

### 5.3.2 Service delivery

Services are delivered directly at the level of the farm or plantation by a team of technical extension staff, or onsite at the headquarters in Cobán. This enables FEDECOVERA to carry out assessments to identify member’s needs and which services are the most effective for meeting their requirements. The aim is to ensure that these services help to develop their potential and have an impact on the local development of their cooperative and their members in particular.
5.3.3 Linking

One form of linking member businesses with a wider network of business contacts that is often used is through participation in trade fairs at local, regional and national levels. To promote its export-quality products, FEDECOVERA participates in trade fairs all over the world, including BioFach in Nuremberg, Germany; Anuga in Cologne, Germany (which specialises in organic produce); the Paris Chocolate Show in France, and other fairs elsewhere in the world that it sees as potentially interesting for expanding its business. Because it is represented in different trade and business forums, in government, national and international cooperation programmes, and the Urban and Rural Development Council’s (Consejos de Desarrollo Urbano y Rural) system, FEDECOVERA is connected to everything that happens in business and can keep up to date with market trends, public policies and technological innovations, as well having access to finance. Its connections provide it with knowledge and useful information that it can make available to its clients when they are identifying, proposing and developing new businesses or seeking to improve and strengthen existing ones. With regard to print media, FEDECOVERA also promotes its services in leaflets, articles in national newspapers, and finally through its website www.fedecovera.com.

Forestry can provide work and income to women and men of rural communities
5.4 Incubation management

5.4.1 Selection
FEDECOVERA use several channels of outreach to communicate with its members and potential new clients. In the first instance, this is done through its internal networks, field staff, board of directors and the general assembly. It also makes use of local radio – a media outlet that is cheap and highly accessible in rural areas – to publicise its services, make announcements and to broadcast information about education and cooperative business training programmes. Communication on local radio stations is often in the Q’eqchi and Poqomchi languages. Special programmes on local television and cable services are also used.

Screening and selection starts with the type of relationship the client has with FEDECOVERA. For FEDECOVERA, clients are classified as organised clients – meaning cooperatives or associations and individual members of cooperatives who may have a direct relationship with FEDECOVERA or a direct relationship with their own cooperative – or private, individual clients who do not belong to a cooperative. The demand for services among clients varies greatly, ranging from the need for a recommendation on a technical, productive or business management matter to a long-term commercial or business contract. Within this range of client demands, credit may be required for business investment, housing, vehicles, surveying or for other purposes.

As part of the selection process, clients are rated depending on the level of business they seek to conduct. It usually starts off by clients either presenting a request for support,
or through a recommendation made by one of FEDECOVERA's technical staff based on observations in the field. It can also be through an assessment by technical staff of a specific situation, or through a proposal for a new project idea to be developed. In all cases, there is a process of screening and selection that is adjusted depending on the existing relationship with FEDECOVERA. Clients who are member cooperatives are supported to develop projects whose size suits their financial capacity or the opportunity to become involved in the value chains that are already established. The assessment also covers their loyalty to the organisation, the contribution they have made to the growth of the value chains, economic status, creditworthiness, legal status, levels of productivity and product quality. For other sorts of clients, FEDECOVERA analyses their level of business development, financial capacity, how long they have been involved in the market, legal status, previous relationship with the organisation, economic stability and levels of growth.

5.4.2 Performance oversight
Supervision of FEDECOVERA's projects with its clients involves constant accompaniment to identify their needs. Initially, if the nature of the project requires it, an analysis is carried out of soils, the local climate, water quantity and quality, and species adaptation, as well as a financial analysis of the project. During the implementation of the project, supervision covers progress against activities as well as financial targets, monitoring the development of the crops or livestock or the implementation of infrastructure projects. When the project involves crops, future production is assessed, making projections of future production by gauging flowering and fruiting, as well as looking at pest and disease control, and the maintenance and functioning of processing machinery for coffee and drying equipment for cardamom and coffee. With forestry projects, annual inventories are conducted to review population densities and assess the growth of the trees by measuring their height and diameter at the base of the trunk. This information is used to take decisions about the harvesting of timber in intermediate and final felling processes.

5.4.3 Graduation
In theory, FEDECOVERA's clients should graduate when the business is sustainable, all the production and marketing risks have been reduced to a minimum, the producer has diversified, the means of production are properly managed and the environment is respected, the capacity to adapt to climate change is in place, the business has moved from informal to formal status, and it is able to stay within the law regarding taxes. However, there are many needs and their origins are structural. For this reason, FEDECOVERA maintains a policy of providing ongoing support and continues to search for ways to address the causes of poverty and achieve integrated development for its members.

5.4.4 Outcome evaluation
The core objectives of FEDECOVERA are to increase both economic and social outcomes of the business and member cooperatives. Although there is no specific procedure for graduation, results are continuously monitored and recorded for performance-monitoring purposes. The results that are evaluated in the projects are: employment generated (days
worked per person), yield per unit of production (hundredweight per hectare), and value addition from the conversion of raw material (for example, coffee cherries to parchment coffee, cardamom capsules from fresh to dried, and density of dried cardamom in grams per litre). In forestry projects, the evaluation looks at the average annual increase in the volume per unit of production (m³/ha/year), the yield in terms of the volume of roundwood to the volume of sawn timber, and the quality of the trees.

5.5 Impact

5.5.1 Overall evaluation

The projects are evaluated by looking at the following parameters: job creation, distribution of benefits, financial statements, income statements, productivity incentives, and achievement of the certification that the buyers of the products require. Some of the most noticeable impacts at the landscape level is the scaling up of sustainable production capacities through the adoption of standards and certification that allows cooperative members to access higher value markets. FEDECOVERA has accredited 100 per cent organic certification of more than 500 hectares of commercial cardamom, coffee, allspice, cocoa, turmeric and tea crops with five labels: National Organic Program (USA), European Commission, Japanese Agricultural Standard, Kosher Organics and Bio Suisse, so that the products can be marketed in the USA, European Union, Japan, Middle East and Switzerland respectively. Good environmental management practices have enabled two FEDECOVERA cooperatives to obtain FSC forest-management certification for 400 hectares and chain of custody certification for the forestry industry.

5.5.2 Successes

Each organised group has its own history and its own particular situation, and success factors cannot be generalised across the board. However, taking the Santo Domingo Las Cuevas Integrated Farming Cooperative as an example, several factors have contributed to its success.

A shared need: Before 2000, 14 farming families were expelled from a cooperative. They felt a shared need to have land of their own so that they could survive, and they took the decision to join forces to buy 10 hectares of land with their own money.

Organisation: They realised that they would need to get organised once again and decided to form a cooperative in order to obtain legal status and institutional backing. With the support of INACOP, they formed a cooperative and in 2001 looked into the possibility of buying more land. They signed a contract to buy 360 hectares of land at a cost of US$33,896.36 but they were only able to pay 26 per cent of that amount. The risk of losing the land and of the organisation collapsing was imminent.

Ongoing support and easy access to funding: By 2002, the cooperative had become a member of FEDECOVERA but realised that it was not enough to be organised and legally registered. They therefore requested financial backing from FEDECOVERA to be able to pay for the land. A cooperative business development plan was then drawn up and
in 2003 the funds were approved to pay for the land. The cooperative was also provided with legal advice.

In 2004, 2005 and 2006 the forest management service supported them to apply to the government's Forestry Incentive Programme (Programa de Incentivos Forestales or PINFOR) and they managed to reforest 176 hectares. Another project was developed for cattle farming associated with forestry plantations and they built up a herd with 35 bulls. In 2010, they bought another five-hectare farm to be used for coffee production and forestry, which they have now paid for in full.

In 2015, FEDECOVERA once again provided them with backing for the purchase of another farm of 11.5 hectares for coffee production and forest management. So far, they have paid 25 per cent of the cost and they have a repayment plan for the remainder.

The importance of trust in business: Long-term support and good business relations between organisations promotes an atmosphere of trust and lasting relationships. This year, the Santo Domingo Las Cuevas Cooperative has launched another business, using its own funds. They are buying a forest for logging and subsequent reforestation, and will market the timber through the FEDECOVERA forestry value chain. The Santo Domingo Las Cuevas Cooperative also has 15.4 hectares planted with coffee and they want to increase this to 21 hectares. The coffee they harvest will likewise be marketed in the coffee value chain, and they have made a commitment to deliver a good-quality product for processing.

Analysis of their income since the year 2000 shows that the cooperative is solvent and stable, bearing in mind that they started practically from zero, as illustrated in Figure 5.3.

Figure 5.3 Annual income in USA dollars, Santo Domingo Las Cuevas Integrated Farming Cooperative

![Graph showing annual income in USD for Santo Domingo Las Cuevas Cooperative from 2000 to 2016. The graph illustrates the growth in income over the years, with a focus on active, passive, and capital income streams.](https://www.iied.org)
5.5.3 **Failure**

Business development, whether for individual entrepreneurs or groups, should be based on an integrated approach. It may be that good knowledge and management practices of the enterprise and its production, distribution and technology are in place, but another important variable, experience, may be lacking. Of course it is difficult to predict what might happen. How important experience is in different variables can be an important but perhaps more difficult aspect to detect, especially when a business run by young people is being promoted.

A case in point is the experience of an organisation training with young farmers. FEDECOVERA provided credit for investment in a pre-incubation process, but later realised that the farmers had no experience in how the technology, in this case polytunnels, is affected by climate variations. Despite presenting a good project proposal the lack of practical experience ultimately affected its success. In other examples, production capacity has been very good, but, lack of experience regarding the behaviour of the market and price fluctuations meant that business outcomes were poor. These factors can be difficult to spot early on and may lead to negative outcomes, which is why it is so important to have the support of an institution or organisation until the business reaches maturity.

5.5.4 **Lessons for other business incubators**

Strengthen and promote business capacities with a view to making the business self-sustaining. Producers should be aware that it is a challenge to produce high-quality raw materials for a demanding agroindustry. Community organisation and the organisation of production are important to be able to compete, influence prices and reduce production costs. When producers are organised, they need to be perfectly aware of their role within the organisation in order to keep it properly managed, and they also need to know that all the members have the same rights and duties. When clients have little formal schooling, adequate ongoing support must be guaranteed so that the changes are felt by the next generation.

5.6 **Conclusions**

5.6.1 **Relevance**

Our experience is in rural areas of a region with high levels of poverty, low levels of schooling, high population growth rates, few job opportunities, productive infrastructure that is either lacking or run down, and production chains that are connected up but without social responsibility. This has led to poverty, the loss of values, deteriorating natural resources, and now vulnerability to climate change. In response to this complicated situation, the starting point for business development must be to adopt a more integrated approach that encompasses all aspects. It should start by strengthening principles and values, changing attitudes, transferring knowledge, and organising the community and production in a way that leads to good business relationships at the local, national and international level.
Be innovative about collective incubation, thinking about rural areas. Facilitate and subsidise long-term processes, seeking to enable them to become self-sustaining. Set up multidisciplinary teams working on human development, organisation, enterprise, environment, business and distribution. And ensure that clients make a commitment to participate fully, taking advantage of the opportunity to collectively produce large quantities of good quality products.

5.6.2 Future prospects
The aim of every social business development effort based on market dynamics is to improve the living conditions of the poorest participants, who have many disadvantages caused by marginalisation, exclusion and discrimination. Given the magnitude of the problem, the actions should be collective and innovative, seeking to incubate organisations that aim to position themselves in export markets after they have become established in national markets. Funding should come from government policies to promote the setting up and empowerment of producer organisations, including paying special attention to children and young people, exchanges for language learning and work placements abroad for job training. There should be financing for low-emissions or carbon-neutral development and production programmes with REDD+2 and funds should be channelled through third-tier organisations (the global cooperative system). Incubators should seek to increase human capital, providing training and sustainable production skills and promote well-run producer organisations.

5.6.3 Recommendations to policymakers
- **Pre-school education** is the basis for human development. This first phase of education should be strengthened (facilitated, incentivised) to increase children's years of schooling, so that by the time they are young people they will have better technical skills and the ability to be more productive and more enterprising.
- Policy is needed to **support university-educated professionals** to develop projects with a social and productive approach for employment creation, training, local capacity building, entrepreneurship and climate change adaptation.
- **Prioritise infrastructure investments** in places with a higher level of organisational and productive development (roads, bridges, electricity).
- **Promote integrated watershed management** by providing incentives for production, conservation, soil protection, forestry development, water resources, hydroelectric generation and organic farming.
- **Bring together the financial and services sectors with academia** to work on competitiveness issues in round tables and working groups.

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2. REDD+ stands for reduced emissions from deforestation and forest degradation and the role of conservation, sustainable management of forests and enhancement of forest carbon stocks in developing countries.
Rice-processing worker at High Performance Services and Business Ltd (HPS&B), one of Inkomoko's most successful clients

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Inkomoko: creating sustainable businesses in Rwanda

by Jeffrey Pilisuk

Rwanda has experienced a long period of political stability in recent years, with impressive rates of growth. Yet despite the country’s business-friendly environment, most start-ups fail within the first three years. Many businesses lack the entrepreneurial and financial skills or capital required to remain in operation. In this context, in 2012, Inkomoko Entrepreneur Development began offering business incubation services to entrepreneurs and small and medium enterprises (SMEs) to all sectors of the economy. In this chapter, author Jeffrey Pilisuk shares lessons learnt from Inkomoko’s experiences – including the need to educate and inspire a new generation of entrepreneurs to develop the skills to make their business ideas a reality in the real world.

6.1 Introduction

6.1.1 Incubator

Inkomoko Entrepreneur Development is the largest business accelerator programme in Rwanda, serving entrepreneurs and small-business owners through training, consulting and advising, and access to finance. The for-profit Rwandan company is an affiliate of the African Entrepreneur Collective (AEC), a USA-based non-governmental organisation (NGO). AEC was founded in 2012 by two social entrepreneurs, Julienne Oyler and Sara Leedom, who recognised the enormous challenge faced by youth across Africa: unemployment and underemployment. Even with a fast-growing private sector, and a workforce motivated to create jobs for themselves, most lacked the skills, networks and capital necessary to build sustainable businesses that create jobs for themselves and others.

Funding for Inkomoko’s programmes in Rwanda comes primarily from three sources: direct fee-for-service payments, partner contracts and grants and donations received by AEC, Inkomoko’s parent organisation. In 2016, 25 per cent of Inkomoko’s funding came through earned income – fees paid by individual businesses and entrepreneurs for services provided. Inkomoko is on track to fund 50 per cent of its programme costs from earned income in 2017, and its long-term goal is to cover 80 per cent of its service-related expenses with programme fees.

Inkomoko and its parent AEC have made tremendous progress since their launch in 2012. Figure 6.1 gives a brief timeline highlighting key milestones and accomplishments since their launch.
6.1.2 Context

Rwanda is a small, hilly, landlocked country in East Africa with a total population of 11.6 million (World Bank). It is located just a few degrees south of the equator, and is bordered by Uganda, Tanzania, Burundi and the Democratic Republic of Congo.

Following the genocide in 1994, Rwanda has experienced a long period of political stability. President Paul Kagame was to complete his second and final seven-year term in 2017. However, in 2015 the constitution was amended to allow the incumbent president to run for a third seven-year term, and in August 2017 Kagame received over 98 per cent of the popular vote and was re-elected to a third term.

Over the last three years, Rwanda’s economy has maintained impressive GDP growth rates, averaging 7 per cent per year (World Bank). Its current GDP is estimated at US$8.376 billion. The Rwandan economy is based largely on agricultural production from small semi-subsistence farms. Agriculture represents approximately one-third of the GDP; moreover, it is the most important sector as the majority of Rwandans are dependent on subsistence farming or on the jobs it generates. Coffee and tea are the country’s largest export crops, which are well-suited to the country’s small farms, steep slopes and mild climate.

Rwanda’s services sector produces the largest economic output, delivering over 50 per cent of the country’s GDP. Tourism has become one of the fastest-growing segments and is now the country’s leading foreign exchange earner. The industrial sector is the smallest, accounting for a modest 15 per cent of Rwanda’s GDP. Rwanda has few natural resources, and with the nearest sea port over 1,400 kilometres by road, opportunities for manufacturing are limited.
Rwanda has low levels of corruption, good roads and a very business-friendly environment. In 2012, the government outlined its strategic development plan, entitled Vision 2020. The plan called for significant investment in infrastructure development, more productive and market-oriented agriculture, and increased support for private-sector-driven growth, especially in information and communications technologies (ICTs) and tourism-related services. The main goal of Rwanda’s Vision 2020 is to transform the country into a services-based, middle-income economy by 2020.

6.1.3 Target business
Inkomoko provides services to entrepreneurs and small and medium enterprises (SMEs) across all sectors of the economy. The ideal participants for its accelerator programme are young companies that have been in business at least six months and have already begun to generate revenue. The types of businesses entering Inkomoko’s programme are largely a reflection of the needs in the local economy. However, participating businesses may also be influenced by the goals of specific funding partners. For example, in 2014 Inkomoko partnered with Tigo Mobile, a local telecommunications provider, to run an incubator specifically designed to support young technology entrepreneurs.

Inkomoko serves approximately 100 businesses each year through its core accelerator programme. In 2016, nearly 40 per cent of the businesses participating in Inkomoko’s accelerator programmes represented elements of the agribusiness value chain (producers, processors and suppliers). Inkomoko has assisted a wide variety of agribusinesses, including rice processors, coffee growers and processors, fertiliser producers, spice processors, cassava processors, flour producers, cooking-oil producers, fruit processors and retailers, potato processors, pig farmers, poultry farmers, egg producers and fish farmers.

Every business entering Inkomoko’s accelerator programme faces a unique set of challenges. The needs of each business vary depending on the maturity of the business, the product or service offered, and the skills and experience of the management team. Nevertheless, there are a few common challenges that have emerged. Most incoming participants believe they need financing to build or grow their business, yet they are unprepared to seek or secure any form of financing. They often lack the necessary financial literacy, accounting systems, budget forecasts or financial reports required by investors or banks. Many business owners therefore have a strong need for financial training and assistance to implement basic bookkeeping and recordkeeping systems. Some businesses also seek sales and marketing support, especially those introducing new products or expanding into new markets.

6.2 Institutional design
6.2.1 Staffing and structure
Inkomoko is led by its managing director, who reports to the chief operating officer of AEC. The staffing structure is broken down into two primary groups: client services and special projects (see Figure 6.2). The client services team serves entrepreneurs who participate in Inkomoko’s core accelerator programme, who enter the programme throughout the year on
a rolling basis. The special projects team primarily serves entrepreneurs who participate in customised programmes designed in collaboration with specific funding partners.

The client services and special projects teams each have a leader, who oversees a team of consultants including business development managers, business development associates, business analysts and trainers. Each team is also supported by two to three international mentors, volunteers who join Inkomoko for a period of 8–12 weeks at a time and who assist with mentoring and advising. Resources for other functional areas such as human resources (HR), accounting and finance, communications, and measurement and evaluation are shared between the parent company and Inkomoko.

6.2.2 Advisory board
Inkomoko does not have its own advisory board. The company accesses a wide variety of expertise through its extensive network of affiliate organisations, partner organisations and local government agencies (see Table 6.1). These connections are informal and mostly depend on relationships maintained by the individual staff, management team members and board members. The collaborative environment and regular team meetings ensure access to outside expertise is available when needed.

6.2.3 Networks
Inkomoko has created a Global Mentorship Programme to recruit talented international consultants who can share a global perspective. Mentors are typically postgraduate students or mid-career professionals who come to Rwanda for 8–12 weeks. Mentors are matched with entrepreneurs based on skills and client needs, and they assist the in-house teams working directly with entrepreneurs to provide consulting, mentorship and advice. Inkomoko also works closely with staff of the Rwanda Development Board, which periodically conducts technical trainings on topics such as how to register your business or paying taxes in Rwanda.
Nearly all of the business services Inkomoko provides are delivered by its own staff. However, as demand for its programmes fluctuates, management calls on a network of external resources to provide additional support. This network includes contract consultants, trainers and data-entry clerks. Inkomoko does not maintain any formal network of Inkomoko graduates, but it does maintain contact details and stays connected with graduates through newsletters.

6.2.4 Finance
There are three primary sources of income that support Inkomoko’s programmes and activities. These include: direct client fees, partner funding, and charitable donations and grants.

- **Direct client fees**: Individual entrepreneurs pay a flat fee to participate in the eight-month accelerator programme. Clients may also pay direct fees for customised consulting, training or market research. The goal is to keep client fees low and affordable. Increasing fees would definitely deter new entrants. Most of the improvement in covering programme costs came from redesigning services – more efficient delivery of workshops and consulting and by reducing duration from 12 to eight months.

- **Partner-funded programmes**: Inkomoko collaborates with various partner organisations to create specialised versions of its accelerator programme, designed to meet the needs of both participating entrepreneurs and the funding partner. These programmes are generally fully funded by the partner organisation(s), such as NGOs, corporations and government-sponsored programmes.

- **Grants and charitable donations**: Funding also comes from grants and charitable donations from institutional and individual donors. AEC is responsible for all of this type of fundraising activity.

### Table 6.1 Organisations that Inkomoko leverages for external expertise

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<th>Affiliate organisations</th>
<th>AEC (HR, legal, professional development)</th>
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<td>AEC Rwanda Trustee (financing and investment)</td>
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<td>Anza (programme development)</td>
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<td>Partner organisations</td>
<td>Gong Communications (public relations and communications)</td>
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<td></td>
<td>Private Sector Federation (technical assistance)</td>
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<td>Impact Hub Kigali (outreach)</td>
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<td>Akilah Institute (recruiting and outreach)</td>
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<td>HEC Paris (recruiting)</td>
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<td>nFriends (technology)</td>
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<td></td>
<td>University of Rwanda (entrepreneur outreach, programme development)</td>
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<td>Wharton School (professional development, curriculum development)</td>
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<td></td>
<td>United Nations High Commission for Refugees (entrepreneur outreach, programme development)</td>
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<td>Rwanda Trading Company (technical assistance)</td>
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<td>Government agencies</td>
<td>Rwanda Development Board (business registration, taxation)</td>
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<td></td>
<td>Ministry of Finance and Economic Planning (research, economic policy)</td>
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<td></td>
<td>Rwandan Agricultural Board (technical assistance)</td>
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<td>Ministry of Youth and ICT (entrepreneur development and outreach)</td>
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In March 2017, the accelerator programme was redesigned with the goal of making the programme more sustainable and less reliant on donor funding. Inkomoko estimates that direct fees from individual entrepreneurs now cover slightly over 50 per cent of the costs for services provided. Their long-term goal is to cover 80 per cent of the service costs from direct client fees. It is not yet clear how long it will take to achieve this. Partner-funded programmes are typically 100 per cent funded by the partner organisations, assuming the programmes are delivered within the expected budget.

6.3 Services offered

6.3.1 Services offered

Inkomoko's accelerator programme is actually a hybrid model, which combines elements of a traditional accelerator with business consulting services (see Figure 6.3). The programme consists of four major components delivered over an eight-month period: a five-day ‘bootcamp’, a business assessment and action plan, advisory/consulting services, and bi-monthly workshops. In addition, businesses that receive services from Inkomoko are eligible to apply for financing through its sister company, AEC Rwanda Trustee (AEC RT).

Figure 6.3 Inkomoko’s business model

The following is a brief description of the package of services each business receives through the accelerator:

- **Five-day bootcamp**: This hands-on, interactive training covers the latest concepts in entrepreneurship and is intended to create a solid foundation of business knowledge. Topics covered include human-centered design (IDEO 2009), business model canvas (Osterwalder and Pigneur 2010), customer journey (Richardson 2010), bookkeeping and accounting, and financial statements.
- **Business assessment and action plan:** Using Inkomoko’s assessment toolkit, a consultant works with each entrepreneur to develop a brief report that highlights strengths, areas for improvement and recommended actions.

- **One-to-one strategic consulting and advising:** Each business is assigned a consultant who assists the entrepreneur in executing their action plan and helps the business owner work through specific business challenges. Entrepreneurs may receive up to 100 hours of consulting and advice services.

- **Bi-monthly workshops:** Inkomoko provides a rotating series of business workshops. These are typically two-hour sessions that cover topics such as sales and marketing, accounting and finance, operations, and HR management.

- **Access to finance:** All participants are eligible to apply for low-interest financing through its sister company AEC RT. AEC RT offers financing up to US$50,000 through capital lease agreements or low-interest loans.

In addition to the accelerator programme, Inkomoko also offers customised consulting packages to businesses with more specific needs. Available services include branding and website development, business plans, investment advice, finance/bookkeeping systems, recruiting and HR policies.

### 6.3.2 Service delivery

The majority of workshops and training, including the bootcamp, are delivered at Inkomoko’s own training room in its Kigali offices. All trainings are in-person sessions, which allows for high levels of engagement, peer-to-peer sharing and interactive learning.

Inkomoko relies primarily on internal resources to deliver its services. In-house trainers deliver the bootcamp training and workshops; staff consultants provide the majority of consulting and advice services. Consulting and advice sessions take place either at Inkomoko’s offices or at the client’s business location. Rwanda is a relatively small country, so consultants can meet business owners wherever they are located.

When developing the business assessment and action plan, consultants conduct on-site visits to the business, interview the management team, and gather financial and other data to evaluate the business. Inkomoko has developed a comprehensive set of tools and templates for consultants, which are used to assist with consulting and mentoring activities and which ensure services meet a consistently high standard.

While most services are delivered face-to-face, Inkomoko has developed a few reference documents which it makes available to programme participants. These include a customer research guide, a local media guide, and referral lists for third-party services such as accounting, tax and public relations.

### 6.3.3 Linking

Both the locally staffed consultants and the company’s management team are well connected to government agencies and service providers within Rwanda. Team members often have different areas of expertise and are able to access different resources, and
consultants draw on the collective expertise of the entire team and make connections to meet the needs of their clients.

Inkomoko connects businesses to financing through its sister company AEC RT, which offers low-interest capital leases. For example, if a farmer needs to purchase a grain silo to increase storage capacity, AEC RT will purchase the equipment for the farmer, and the farmer will make payments as defined in the terms of the lease. Once the terms of the lease agreement are fulfilled, AEC RT will transfer ownership of the asset to the entrepreneur. AEC RT also advises businesses requiring other types of financing and can connect them to appropriate investors.

6.4 Incubation management

6.4.1 Selection

Inkomoko uses a variety of approaches for outreach and screening of participants, depending on the programme. For the core accelerator programme, outreach activities for recruiting entrepreneurs consist of referrals from alumni, referrals from partner organisations, coordinated outreach through partner organisations, participation in business and community events, hosting business and community events, and direct outreach. Inkomoko has one full-time staff member dedicated to recruiting and organising all outreach activities. Because participants in the core accelerator programme pay to participate, ‘selection’ is based on the prospective participant’s perceived value of the programme and his or her ability to pay the programme fees. Inkomoko’s leadership believes participants who pay for services get more from the programme; they are more engaged, more committed, and put in the time needed to be successful.

Recruitment and selection of participants for partner-funded accelerator programmes follow a different approach. Entrepreneurs do not pay any fees to participate, and the selection process is specifically tailored to reach the desired population and to achieve the intended outcomes of the programme. For example, Inkomoko has run accelerator programmes specifically targeting technology entrepreneurs, health innovators, student entrepreneurs, and businesses focused on the agricultural value chain. In each case, staff developed a unique set of screening criteria, identified recruitment sources, and designed outreach activities to target the ideal candidates.

Although the selection process and criteria vary across programmes, tables 6.2 and 6.3 give a few examples of the best practices used by Inkomoko for partner-funded accelerator programmes.

6.4.2 Performance oversight

During the first phase of its accelerator programme, a consultant works with each entrepreneur to develop a business assessment as a way to identify and prioritise areas of improvement for the business. The key output of the assessment is a prioritised list of recommended actions, which becomes the primary focus over the final six months of the programme.

Each entrepreneur meets regularly with their assigned consultant, who provides support and coaching to get them through any challenges they face in implementing their action
Table 6.2 Selection criteria example

<table>
<thead>
<tr>
<th>Criteria</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Product-market fit</td>
<td>Does the product/service offered directly address the problem or market need identified?</td>
</tr>
<tr>
<td>Value proposition</td>
<td>Is there a clear and compelling reason for customers to purchase the product/service?</td>
</tr>
<tr>
<td>Team credentials</td>
<td>Does the management team have the right skills and experience?</td>
</tr>
<tr>
<td>Scalability</td>
<td>Is the business scalable?</td>
</tr>
<tr>
<td>Financial viability</td>
<td>Is there a path to financial sustainability? Are financial forecasts based on sound assumptions?</td>
</tr>
</tbody>
</table>

Table 6.3 Selection process example

<table>
<thead>
<tr>
<th>Process</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Application submission</td>
<td>Typically, applications are submitted through an online form.</td>
</tr>
<tr>
<td>Review and scoring</td>
<td>Applications are scored against selection criteria; each application is reviewed and scored by multiple judges.</td>
</tr>
<tr>
<td>Short-listing applicants</td>
<td>Short-listed applicants are selected from applicants receiving the highest scores.</td>
</tr>
<tr>
<td>Interviews</td>
<td>Short-listed applicants are interviewed in person or by phone to confirm information and gather additional details.</td>
</tr>
<tr>
<td>Final selection</td>
<td>Judges share insights from interviews and make the final selection of participants.</td>
</tr>
</tbody>
</table>

Inkomoko rigorously collects and tracks outcomes data from participants in its programmes. Baseline data are collected at the start of each programme and survey data

6.4.3 Graduation

Inkomoko’s standard accelerator programme runs for a period of eight months, at which point services end and entrepreneurs effectively ‘graduate’ from the programme. Participants who obtain financing from Inkomoko’s sister company, AEC RT, continue to receive basic advice services during the term of their capital lease agreement.

Inkomoko offers additional consulting, advice and coaching services to all alumni on a fee-for-service basis. These services are provided under a separate consulting contract and usually involve specific, short-term projects such as market research, implementation of accounting systems, HR policies or creative/web design.

6.4.4 Outcome evaluation

Inkomoko rigorously collects and tracks outcomes data from participants in its programmes. Baseline data are collected at the start of each programme and survey data
are gathered every six months for three years following the programme’s completion. The key outcomes data collected include: whether the business is still active, number of employees (full-time, part-time, casual), gender of owners, and financing received (this includes financing directly from AEC RT and any outside financing that results from connections or introductions they facilitate). These data are used to measure business survival rates, job creation, gender balance and total financing disbursed.

Additionally, surveys are conducted to gather feedback on nearly every component of Inkomoko’s programmes including bootcamps, workshops and one-to-one consulting. These surveys provide direct feedback from participants about overall satisfaction, usefulness of curriculum, competencies of trainers, knowledge and skills acquired, and the ability to apply such new knowledge and skills in their business. The data provide valuable insights to the Inkomoko team and have already influenced overall programme design, curriculum topics and exercises, advisory sessions, and the professional development of trainers.

Tea-leaf pickers. Tea is one of Rwanda’s largest export crops, as it is well-suited to the country’s small farms, steep slopes and mild climate.
6.5 Impact

6.5.1 Overall assessment
As the flagship accelerator programme for AEC, Inkomoko’s impact goals are closely tied to those of its parent. The key metrics for success are entrepreneurs served, new jobs created, business survival rates achieved, and direct investments made. Through 2016, Inkomoko and its affiliate organisations have served 236 entrepreneurs, created 2,672 jobs, achieved a business survival rate of 80 per cent and made direct investments of over US$547,000.

One additional metric that Inkomoko and AEC are exploring is the cost per job created. This metric would help to measure the efficiency of its programmes versus other programmes designed to foster job creation. The methodology for this metric is still under development and no results have yet been published.

6.5.2 Successes
Jean ‘Rice’ Bosco is one of Inkomoko’s most impactful entrepreneurs. His rice-processing company High Performance Services and Business Ltd (HPS&B) produces 10,000 tonnes of processed rice per year that he sells to schools, hospitals, restaurants, hotels and regular individual buyers. He has created more than 30 jobs for people in his community and his company works with 15 rice cooperatives, which represent more than 10,000 smallholder farmers in Rwanda.

HPS&B has hired agronomists who work with each rice cooperative to assist individual farmers to improve their techniques. His company also provides fertilisers and tools that help farmers improve their yields. As a result, farmers on average have increased their yield from 3 to 5.5 tonnes per hectare and have seen a significant rise in their incomes. Since coming to Inkomoko in September 2013, HPS&B has expanded capacity and doubled production.

The company’s success, however, is not just a result of building processing capacity. When Jean Bosco initially approached Inkomoko, his major challenges were managing cash flow, securing working capital, and developing his supply chain. His rice-processing operations were running at 40 per cent capacity and the lack of cash limited his ability to buy more rice. He also lacked solid bookkeeping and financial reporting systems, and no banks or investors were interested in offering him financing.

The challenges faced by HPS&B are common among many entrepreneurs who participate in Inkomoko’s programmes, yet not every entrepreneur achieves the same level of success as Jean Bosco. What was different? Here are a few factors that contributed to HPS&B’s success:

- **Recognition of critical gaps and steps to address them**: Working with Inkomoko, HPS&B developed a clear picture of the ‘gaps’ or key issues in the business, and the steps needed to address them. For example, HPS&B's poor recordkeeping practices made it difficult to create an accurate picture of its financial health.
Commitment to making changes to address the gaps: For example, HPS&B remained fully committed and engaged, taking the necessary steps to address the gaps once identified. Inkomoko trained staff and assisted HPS&B in implementing improved bookkeeping and financial reporting practices.

Good understanding of finance and risks: For example, HPS&B management developed a keen understanding of financial management, financing options, and what amount of financing was appropriate for their business. Using realistic cashflow projections, HPS&B was able to demonstrate how additional working capital would grow the business and generate the cash necessary to pay back their loan.

Development of sound bookkeeping and reporting systems: HPS&B strengthened its financial systems, a necessary step to secure financing.

Access to appropriate financing: Through AEC RT, HPS&B received four rounds of debt financing with favourable terms and flexible repayment schedules to accommodate seasonal fluctuations in cash flow.

6.5.3 Failures

Jean Pierre and Eric started working with Inkomoko in early 2014. They were experienced entrepreneurs, and were now hoping to build a poultry-farming business to raise chickens for meat and eggs. Market demand for chicken and eggs in Rwanda is strong, and imports – most coming from Uganda – are needed to supply the local market.

Jean Pierre and Eric were seeking start-up capital to buy land, build facilities and purchase equipment. They also needed working capital to buy chickens and feed. They had already begun discussions with a Dutch investment firm which was promising to invest US$2 million to support poultry farming in Rwanda, though no specific financial commitments had been made. Inkomoko would help the two develop a business plan and assist them with some of the initial financing.

These two entrepreneurs were among the first to receive financing through AEC RT. Jean Pierre and Eric found a plot of land that was ideally suited for the poultry farm. They needed 10 million Rwandan francs (RWF) – about US$15,000, which AEC RT agreed to provide. At this time, all approved financing was disbursed in cash.

Inkomoko worked with Jean Pierre and Eric on the business plan and financial forecasts; however, the business itself made little progress. The Dutch investment firm continued delaying its support, and after a period of several months, it became clear that the expected funding would not come through. Unable to begin operations, Jean Pierre and Eric had no way to make their loan repayments and were heading for default. To make matters worse, AEC RT learnt that only RWF 6 million of the financing the entrepreneurs had received was used for purchasing the land. The remaining RWF 4 million was used to purchase eggs, which were now somewhat mysteriously unaccounted for.

Jean Pierre and Eric kept promising they would repay the debt so they could keep the land. Ultimately, it was clear they could not pay, and AEC RT was able to force the sale of the land and recover RWF 6 million. The remaining RWF 4 million is still the subject of an ongoing legal

1. Inkomoko has an ongoing legal action against these two entrepreneurs. ‘Jean Pierre’ and ‘Eric’ are fictitious names being used to protect their identities.
dispute. These were hard though important lessons in the early days for Inkomoko and AEC RT. A few of the factors that contributed to the failure of this relationship are as follows:

- **Financing a non-operational business**: Early-stage, pre-revenue businesses are a high risk for investors due to the challenges of initial start-up and lack of cashflow.

- **Entrepreneurs that are too focused on raising money**: Jean Pierre and Eric were completely focused on securing financing. They disengaged from Inkomoko’s services and failed to seek advice or consulting support when it was needed most.

- **Cash disbursements create a higher financing risk**: Cash disbursements are riskier since the investor lacks any real control over how the financing is actually used and this provides little recourse in the case of a default.

- **Poor coordination with other financing partners**: In this case, it was clear more funding would be needed before Jean Pierre and Eric could start their business. AEC RT disbursed funds too early, before other investors had fully committed.

### 6.5.4 Lessons for other incubators

From its experience working with hundreds of entrepreneurs, and through its many successes and some failures, Inkomoko has learnt a number of valuable lessons.

- **Commit to long-term support**: Entrepreneurs and SMEs face challenges that seem to change daily. Short-term programmes fail to help entrepreneurs through critical challenges that can impact the survival of their business. Additionally, shorter programmes tend to focus primarily on training and workshops, but they do not provide the individual, ongoing support to reinforce these new skills or to fully incorporate new techniques into the businesses.

- **Charge fees to increase engagement**: Requiring participants to pay even nominal fees for a programme distinctly changes the relationship between the entrepreneur and the service provider. Participants who pay have higher expectations about what they will gain from the programme and they are more likely to remain fully engaged in programme activities.

- **Focus on financial literacy**: The vast majority of participants in Inkomoko’s programmes lacked the financial skills needed to effectively run a business. Many needed training on setting up proper accounting and bookkeeping systems, creating and understanding financial reports, and developing realistic financial forecasts.

- **Avoid ‘money hunters’ – those exclusively focused on funding**: On average, 10 per cent of participating businesses qualify for financing through Inkomoko’s affiliate, AEC RT. Entrepreneurs or business owners who are singularly focused on funding are likely to be disappointed. They also tend to be less engaged with programme activities, are more likely to drop out, and are more inclined to burden their business with unnecessary or excessive debt.

- **Offer one-to-one advising and consulting**: Workshops and training are an excellent means of developing a solid foundation of business skills and knowledge; however, that alone is not nearly enough. One-to-one advice and consulting sessions are necessary to help entrepreneurs apply these learnings to their own businesses. The sessions allow entrepreneurs to focus on their unique challenges and priorities and offer guidance on critical business decisions.
6.6 Conclusions

6.6.1 Relevance

Even within Rwanda’s business-friendly environment, most start-ups fail within the first three years. Business owners are often experts in their own product or service, but they frequently lack the basic financial skills, business skills, and entrepreneurial mindset to successfully navigate daily challenges and to make sound management decisions. The educational system does little to prepare graduates to effectively start or manage a business.

Access to finance continues to be a major problem for nearly every young business seeking growth capital. Friends and family rarely have the means to invest in early-stage companies, venture capital is practically non-existent, and bank loans require collateral and offer high-interest rates that are out of reach for the majority of business owners.

Business incubators and accelerators help to bridge these gaps. They build the capacity of entrepreneurs who start and grow strong businesses, and they connect business owners to appropriate sources of capital. These programmes are part of the solution and continue to play a significant role in helping motivated entrepreneurs build productive, sustainable businesses.

6.6.2 Future prospects

Rwanda’s business-friendly policies, lack of corruption and political stability make it an ideal environment to start and incubate new businesses. However, its relatively small size presents a few challenges for developing successful incubator and accelerator programmes. First, there is a limited pipeline of qualified entrepreneurs. Programmes sometimes compete with each other to register participants or may end up with individuals who are not well-suited to entrepreneurship. To help fill this pipeline, Rwandan universities need to do more to prepare future entrepreneurs, and successful local business leaders must become prominent role models who inspire the next generation.

Secondly, programmes that exclusively focus on high-growth companies are likely to have limited impact. There is a very small pool of entrepreneurs in Rwanda with the vision to dominate or the ability to disrupt an industry. Instead, accelerator programmes will likely have more impact by increasing the number of businesses they serve and helping each to achieve moderate growth.

Finally, successful and ambitious businesses soon discover they need to expand beyond the Rwandan market in order to continue growing. Accelerator programmes should consider a broader, more regional perspective when helping businesses go to scale and look for ways to connect growing businesses to networks and markets outside of Rwanda.

Future financing for incubator and accelerator programmes will need to come from a variety of sources. Early-stage, pre-revenue companies receiving incubation services cannot afford to pay for services out-of-pocket. This suggests the majority of funding for these programmes must come from a combination of mission-aligned NGOs, foundations, private companies, individual donors and public grants. Accelerator programmes working with existing businesses will tap into similar sources of funding to ensure their services
are accessible and affordable, but they should also be able to fund a portion of their services by charging fees to participants.

6.6.3 Recommendations to policymakers

Incubators and accelerators are an important part of the entrepreneurial ecosystem, and policymakers also have an essential role. Here are a few recommendations for policymakers and decision makers to further progress and build a strong entrepreneurial community.

**Improve lending options:** New lending alternatives are needed to address the needs of small-business owners. Programmes such as community-development financial institutions (CDFIs) are needed to help provide and de-risk low-interest financing to small businesses. In the USA and UK, CDFIs are certified by the government and provide credit and financial services to underserved markets and populations. Government support for these programmes includes both financial and technical assistance. Financial assistance can be used to increase lending capital, increase capital reserves, pay for operations and fund loan loss reserves.

**Educate future entrepreneurs:** Universities and secondary schools must begin to help students to develop an entrepreneurial mindset. Beyond rote learning, students need to develop problem-solving skills and the confidence to test out their ideas in the real world. The human-centered design process could teach students how to frame problems,
develop solutions, and test their assumptions. Such techniques should be integrated into existing academic curricula and not reserved exclusively for those studying business. Schools can also play a larger role in connecting students to internships within local businesses. Internships provide practical experience and expose budding entrepreneurs to successful leaders at a young age.

**Develop new sources of seed funding:** Pitch competitions, such as those run by SeedStars World and Bank of Kigali, mainly target technology start-ups and only award prizes to a select few. SeedStars World runs an annual global pitch competition and rewards winning start-ups with up to US$1 million in funding and services (SeedStars World 2017). But most start-ups lack even the small amount of funding needed to test and refine their ideas. Public-private partnerships are needed to establish seed funds and grant programmes that will increase the capital available to early-stage start-up businesses. To ensure this new capital is effectively deployed, these funders should collaborate with local incubators and accelerators, such as Inkomoko, to help identify qualified entrepreneurs and provide ongoing support after funds have been disbursed.
Ecotourism in the treetops, Kalibiru village, Kulon Progo, Yogyakarta Province

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Javlec: how community enterprises are tackling poverty and sustaining forest landscapes in Indonesia

by Rohni Sanyoto, Dwi Nugroho, Pak Suryanto, Puji Raharjo, Endri Hera Rahmawati

Between 1950 and 2000, there was a dramatic decline in Indonesian forests from 162 million to 98 million hectares. This chapter describes how Yayasan Javlec Indonesia (Javlec) began by focusing on saving Java's forests through community forestry advocacy and capacity building. Over the last two decades, Javlec has developed as a business incubator and supports a range of community-based forest enterprises. From ecotourism to coffee production, Javlec applies the five ‘S’s: providing service, support for business development, skill development, seed capital and creating synergy with local and international business networks. With a focus on alleviating poverty and making forest landscapes sustainable, Javlec’s experience shows that successful business incubation requires commitment, not just between incubators and incubatees – but also long-term government support.

7.1 Introduction

7.1.1 Incubator

Prior to its formal establishment, Yayasan Javlec Indonesia (Javlec) had been active since 1999 as a community of practice which consisted of activists and support organisations concerned about forest conservation, good forestry governance and forest management. In the early years between 1999 and 2006, Javlec's activities were focused on saving Java's forests through community forestry advocacy and capacity-building programmes. In accordance with Indonesian law, this community of practice was then institutionalised by seven NGOs in 2006 as an association, the Java Learning Center or Javlec. Javlec was later formally established as a foundation in September 2013 under the name of Yayasan Javlec Indonesia.

After 2006, Javlec's functions became akin to that of a business incubator as it sought community empowerment by promoting access to land (through the government's Social Forestry Programme), finance, and markets for community forest groups. Javlec managed a funding scheme for small-scale enterprises in village communities in forest areas, which complemented its work in providing business assistance for community-based forest enterprises (CBFEs). However, this direct funding scheme ended in 2010.
Since the organisation's formal registration in 2013, Yayasan Javlec Indonesia has widened the geographical area of its work beyond Java Island to other Indonesian islands such as Sumatra and Kalimantan. Since its change into a legal entity, the ownership of its work has become its key selling point. Every year, Javlec's achievements and its use of funds for CBFE facilitation are reported. The foundation is accountable to its founders and the public through annual general meetings and related media. Both as an association and foundation, its financing for business incubation activities has come from donors and contributions from members of its community of practice. Javlec is funded by the Multistakeholder Forestry Programme II, the corporate social responsibility (CSR) departments of Danone (a mineral water company) and Bank Negara Indonesia (referred to here as BNI 46 CSR), the Indonesia Climate Change Trust Fund (ICCTF), the Millennium Challenge Account Indonesia, and USAID Lestari. Javlec also cooperates with government agencies such as Gunung Merapi National Park authorities under the Ministry of Environment and Forestry.

7.1.2 Context

Business incubation activities carried out by Yayasan Javlec Indonesia always relate to poverty alleviation and the sustainability of forest landscapes. In the early years, Javlec supported community businesses within and run by village communities adjacent to the forest. Forest villages are a major poverty pocket in Indonesia: 18.5 per cent of households are poor. The poverty of villages adjacent to the forest portrays a contrasting gap between the rich forest resource and the poor community. Peluso (1992) referred to it as ‘rich forests, poor people’.

Around 2010, Javlec began to develop its business facilitation skills for small-scale timber industries. In general, timber industries consist of primary industries, which process timber logs into sawn timber, and secondary industries, which produce finished products and semi-finished products. These industries are spread in industrial centres such as Jepara, Solo, Klaten, Yogyakarta and Wonosobo on the island of Java. Even though they are small scale, such timber industries must comply with a new timber legality verification system (sistem verifikasi legalitas kayu or SVLK) that assures the traceability of raw material from sustainable forest management.

Lately, Javlec has also started to facilitate support for businesses in coastal communities dominated by fishing. The poverty level of coastal communities is 32.4 per cent or around triple the national percentage. Like forest communities, coastal communities also have varied natural resources. There are various types of fish and marine life that live in coral reefs, seagrass meadows and mangroves. As for forests, these three types of ecosystem play very different roles in their resilience to and mitigation of climate change.

7.1.3 Target business

Business services offered by Yayasan Javlec Indonesia are always focused on community-based enterprises and related small-scale timber industries. Client businesses must also show direct links to poverty alleviation and the sustainability of the landscape. Small-scale industries are defined as those which have an investment value of less than 500 million rupiahs. The selection of which community business to provide services to is also based
on an analysis of market potential: whether for community timber, ecotourism, fish or traditional processed foods. In order to qualify for support, community forest enterprises or small-scale timber industries have to apply eco-friendly and social principles.

Since recordkeeping began in 2002, there have been 202 enterprise clients that have received business services, either in the form of capacity building, access to finance or access to markets. The type of enterprises supported include 71.3 per cent community businesses and 28.7 per cent small-scale timber industries. Most community businesses rely on forest products – hence the commonly used term, community-based forest enterprises (CBFE), which make up 94.4 per cent of the community businesses supported by Javlec. From 2005 to 2007, the annual average number of Javlec's business clientele was about 24 clients, with 47 the highest number in any one year.

In general, the main challenges faced by community-based business clients relate to start-up capital, business skills, financial and financial management skills, low productivity, assuring product quality, and marketing (see Table 7.1).

| Table 7.1 Comparing main challenges faced by community business clients and small-scale enterprises |
| Aspect | Community businesses | Small enterprises |
| Finance | Low levels of available capital and are not familiar with accessing bank services | Although they face finance problems, are more familiar with accessing bank services |
| Business skills | Serious lack of business experience or skills | More business experience and skills |
| Financial management skills | Weak financial management skills affecting production efficiency. Often unable to calculate business profit margins | Also weak financial management skills which can affect production efficiency. Often unable to calculate business profit margins |
| Productivity | Difficulties in estimating the time required to fulfill orders for some products. Orders often cannot be fulfilled by the community | Difficulties in estimating the time required to fulfill orders for some products. Orders are often delayed which affects business relationships with buyers |
| Product quality assurance | Difficulties in assuring product quality, which varies between members | Better product quality assurance |
| Marketing | Difficulties in marketing products, relying heavily on brokers who often mark down prices | Have markets for their products, although still very dependent on larger-scale buyers or brokers. Ability to access wider market is still weak |
Based on these, Javlec has developed several business services.

**Access to finance:** Javlec began by providing financial services direct to community businesses until around 2010. Now, Javlec only provides assistance in accessing finance from other third parties, either from banks or the BLU (Badan Layanan Umum or Public Service Agency). Small-scale industries tend to be able to access finance from banks, but they often face difficulties in employing such finances efficiently to increase their business.

**Capacity building:** Javlec’s main emphasis is building client capacity in financial and business management. Financial management is focused on the skills of profit and loss calculations so that the business can identify when it will break even and when it will be profitable. Business management training is more focused on human resources management, so that they can produce quality products, on time, and with precise numbers. Especially for community businesses, entrepreneurship training is also needed to develop their business skills and their sense of business.

**Technical assistance:** Although Javlec staff have carried out many capacity-building activities, direct technical assistance is still needed. Direct technical assistance is organised relating to a specific problem faced by a client. Besides helping to solve specific problems, technical assistance is also key to giving confidence to entrepreneurs within community businesses and small-scale enterprises, which in turn increases the performance of their businesses.

**Access to markets:** This is a dominant constraint experienced by clients, both community businesses and small-scale enterprises. Both face problems accessing potential customers. This is both a problem in terms of understanding demand but also an issue because the profit proportion received by brokers is high, at times even reaching 40 per cent. This creates injustice that impacts both profitability and motivation within the business. In response, Javlec uses an approach that covers branding, packaging, promoting and networking.

### 7.2 Institutional design

#### 7.2.1 Staffing and structure

Until 2010, community business facilitation within Javlec was specially handled through its Community Empowerment Facilities (CEF) division based in Malang, East Java. However, after the dispersion of CEF, Javlec’s business services are now delivered in a more integrated way through different activities and programmes for which Yayasan Javlec Indonesia has funding. At present, Javlec has 29 field assistants and site coordinators who also have community business facilitation and small-scale enterprise development built into their terms of reference.

#### 7.2.2 Advisory board

The complete organisational structure of Yayasan Javlec Indonesia is illustrated in Figure 7.1. The advisory board consists of three people: Hery Santoso, Wiratno and Hari Cahyono. As an anthropologist, Hery Santoso represents social approaches to activities
including the social dynamics of Javlec’s support to community business incubation. Besides representing the government, Wiratno is also a specialist on how to integrate business with conservation so as to assure environment sustainability. Wiratno’s formal position is director general of ecosystem and natural resources conservation within the Ministry of Environment and Forestry. Hari Cahyono is a business practitioner who has much experience in strengthening community businesses and small-scale enterprises.

To roll out its business services, Javlec often asks experts in particular fields for help in areas such as entrepreneurship, ecotourism, timber management, product development, legal review and licensing, and financial inclusion. Those experts are from various backgrounds – whether practitioners, academic experts or government employees. For any implemented project, planned activities are appropriate to the needs of the community’s business development. If applicable, experts’ fees are agreed in advance and included in project workplans. For some activities, however, no fee is required, as the experts usually provide support voluntarily. Besides the direct impacts of working
with experts to train clients, their involvement also impacts on the expansion of Javlec's networks and knowledge base, which often opens wider business opportunities.

7.2.3 Networks
Javlec and its clients communicate continually – thereby forming an active network of everyone who has ever been involved with it in providing business services. Whether directly or indirectly, keynote speakers or experts do not seem to mind providing ongoing advice and inputs into business development – in part because of the strong social and environmental impacts on the client base. In addition, in some cases, their engagement and relationships have been pivotal for sustainability and market access. In Gunungkidul, experts have been involved, voluntarily, to produce a promotional movie for ecotourism in Watu Payung. In Aceh, coffee from Agusen is bought by the coffee shop in Yogyakarta owned by Javlec's coffee expert advisor. In Kulon Progo, the government office there always promotes community-based ecotourism in Kalibiru and invites these businesses to attend exhibitions. Women's groups for processed marine-based food products in Berau have also benefitted from Javlec's support through an exhibition in Jakarta, as a result of their good relationship with the Ministry of Environment and Forestry.

Training of coffee development and production, Agusen village, Gayo Lues, Aceh

7.2.4 Finance
Javlec has never offered services to clients that require a client payment. Perhaps for that reason, Javlec feels it has not fully applied the 'business incubator' concept where the service provider receives a fee to support the sustainability of the business incubator,
which in turn would enhance the long-term prospects of providing services to other clients. The Mandiri farmer cooperative in Kalibiru does pay a fee each month for Javlec’s support, but only because a particular function of the business is directly managed by one of Javlec’s field assistants. It has always been possible to source funds to facilitate business development from donors, or through contributions from Javlec’s members and support organisations.

### 7.3 Services offered

#### 7.3.1 Services offered

Javlec engages with and supports communities that want to develop community businesses. Community businesses are considered part of the solution to boost local economies and improve livelihoods. But Javlec’s focus is not just about improving community economies and welfare, but also integrating and synergising these with sustaining natural resources.

Sustainable natural resource management has to be the founding principle for developing community businesses. The economic value of businesses in rural areas is fundamentally dependent on business activities working in harmony with ecological values. It is because of prior concerns over rising environmental damage that Javlec insists that the community businesses it supports do not harm the environment. From data in 2001, Forest Watch Indonesia and Global Forest Watch released figures showing the decline in Indonesian forest areas from 162 million hectares down to 98 million hectares between 1950 and 2000 (SSS-Pundi dan Partnership 2010).

In its understanding of what a business incubator is, Javlec uses the concept of the five ‘S’s:

- **Service**: providing consultation services and advice on marketing, finances, production and technology.
- **Support** for business development and accessing technology.
- **Skill development**: training in how to develop a business plan and management training.
- **Seed capital**: providing or brokering access to initial start-up funding for the business and accessing capital from financial institutions.
- **Synergy**: creating local and international business networks.

Javlec has always provided consultation services for community businesses, such as a free SVLK clinic in cooperation with the local government’s industry office. Javlec has also facilitated building the Mangrove Information Centre as part of mangrove ecotourism development. Here, Javlec provides space in which to showcase handicrafts and food products produced by a women’s group in Berau, East Kalimantan province, enabling them to sell their products as souvenirs for visitors. All of the products displayed in the business chamber are made by the surrounding community.

Referring to those five ‘S’s above, Javlec has sought to make its work locally appropriate and responsive to community needs and the development of community business.
Natural resource mapping and identifying potential: Identifying the economic potential of community-owned natural resources is key to developing any community business plan. Javlec usually offers this service in the early stages of community forest business development. Unleashing the value of natural resources and maintaining spatial control over them is strongly dependent on mapping active indigenous people’s knowledge. Why is this assistance important? Without this, the surrounding natural resources are not considered to have proper economic value (Mansai et al. 2013). From Javlec’s experience of communities, most client groups only consider the potential value of their natural resources, whether goods or environmental services, in a vague and general way. There are no specific data which can be communicated to potential buyers. Identifying potential is all about products that will be sold to specific markets during the process of community business development.

Organisational structure: For the farmers who are Javlec’s community business clients, establishing a group is not a new concept anymore. Many groups have been developed. However, those groups are often formed to carry out specific projects. As such, the groups are usually not rooted in or receive the full support from the community or capital from the community. So when a project ends, the group ends also (Suprapto 2010).

Getting the organisational structure right is critical to how the business subsequently operates: it will become the soul of the community business. If the business is organised as a company, the form and behaviour of this community business will follow the company structure. The management will be directed by the company hierarchy. The right organisational structure is important because without it, the business will not be profitable nor deliver other benefits.

Javlec’s support covers organisational structure, institutional internal rules, standard operating procedures (SOP) or technical guidelines about community business management, job descriptions and the functions of each position, schemes of communication flow, coordination flow, legal registration, rules of financial management, rules for administrative and household matters, rules for who can serve in some positions, rules and strategies about marketing, promotion, and rules about bookkeeping and also the transparency of community business.

At the community level, transparency becomes important and is the core difference between a community business and a conventional company. Companies are normally controlled by shareholders, but in a community business, all the member are shareholders and are the collective owners. Therefore, mechanisms of transparency become very important.

Capacity building of community business managers: Managers are pivotal to overall business capacity. According to Haeruma (2000) in Nurseto (2004), the challenges for the development of small and medium enterprises cover a wide range of issues: how to increase the quality of human resources in management skills, organisation and technology; entrepreneurship competency; wider access to capital; the collection of market information; required inputs for production; and creating a healthy business climate which supports innovation while nurturing healthy competition (Nurseto 2004). Therefore,
building the capacity of community businesses – and especially their business managers – becomes important.

No two client groups have the same capacity-building needs. Capacity-building needs first appear during the process of identifying the right organisational structure for the individual business. During that process, the gaps are identified between the ‘ideal’ community business manager required and the reality which actually exists in the assisted group. Javlec’s services cover institutional, administrative, financial and thematic issues, in accordance with whatever gaps have been identified in the business itself. Administrative and finance areas involve capacity building in SOP administration, bookkeeping and financial reporting, documenting household matters, and the use of administrative software.

Javlec structures training relevant to the particular field which is being developed by the community business. For example, for mangrove tourism, Javlec offers training in mangrove management, ecotourism, tour guide training and marketing. If the community business develops processed food such as coffee, Javlec offers a different package of training, for example, coffee harvesting, processing, roasting, quality standards, and promotion and marketing.

Monitoring, evaluation and learning: Javlec undertakes monitoring to assess results, activity implementation, and effectiveness and efficiency against inputs. It also undertakes evaluation to measure economic and social impacts and also programme sustainability (Sudarsono 2016).
A key service offered by Javlec is monitoring, evaluation and learning. The businesses supported by Javlec are community based, so monitoring and evaluation plays an important role in maintaining community trust toward those managing the community business. Monitoring and evaluation serves both to improve internal relations and as a control tool for the community business manager to assess how to improve the business.

Javlec also provides services to increase learning. Community businesses supported by Javlec learn how to increase their income and better contribute to the community economy, and how to encourage sustainable natural resources management. Through this, Javlec also aims to establish examples of good practice so that through exchanges with other neighbouring communities, businesses can also gain more experience in business management.

**Promotion:** As well as building basic business and financial management capacity, Javlec also provides technical support for promotion and marketing. Services include the production of promotional media like flyers, brochures and booklets or website development, publishing news articles in local media, and also participating in exhibitions at local and national levels.

**Networking:** In addition to training services, Javlec also carries out networking with others who are interested in supporting community business. This networking service is primarily achieved by linking those support agencies to community businesses during workshops, training or coaching courses and other interactions carried out by government or private-sector actors. In some cases, Javlec connects community businesses to larger private-sector actors as part of their corporate social responsibility (CSR) programmes so as to improve direct technical aid from other parties to develop community business. In all these activities, Javlec strives primarily to improve the useful contacts and networks of the community business.

**7.3.2 Service delivery**

Any services offered to the community business are agreed by free prior and informed consent involving a process of discussion between the community and Javlec. Not all services listed above are required to be supported, only the services that are needed and agreed and which serve the interests both of the business and regional development.

Javlec itself promotes services that meet community needs by increasing income and encouraging sustainable natural resources management. The aim is to establish community businesses in synergy with local and regional development. Because of this, it is easy to engage and procure support from government, especially local government.

Each package of services is individually designed. For example, support from Javlec to a mangrove ecotourism business in Berau was different from the assistance offered to an ecotourism business in Kalibiru. In the former, Javlec had to start almost from scratch looking at market potential, institutional capacity, training needs and marketing. But the
assistance that was designed for Kalibiru ecotourism in Kulon Progo did not start from such a low baseline because that assisted group had some existing capacity including a marketing plan, sound institutional organisation, and a system of financial management. Before Javlec assisted Kalibiru, two other agencies, Yayasan Damar and Lintang, had already given some considerable support. But the group did not yet have a licence to use their community forest which had potential as an ecotourism area. So in Kalibiru, Javlec worked with the community business to obtain a licence to use their community forest from the government.

7.3.3 Linking

Javlec places a strong emphasis on improving useful contacts for the community businesses that it supports. Building networks to support and upscale community forest businesses is part of the process of improved information that is offered by Javlec. Such networking is not merely about product promotion, but also about connecting community forest businesses to other service providers, including those who can help with technology, plant layout and infrastructure alongside more conventional training providers.

Sometimes building these useful networks, such as for marketing and promotion, takes the form of trade fairs or exhibitions, involving either government or private-sector organisations. For example, for a range of forestry products and ecotourism services, every year Javlec ensures community business participation in the National Social Forestry (Perhutanan Sosial Nusantara) exhibition. But it also works to ensure community forest businesses have access to social media to help in their marketing. Additionally, it links them to workshops that provide capacity building in forest management planning and training in ecotourism management. Sometimes Javlec ensures links to the local forestry office or watershed management body within the Ministry of Environment and Forestry so as to ensure access to good-quality supplies of seed.

Another example of Javlec's approach is how it links businesses such as the Sri Gethuk ecotourism business in Gunungkidul with CSR support from companies such as BNI 46 CSR. In collaboration with Javlec, BNI 46 CSR helped Sri Gethuk ecotourism business to develop facilities and infrastructure for tourists alongside tools that helped the community business to promote its package on the internet.

Financial networking is also an important area for Javlec, in which it facilitates links with the funding agency BLU, a Ministry of Environment and Forestry programme. By providing such network links, Javlec improves the information available to the community businesses in areas in which they need to perform well, although Javlec has not yet linked any of its client businesses with conventional banks for business development loans.
7.4 Incubation management

7.4.1 Selection
Not all potential community forest groups who want support will receive support from Javlec. To determine which community businesses receive support, Javlec has developed a set of criteria to choose between the groups. These criteria are integrated rather than stand alone, and complement one another.

First, the business has to have the broader economic interests of the community at heart, not just serve a community elite or a bigger business. Any group wishing to develop a community forest business should have the collective objective to increase local economic income. Preference is given to community businesses that serve low-income communities and which are starting from a fairly small scale (for example, community forest businesses with a turnover of less than 500 million rupiah).

Second, the community business must adopt sustainable natural resources management. Generating economic value frequently contradicts ecological values, but any community forest business supported by Javlec has to accept the trade-off and work in synergy with sustainable natural resources management.

Third, any community forest business supported by Javlec has to be acceptable to government, both at village and district government levels. This is very important, because ensuring synergy with the objectives of village or district government opens up possibilities for long-term support for community business. It means that the business is also able to support local and regional development.

Fourth, there must be a strongly articulated desire and commitment from the community for Javlec’s support. Potential clients are encouraged through community empowerment programmes designed so that community members actively participate and are active agents in that development process. Javlec's previous experiences have shown that without the willingness of and a clear commitment from the community, its services tend not to have the required impact.

7.4.2 Performance oversight
Javlec has no single standard tool to evaluate the performance of assisted groups. This is because each group has different dynamics. Moreover, the needs of each group are different in terms of services offered by Javlec.

As a result, performance monitoring tends to be based on two main processes linked to periodical monitoring and evaluation against the community forest business plan. On developing a business plan, which is an integral part of the incubation process, there commences monitoring and evaluation. There are usually two types of monitoring and evaluation: collective and participatory monitoring and evaluation, which is done with the community or assisted group; and stakeholder interviews which assess the internal management of the business. The former focuses more on the marketing of products,
profitability and other elements of the business plan. The latter covers specific institutional and administrative matters, or those or relating to household finance.

7.4.3 Graduation
Groups which have been assisted by Javlec are considered as independent and ready to graduate if:
- The business has been steady and economically profitable for some time,
- There has been sound business management and distribution of benefits, and
- There is a clear reliable market.

Javlec does not operate a strict graduation policy but continues to assist groups with diminishing intensity after they are considered to be independent.

New groups will be assisted intensively by special core staff. After that, assistance is based on periodic interactions that monitor the progress of the business plan which is being developed. Then, if the groups are considered to be independent against the criteria above, they are monitored through regular communication. In this case, Javlec continues to collect data with the assisted group, in line with its monitoring, evaluation and learning approach.

7.4.4 Outcome evaluation
Javlec collects basic data relating to each assisted community forest business. The data support both monitoring and evaluation, and in providing statistical analysis for improving the services that Javlec offers.

Institutional data: This includes information on the business as a legal entity and its registration, organisational structure, SOP and internal rules of the organisation, management, membership numbers and staff roles, plus some documentation on finance and household incomes.

Data on implementation and development of the community forest business: This includes cash flow, group profits, types of products sold, and investments; the activities and strategy that the business has carried out; and finally, data on knowledge management within the business.

7.5 Impacts
7.5.1 Overall assessment
So far, Javlec has not used specific criteria or indicators to measure the success of the business service that it has provided. Information gathering is still focused on the activities and community forest businesses within the programme. However, some of the information gathered to assess if a business has become independent or not can be used to monitor impact – for example, data that cover profitability, business management, and access to markets. At least 30.2 per cent of community forest businesses that Javlec has supported have become independent (see also Table 7.2).
Table 7.2 Number of clients Javlec has assisted by type of support

<table>
<thead>
<tr>
<th>Type of support</th>
<th>Total clients (2006–2017)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Applying for forest use/exploration licence</td>
<td>42</td>
</tr>
<tr>
<td>Access to finance</td>
<td>15</td>
</tr>
<tr>
<td>Certificate of timber legality (SVLK)</td>
<td>32</td>
</tr>
<tr>
<td>Applying for production permits for household industries (ijin produksi industri rumah tangga or P-IRT)</td>
<td>6</td>
</tr>
<tr>
<td>Support in becoming a profitable independent business</td>
<td>61</td>
</tr>
<tr>
<td>Technology and infrastructure support provided</td>
<td>10</td>
</tr>
<tr>
<td>Business training provided</td>
<td>102</td>
</tr>
<tr>
<td>Promotion and marketing support provided</td>
<td>27</td>
</tr>
</tbody>
</table>

Note: Clients can be either groups or individuals.

7.5.2 Successes

Kalibiru is one of Java's tourism icons. Hargowilis village in Kulon Progo district is a community forest business which has capitalised on the natural panoramic landscapes of its hillside setting, 500m in altitude, to attract tourists. Previously, the hill was located in state forest that was encroached by the community. In 2002, the Mandiri forest farmer group proposed that they obtain a licence for forest use covering an area of 29ha through the national community forestry scheme, which grants community groups with forest management rights for 35 years, and is renewable.

Currently, Kalibiru community forest has received direct economic benefit from the tourism business that it has built. In 2005, the turnover income of that ecotourism business reached 2.3 billion rupiah. That number had increased significantly to 5.9 billion rupiah in 2016. The support that Javlec provided to develop the business took quite a long time. It started with the process of forest management plan development, the selection and mapping of potential tourist viewpoints, accessibility planning, and also the arrangement of the business management plan.

Previously, the Mandiri forest farmer group could not imagine that their business would be based on ecotourism. But after several years developing their business, they had a sudden leap of success in 2012. It was based on the development of social media – both taking selfies for the tourists at pay-per-photo viewpoints, and effective marketing over social media.

The natural resources factors, careful planning and networking provided the basis for the facilitation of the forest farmer group’s ecotourism business in the first five years (2002–2007). This facilitation stressed the process of group capacity building through training on organisational management, internalising rules, and building commitment within the
community. That period ended with the issue of a community forest utilisation permit (ijin usaha pemanfaatan hutan kemasyarakatan or IUPHKm) in 2007. Leadership has been an important factor in the establishment of this successful community forest business – including the efforts of their leaders to assure the firmness and commitment of its members. Mr Parjan is a figure who has proved that he can maintain the group sustainably – both in times of difficulty and success.

The support process involved first establishing a forest management plan, which covered the management area, institutional management, and business management. Group business development began by mapping potential viewpoints and the exploration of creative ideas about how to attract tourists. At that time, the idea which took hold was of a tourism service of taking photos at specific viewpoints – including tree platforms, high canopy walkways, zipwire slides (known as ‘flying foxes’) and the development of a path network around the forest area. The plan that was developed involved many parties and resulted in funding support from local government to a total of 425 million rupiah in 2008. That funding was used to build facilities and infrastructure to provide easier access for and attract tourists. The selection of photo viewpoints included views over the beautiful Sermo Reservoir.

Networks and markets were built and developed rapidly through social media technology. The phenomenon of social media has made marketing Kalibiru ecotourism much easier. Additionally, the tourists themselves become effective marketing agents – and ones who do not need to be paid. At the moment, Kalibiru tourism has directly benefited 200 community members and 60 field staff. Besides tourists, Kalibiru has also become a learning centre, attracting many visitors.
7.5.3 Failures

The Manunggal Sustainable Forest Cooperative (Koperasi Wana Manunggal Lestari or KWML) is a cooperative owned by farmer members of a community forest area in Gunungkidul, Yogyakarta. KWML manages an area about 594.15ha with a total membership of 1,658 people. KWML's objective is to have a timber business sourced from sustainable community forest management and certified as sustainable by the Indonesian Ecolabelling Institute's community-based sustainable forest management scheme.

In 2013, Javlec – with the assistance of donors – helped KWLM to establish a primary industry that converted logs into sawn timber. At that time, Javlec's support to KWML covered assistance with the procurement of production facilities in the form of an office and sawmill, with capacity building in the form of training of technical employees and management staff, and also promotion and marketing.

From the beginning, business operations deviated from the original plan. The sawmill that was installed was used to process local timber whenever required by members, not to buy community timber to be processed and sold on as sawn timber. This timber sawmill service only worked for 15 months and ended with the closure of the sawmill.

The two main reasons for the KWML business failure were internal and service related. Internally, the reasons were:

- Lack of ability to manage finance at the community level, especially to optimise sawmill use. Buying timber raw materials from members to process was too large a variable cost and generated cashflow problems.
- The management capacity was weak. KWML did not develop policies to recruit new staff or a new manager to deal with the lack of professional capacity.
- Technical skills for technology maintenance were weak and not regularly carried out. This meant that machinery suffered damage that interrupted the service of the sawmill and further reduced cashflow.
- The geographic area covered by the cooperative was too large to build the level of cooperation and trust needed to make the business a success. KWML has a large membership spread across three development zones in Gunungkidul (Batur Agung, Ledok Wonosari, Gunung Sewu).

From the service perspective, the main reasons were:

- Javlec's facilitation of access to finance was not quite successful. The business capital that was accessed provided insufficient cashflow required by KWML to make it economically possible to buy logs from members and sell them on as sawn timber to the market.
- There were weaknesses in the capacity-building process, due to the slow transfer of knowledge and skills to KWML's manager. In addition, Javlec's field assistant was unable to influence the manager, especially the chief of KWML, to step down and appoint a replacement. Although the capacity building provided by Javlec did improve skills and knowledge in terms of operating the sawmill and obtaining a timber legality certificate, low profits caused the main personnel to resign to get a better income elsewhere.
• The most important lesson from the failure of KWML was that their unique product, sustainable certified timber, did not appeal to the market. Only a few buyers sought sustainable certified raw materials. The intended strategy to attract special eco-friendly buyers through sustainable certified timber products failed. The second strategy to add value by processing logs into sawn timber also failed. Finally, KWML no longer offers services to its members as a timber sawmill.

7.5.4 Lessons for other incubators

Commitment: A commitment between the incubator and its client has to be agreed before any business services are provided. That commitment is to build relationships that are transparent with trust between client and incubator. There must be a willingness to cooperate in the process of business incubation and the client also has to declare their willingness to make any changes that are needed for the business to succeed, including structural changes, personnel changes, SOP improvement and product development. If the incubator requires a fee based on the success of the client, that commitment has to be built in from the start and insisted on at the beginning of the incubation process or when the business has shown signs that it will be a success.

Integration and synergy with others: An incubator should not interrupt the support given by other service providers who are also helping a business, either directly or indirectly. The incubator should ideally act as a facilitator or mediator to introduce the business client (and their business plan) to other potential stakeholders. The success of business development is often triggered by the ongoing integration and synergy among a community business's different support agencies.

Eco-friendly and socially responsible: The sustainability of a business is ultimately determined by profit, environmental sustainability, and maintaining a social balance. Incubators have to be brave enough to say 'No' to clients who are not committed to building an eco-friendly and socially responsible business.

7.6 Conclusions

7.6.1 Relevance

Business incubation in forest and farm landscapes is relevant if and when it maintains a balance between sustainable development and the sustainability of the environment. The community businesses supported by Javlec are eco-friendly community businesses, but that does not lessen the requirement to facilitate community empowerment to increase economic values.

For community empowerment, increasing economic returns and community income streams are important. Without increasing profitability, it can be said that community empowerment will not endure. Javlec's approach to community empowerment is based on three key principles: the community should actively participate in business activities, the business should be oriented towards benefiting the community; and the community should become its own agent for development.
By facilitating community business with full community participation, incubation programmes can also help solve social welfare problems – and scale up solutions across different communities.

7.6.2 Future prospects
In Indonesia, community forest business is highly contextual. The same model cannot work everywhere. Addressing problems faced by the community, especially on how to increase welfare and boost the local economy, can be achieved using different resources and markets.

Indonesian society is lucky to have high levels of social bonding in terms of collective action or social capital that can be used to develop programmes together. Javlec considers community forest businesses to be an appropriate model for tackling economic problems faced by communities. The challenge is to cater for regional characteristics, and the different community structures and resource potentials, so there needs to be a different strategy for each client business of each community.

Each region in Indonesia has different ecological potential. For example, Gayo district has potential for local coffee, Berau district is a coastal zone and has potential for mangrove ecotourism and marine-based food products, and Gunungkidul region has the potential for local food production such as yams, cassava, sweet potato, corn and a variety of spices. The development of community forest businesses can be an appropriate solution in each of these regions but in different ways.

Javlec has tried to develop as many community businesses as possible. Now, with more experience, the design of business incubation programmes by Javlec can be shared for the benefit of other regions.

7.6.3 Recommendations to policymakers
Community businesses can help to solve social problems such as poverty or broader Sustainable Development Goals (SDGs). With that understanding, new community empowerment programmes led by government are beginning to point to the increase in income generation that can occur through community forest business development. But such empowerment must also be sustainable. Unfortunately, the funding provided by some government programmes is only done on an annual basis. Community programmes then become neglected after a short period or dependent on non-sustainable donor aid, which is often not appropriate to the local community’s need.

Javlec endeavours to support community forest businesses continuously, not just through annual funding cycles. The government needs to identify community needs and local potential that can be developed and optimised before any community empowerment is carried out. The government should also make a design or masterplan for sustainable community empowerment that is continuous – and in line with the approach Javlec is aspiring to use.
Planting rattan seedlings. NTFP-EP focuses on incubating community-based enterprises working with natural and cultural products, such as rattan.

© Wahyu Widhi
The NTFP Exchange Programme in Asia: working with forest-dependent and indigenous communities

by Emmanuelle Andaya

For many rural communities in South and Southeast Asia, developing viable businesses based on non-timber forest and cultural products has been challenging. They face difficulties such as distance from markets, or producing high-quality products in enough volume for both domestic and international consumers. But NTFP-EP has shown how times are changing. From undervaluing the cultural or green value of their traditional products – such as woven textiles or honey – community-based enterprises are working with NTFP-EP and partners (or ‘green intermediaries’) to grow their businesses. Communities are discovering and developing product innovations and new markets for their products and revitalising traditional crafts. Here, Emmanuelle Andaya shares NTFP-EP’s experience of developing its business incubation services over the last 20 years.

8.1 Introduction

8.1.1 Incubator

The Non-Timber Forest Products Exchange Programme in Asia (NTFP-EP) is an NGO and network in South and Southeast Asia. NTFP-EP started as an informal network in 1998 and was registered in January 2004 in the Philippines. Its interlinked programmes include conservation and resource management, advocacy on land tenure and resource access, forest foods, and sustainable livelihoods including business incubation of forest community-based enterprises and green intermediaries.1 It has offices or desks in six countries in South and Southeast Asia: Cambodia, India, Indonesia, Malaysia, the Philippines and Vietnam. NTFP-EP has also expanded its work at the ASEAN level (Association of Southeast Asian Nations) through the region-wide civil society organisation (CSO) Forum on Social Forestry. In 2014, the organisation launched EXCEED (Expanding Community Enterprise and Economic Development), NTFP-EP’s training and advisory wing, to expand enterprise development support to other organisations and non-partner communities working within the same contexts.

NTFP-EP’s enterprise development or business incubation support for producer groups started in mid-2000, when there was still little support of this type offered to forest-

1. ‘Green intermediaries’ are independent spin-off entities that take on the marketing role for established community enterprises. They focus on promoting green and sustainable products.
based and forest-dependent communities. Business incubation developed organically in response to the needs of partner groups of the organisation. The objective was to provide them with the skills to develop sustainable use of their resources, enhance their livelihoods and to access and engage the market without being exploited.

Financing of NTFP-EP business incubation has mainly been project based and sourced from international funders. The organisation has also begun to create a general fund through business development support consultancies. There had been efforts to explore other types of financing like impact investment, but it has been difficult finding a match between offers and the needs of community enterprises and intermediaries.

8.1.2 Context

NTFP-EP's business incubation takes place in two contexts: first, in community areas (usually in remote rural areas) and second, in provincial and national capitals, where markets are found. NTFP-EP works with forest-dependent communities and indigenous peoples (IPs) living in or nearby state-owned forests, community-managed forests or ancestral domains. In Cambodia, where there is a landscape-development approach, business incubation also extends to fishing communities. The communities' livelihoods depend on common-pool resources, usually subject to degradation, security threats, and land-use or access conflict.

In many of these areas, livelihoods are not the only concern. There are also overlapping issues of the impacts of climate change, threats to food security, insecure land tenure, lack of awareness of gender issues, and a way of life that has become more and more cash dependent. For indigenous peoples, lack of markets for traditional crafts has led to the gradual abandonment and loss of certain traditional arts. For forest-dependent communities, limited livelihood choices have led, in some cases, to migration or unsustainable practices like labour-renting to illegal loggers, if not trading illegal logs themselves, charcoal making, wildlife poaching or overharvesting of NTFPs.

Due to their geographic location, there is limited access to government support as well as markets. Their only exposure or access to the market has been mainly through traders. Producers usually sell their products sporadically and on an individual basis. There is no concept or experience of a business or an enterprise, which limits income potential. There is also a lack of business skills and enterprise-development capacities. With limited experience and literacy, there is difficulty in finding community members who can readily fulfil business functions like management, bookkeeping or marketing.

When NTFP-EP's business incubation started, there was still little awareness of fair trade and sustainable lifestyles. Markets for such products were just in the early stages, which led NTFP-EP to incubate green intermediaries first in national capitals, and later on in provincial capitals. These green intermediaries became instrumental in developing new products and competitive markets for community products.

Over the past 12 years, markets have changed and there is now a growing demand for natural, sustainably produced and fairly traded products. The organisation has since
expanded its support to communities and producer groups that can benefit from and supply to these markets for growing sustainable and fair consumption (see also Table 8.1). However, the same challenges still hamper smooth enterprise operations such as impacts of climate change on production, security threats in these remote areas, and the declining state of natural resources which affects the production volumes and accessibility of the products.

### 8.1.3 Target business

NTFP-EP focuses on incubating community-based enterprises working with natural and cultural products and services that are guided by principles of fair trade and the promotion of sustainable lifestyles. Products range from NTFPs (resin, rattan, bamboo) and traditional crafts, handwoven textiles and baskets, essential oils, natural dyes and fibres to processed wild foods such as honey, sago products, fruit juices, pa-o (a traditional Cambodian fish condiment) to services like ecotourism.

The NTFP-EP network chose to concentrate on the development of community-based enterprises not just to promote inclusive development, but also to encourage collective responsibility and benefit-sharing from common-pool resources, whether natural or cultural. In this model, sustainable resource management and/or cultural respect and conservation are an integral part of the business. There are also other benefits from working as a collective enterprise: producers are able to standardise production and meet volume and quality requirements; they are able to negotiate better with the buyers; and they are also able to access different support services that individual producers are not able to do.

In the context of Cambodia, target groups are mixed IPs and non-IPs. The non-IPs do not have a communal background which makes this business model quite challenging. This requires the local NTFP-EP team to explore other models and mechanisms that are more applicable, while ensuring common responsibility for the sustainable management of shared resources and equitable sharing of benefits derived from them. A cottage industry approach seems to work and family/individual businesses appear to thrive better than collective businesses. This theory, however, still needs to be tested more broadly.

<table>
<thead>
<tr>
<th>Year</th>
<th>Cambodia</th>
<th>Indonesia</th>
<th>Philippines</th>
<th>India</th>
<th>Malaysia</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>2010</td>
<td>38</td>
<td>16</td>
<td>57</td>
<td>27</td>
<td>5</td>
<td>143</td>
</tr>
<tr>
<td>2011</td>
<td>38</td>
<td>29</td>
<td>64</td>
<td>27</td>
<td>5</td>
<td>163</td>
</tr>
<tr>
<td>2012</td>
<td>39</td>
<td>30</td>
<td>74</td>
<td>160</td>
<td>3</td>
<td>306</td>
</tr>
<tr>
<td>2013</td>
<td>41</td>
<td>37</td>
<td>80</td>
<td>444</td>
<td>7</td>
<td>609</td>
</tr>
<tr>
<td>2014</td>
<td>44</td>
<td>31</td>
<td>53</td>
<td>53</td>
<td>3</td>
<td>184</td>
</tr>
<tr>
<td>2015</td>
<td>60</td>
<td>41</td>
<td>51</td>
<td>50</td>
<td>4</td>
<td>206</td>
</tr>
<tr>
<td>2016</td>
<td>33</td>
<td>23</td>
<td>31</td>
<td>363</td>
<td>2</td>
<td>452</td>
</tr>
</tbody>
</table>

Sizes, level of development and types of enterprises vary. An enterprise can be an informal self-help group with five members or a federation, cooperative or producer company with hundreds of members. There are also community enterprises and profit and non-profit green intermediaries. The concept of an enterprise, whose goal is to keep growing and to maximise profit, sometimes is a challenge in the community context. Some communities are not interested in scaling up but rather in sustaining their enterprise through market access and financing. Net profit is not the only the measure of success, but also the expanding number of producers that are benefiting from the enterprise.

The community-based enterprises are in the early stages of development, if not starting from scratch, and have to overcome many challenges before they become sustainable enterprises. Table 8.2 summarises the main challenges faced by the communities.

<table>
<thead>
<tr>
<th>Area</th>
<th>Challenges</th>
</tr>
</thead>
</table>
| Market                               | • Distance/access to markets  
• Lack of market knowledge/opportunities  
• Limited market for traditional products  
• Basic lack of awareness and appreciation of the value of natural and cultural enterprises by market actors and consumers  
• Competition                                                                 |
| Production                           | • Accessibility, availability and costs of raw material  
• Lack of marketable products  
• Volumes, quality, timing usually fail to meet market standards and demands  
• Inefficient production resulting in low-quality and high-cost products  
• Lack of access to efficient technologies and low-cost inputs  
• Equipment which is inappropriate to the realities of the communities                                                                 |
| Enterprise development and management | • Distance from support services makes technical support, extension and innovations costly for community enterprises  
• Lack of management capacity (human resources, operations, financial)  
• Lack of trust among community members                                                                                                                                 |
| Financing                            | • Lack of awareness of potential financing  
• Lack of availability and accessibility of soft financing (ie zero-interest loans)  
• Need for working capital                                                                                                                    |


Organising, enterprise development, capacity building, and creating market linkages are the general services that the communities demand. However, in the context of the communities, auxiliary needs also surface, such as raising awareness about fair trade, sustainable resource management and harvesting protocols, and market development, and even awareness of gender issues as women take on both income-generation and household-management functions. These are also addressed by the organisation to promote the smooth and sustainable operation of the enterprises.
8.2 Institutional design

8.2.1 Staffing and structure

Incubation is embedded in the NGO’s structure as the enterprise development programmes of country offices and in EXCEED, NTFP-EP’s training and advisory programme. In most countries, the enterprise development programme is composed of an enterprise development coordinator, enterprise development officers (EDO), and depending on the size the coverage area, area enterprise development staff who are hired directly from the community. Besides the enterprise, the EDOs and coordinators have to support activities that address issues that have an impact on the enterprise, such as training on sustainable harvesting methods, applying for permits to harvest and advocacy for land tenure, among others.

Country offices are also supported by NTFP-EP through backstopping and advisory support for programme staff. There is also a continuous exchange of experiences, expertise and tools among the different offices through regional meetings and learning visits. Country offices and NTFP-EP also tap external experts in the region or beyond to support enterprise development through trainings and advisory support on problematic areas.

The EXCEED programme caters to both community enterprise partners and non-partners who are interested and in need of capacity building. For enterprises supported by country programmes, the EXCEED programme provides complementary and specialised training to address specific problems that are shared by many enterprise partners across countries. The trainings are usually done at whichever country office has the best experience of that specific topic. Knowledge from the network also complements in-country experience. For non-partner organisations and communities, participation in an EXCEED training becomes a starting point for enterprise development partnership in the country. Participation of non-partners sometimes leads to in-country collaboration or consultancy. The programme also maintains a pool of trainers coming from the different country offices and its external advisors who also become resource persons for country-based business incubation.

Green intermediaries operate as separate entities. However, they are included in the organogram as they are an important part of the services provided by NTFP-EP (see Figure 8.1). Green intermediaries in the Philippines and Cambodia are spin-offs from project-based and project-funded marketing support. They have answered the need for more sustained market-linking support. In Indonesia, they were developed from a collaboration of various NGOs. As green intermediaries are run as businesses, it was the ultimate goal to separate them as their own entities and to be self-sustained. NTFP-EP country representatives usually sit on the board of these green intermediaries to ensure that their operations remain aligned to the original mission of the intermediaries. They also receive advice and development support from country programmes when necessary.
8.2.2 **Advisory board**

Each country office and green intermediary has its own board of trustees, which is mainly involved in policymaking, but can also provide advisory support for the organisation as well as the enterprise development programme. There is usually a mix of professionals and experts covering business, legal support and IP issues as well as from funding organisations and NGO partners. For example, on the NTFP-EP Philippines board is an entrepreneur who specialises in organic markets. He provides enterprise development and marketing advice and market links. Another board member is a lawyer specialising in intellectual property rights of indigenous communities. NatureWild, the green intermediary in Cambodia, has an entrepreneur board member who provides advice on financial management, domestic markets and business laws. One board member provides marketing inputs, while another, an ex-enterprise development coordinator, provides inputs on community enterprise development and management. Country coordinators/directors also sit on the boards of the green intermediaries to ensure that their operations are aligned with the vision and mission of NTFP-EP. In the Philippines, the NTFP-EP governance and policy advocacy advisor provides legal support and advice.
8.2.3 Networks
The incubator cultivates relationships with international and national funders, a regional pool of trainers, advisors, market partners and volunteers. Some country offices work closely with government agencies that can supplement their work in the communities. For example, in the Philippines, they work with the Philippine Textile Research Institute (PTRI) to develop knowledge and provide trainings on natural dyes to community groups, and with the Department of Science and Technology (DOST) for technology research and equipment acquisition. They also work closely with the Department of Environment and Natural Resources (DENR) to advocate for land tenure of indigenous communities and to facilitate NTFP-harvesting permit applications, which has an impact on access to raw materials for the enterprises. The country offices also maintain links with volunteer designers who are passionate about natural and traditional textiles. NTFP-EP is also linking up with market movement actors in areas such as social entrepreneurship, slow food, organic products and green design.

NTFP-EP Indonesia works with professors of a nearby agricultural college with expertise in supporting SMEs both in areas of management as well as food technology. Other consultants’ groups and women’s associations are partners in incubation programmes. The organisation has also linked up its groups to the national forest network, the Indonesian Forest Honey Network (Jarigan Madu Hutan Indonesia or JMHI) and to the Forum Fair Trade Indonesia. They have also recently started engaging with the Indonesian Chamber of Commerce and Industry (KADIN) through the PARARA (Panen Raya Nusantara) Festival initiative. They are also working with government agencies such as the Ministry of Forestry and Environment, Indonesian Creative Economy Agency, and Ministry of Law and Human Rights.

The NTFP-EP regional network of NGO partners also provides a valuable contribution to business incubation. Tools and good practices learnt from direct experiences are exchanged through learning visits, exchange of tools and EXCEED trainings, which are then enriched by local experiences and adapted to local contexts. NTFP-EP regional office also organises product-specific conferences (such as on resins or forest honey) so that producers and others in the value chain are able to meet and collaborate.

8.2.4 Finance
Each country programme raises its own funds to support enterprise development or business incubation programmes. In some cases, NTFP-EP also contributes to this effort. The main source of funds for business incubation is project funding from international donors. Many of the funders are supported by government funds. The changing political interests and country focus of these governments, and to some extent economic situations in their countries, have had an impact on funding availability for some country offices. This has led the organisation to diversify its sources of income by establishing the EXCEED programme and doing in-country consultancies. EXCEED training programmes and consultancy projects offered to other organisations generate additional income for the organisation. Most business incubation costs are covered by the project funds of country offices. The regional offices, in some cases, supplement that budget by supporting training activities or special events that contribute to the capacity building or
market linking of the country clients. For EXCEED trainings, the costs are covered mainly by participating clients. However, in three out of four EXCEED trainings, NTFP-EP has also found funds to send its own participants. These are four to five participants out of an average of 20 participants per training. A recent Yogyakarta training of 26 participants was fully funded by the WWF and PARARA partners.

The organisation has also begun exploring impact investment. However, there is an observed mismatch between offers and expectations of investors with the needs of clients, small enterprises and small-sized marketing intermediaries, who require less than what is being offered by investors. Profit margins are small and therefore do not attract traditional impact investors.

8.3 Services offered
8.3.1 Services offered
NTFP-EP business incubation provides customised services that range from enterprise organising, capacity building, mentoring, advising and networking to marketing (see also Figure 8.2). The process is described below.

- **CLAPS**: In areas without identified products, the process starts with a community livelihoods assessment and product selection (CLAPS) workshop. In this process, the community assesses its livelihoods needs and identifies and selects their enterprise focus based on sustainability of resources, market opportunities and feasibility.

- **Community enterprise organising**: In this next step, EDOs facilitate discussions and consultation to enable the community to come together and decide to work as one enterprise. This step includes identifying roles and responsibilities, and policy and systems development. Initial steps also include value chain analysis and strategy development.

- **Production technology upgrading**: Starting from what the community producers already know, which is production, EDOs introduce new inputs to either improve product quality or develop new products to make them more acceptable to the market. Starting with something that they are familiar with helps ease the community producers into the complex process of enterprise development. This service also includes ‘greening’ enterprises. For enterprises working on textiles, NTFP-EP promotes the use of natural dyes and natural fibres. Together with the community, NTFP-EP develops protocols and standards not just for quality improvement, but also for sustainable or green production.

- **Assistance in sales of products**: The organisation ensures that from the onset, the support team tries to find buyers for existing community products, as they develop the enterprise. This is part of the strategy to keep the producers interested in the business incubation process. They have income needs and this cannot stop while they establish their enterprise.

- **Capacity building for enterprise management** is composed of training, mentoring and coaching. Training modules include operations management, financial management – bookkeeping, accounting, marketing – and production management. Trainings are
usually adapted to community participants, who are mostly without business experience and have limited literacy. Trainings are very interactive and experiential. Methods include games, producer visits and film screenings. In EXCEED, actual case studies from participants are used during the training for a more hands-on and practical approach. Activities are also usually done in local languages or are multilingual. The organisation makes an effort not to make language a barrier to learning. Mentoring and coaching are important to the actual implementation of the lessons learnt. Enterprise development officers work alongside community enterprises to carry out activities like bookkeeping, production management and sales. The presence of the staff in the community during the development period encourages the community to continue as they know they are not alone in this activity.

- **Marketing** is one of the most important services provided by the organisation. The geographical location of the clients is a big hindrance to them engaging with the market directly. Marketing includes product development, promotion, communication and sales. When the organisation started, there were limited markets for community products, and markets were monopolised by a few actors. Community producers also lacked any knowledge of marketing strategies, which also limited the market reach of products, hence restricting demand. This led the organisation to incubate marketing intermediaries to provide a fair opportunity but also to find new markets for community products. The marketing (green) intermediaries now lead in the research and development (R&D) of new products from the communities and cultivation of new markets. For example, handwoven traditional baskets made in Borneo are now converted into high-end bags by Borneo Chic, the green intermediary of NTFP-EP Indonesia. Moving beyond tourist markets, these traditional baskets have found a new market in fashion.
Services also go beyond actual market linking or sales to market and industry-development efforts. These aim to increase the value of NTFPs and cultural products and advocate for the development of these industries. Strategies include federation formation, branding, standard development, certification development and consumer engagement and education. Some examples of this type of service can be seen in Table 8.3.

Table 8.3 Additional services offered: from federation building to branding, certification and events

<table>
<thead>
<tr>
<th>Service Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>The Cambodian Federation for Bee Conservation and Community-Based Wild Honey Enterprises (CBHE) and the Philippine Forest Honey Network (PFHN) are national federations of honey producers that work with other NGOs (including WWF Cambodia for CBHE) to provide an industry voice to producers and give them more leverage to demand business development support and negotiate with the market.</td>
</tr>
<tr>
<td>The Participatory Guarantee System (PGS Rattan) or Rotan Lestari is a labelling initiative to increase the value of sustainably harvested rattan for Indonesian rattan farmers. It aims to partner with furniture makers and accessory makers aiming to target the green market.</td>
</tr>
<tr>
<td>Forest Harvest is a collective mark for partners in the region. It is an initiative to increase awareness and appreciation for sustainably harvested forest products by communities. It is currently being piloted on forest honey. For Forest Harvest forest honey, country programmes and the NTFP-EP network have partnered with the Keystone Foundation and Mountain Bee Development Joint Stock Company, and country and provincial networks have partnered with the Sumbawa Forest Honey Network (Jarigan Madu Hutan Sumbawa or JMHS) and Jarigan Madu Hutan Indonesia (JMHI), CBHE, and PFHN to develop standards. Pilot is currently with JMHS, while NTFP-EP leads in the development and promotion. There are also plans to incorporate existing programmes, PGS Rattan and sustainable textile programmes under the Forest Harvest collective mark.</td>
</tr>
<tr>
<td>The Good Hinabi Practice (GHP) textile standard was initiated and developed by the producers themselves in the Philippines and Indonesia. Besides quality standards, this includes occupational safety practices and proper waste management. For example, the dyeing process standardisation, which applies correct measurements, not only guarantees compliance to international standards required by the market, but also ensures that waste is reduced to a minimum and waste, especially waste water, is disposed of properly. This in turn helps to protect the health of producers and their environment.</td>
</tr>
<tr>
<td>The PARARA Festival is a sustainable livelihoods festival co-organised with partner organisations and communities in Jakarta, Indonesia to create a sustainable market for community products by raising awareness and promoting sustainable lifestyles.</td>
</tr>
</tbody>
</table>

2. WWF Indonesia, Kemitraan Partnership for Governance Reform, Association Supporting Women in Small Business, Friends of the Earth Indonesia (WALHI), Samdhana Institute, Koperasi Produsen AMAN Mandiri (Indigenous Peoples Producer Cooperative), JMHI (Indonesian Forest Honey Network), Biodiversity Conservation Trust Fund (KEHATI), The People’s Coalition for Fisheries Justice (KUARA), Weavers Cooperative in Sintang, West Kalimantan (JMM), the Indonesian Conservation Community (WARS), the GEF Small Grants Programme and Teras Mitra, Indonesia Bersatu, RECOFTC, Rok Bumi, Rumah Organik, Yayasan Dian Tama, Network of Traditional Indonesian Knowledge (JKTI), AOI (Indonesian Organic Alliance), YADUPA, YKWS, Mitra Insani, Indonesian Communication Forum on Community Forestry, Yayasan Palung, Yayasan Petak Danum, and Penabulu Alliance.
8.3.2 Service delivery
Capacity-building trainings are conducted in the community. Trainings are supplemented with exposure to production centres and to markets through trade fairs, and learning visits. These external trainings are very useful in influencing mindsets and behaviours resistant to change or new concepts. Seeing processes or talking to buyers first hand helps producers to see new possibilities whether in production or in markets. The EXCEED programme also set up a Facebook group for ex-participants of trainings to share news, tips and some post-training mentoring where needed.

A Fairtrade comic book written in Bahasa Indonesian and a sustainable honey-processing poster in Khmer

The organisation also publishes tools and guides in local languages. The network strives to have a common process and tools that are then adapted to local contexts. NTFP-EP’s From seeds to beads: tales, tips and tools for building a community-based NTFP enterprise was published in 2008. It was designed to provide tools and, more importantly, inspiration from real-life experiences of partners in the network. Saving forests, making profits: a field guide for facilitators of community-based NTFP enterprises is a community enterprise development guidebook and an updated version of enterprise development tools used by NTFP-EP (2012). Guides and quick references such as posters and comic books and a mix of low-cost, portable and accessible materials are developed to facilitate dissemination of new concepts, processes and protocols. These materials are available on the NTFP-EP website.³

³ www.ntfp.org
8.3.3 Linking
Making NTFP-EP’s extensive network of contacts available to its clients is key to linking them with government authorities, buyers and investors. The first step in enabling this is by organising interested individuals into registered groups. Being organised and registered, they become eligible and ‘attractive’ to government agencies and NGOs that provide support to enterprise development, technology and financing. These support providers usually prefer to provide assistance to a group that is already organised, which gives them an assurance that their support will be put to use and not wasted. For example, Danau Sentarum honey producers in Indonesia were linked up with guaranteed funds so they could access loans. Representatives from community-based enterprises are usually invited to provincial, national and international trade fairs and learning visits, where they meet business development support providers and market actors and learn directly from other community producers like them. This is also a part of the training as they are able to experience first hand the demands of these sectors.

National meetings are also organised for different product groups. For example, every two years there is the Crafts Conference, which brings together craft producers from all over the Philippines and some partners in the region. Here, the producers learn of new concepts, and also get to interact with other producers and exchange experiences. Other examples of national meetings are for forest honey and resins.

8.4 Incubation management

8.4.1 Selection
Clients initially come mainly from partner communities, where NTFP-EP country offices have long-term stakes. For some country offices, clients are selected from target areas identified in projects that they are involved in. The country offices also identify groups nearby existing community enterprises that can supplement production. This is to address the problem of meeting volume requirements. Some of the clients come from partner organisations that have learnt of the organisation’s work or have participated in one of its public trainings.

Groups are selected based on their potential to contribute not just to livelihoods enhancement, but also to sustainable resource management, and of course their desire to participate and start a community enterprise. In most cases, there are already products being made and traded on a small scale. Development starts from existing skills and interests. The enterprise team of the country office organises a consultancy meeting with the community and from there establishes the needs and the desire of the members, usually using the CLAPS tool to assess livelihoods needs and enterprise potentials.

8.4.2 Performance oversight
Enterprises supported are monitored for their development and performance during the project period. Quarterly and annual reports are made by enterprise officers who address any issue that comes up. Currently, there are different monitoring processes in the country offices. However, the main business indicators that are monitored include:
• **Organisational development and management:** The establishment of policies, execution of roles and functions by enterprise officers, implementation of business plans, including benefit sharing.

• **Production capacity:** The ability to meet volume, quality, time requirement of orders and, for some countries, to meet clean production standards.

• **Marketing, sales and income:** To increase sales and income of members.

• **Financial management and profitability:** The ability to produce and understand financial reports and cover enterprise operating costs.

• **Sustainable harvesting:** Implementation of sustainable harvesting protocols and resource management plan.

### 8.4.3 Graduation

Based on the experience of the enterprise development teams, business incubation can last from three to five years. In the 2016–2019 strategic plan (NTFP-EP 2016), country programmes agreed on target outcomes and indicators to monitor the development of community enterprises, which is expected within four years of business incubation. These are summarised in Table 8.4. Community enterprises no longer require support when they have members actively involved in enterprise management and can distribute benefits to members, can sustain operations and improve the income of members, and have sustainable and resilient enterprises. For indigenous communities, the additional indicator included is that they are able to contribute to cultural protection and promotion. However, the latter still needs to be systematised and implemented in the different countries.

<table>
<thead>
<tr>
<th>Table 8.4 Target outcome and indicators</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Outcomes to be achieved over four years</strong></td>
</tr>
</tbody>
</table>
| Year 1: Community-based NTFP enterprises (CBNEs) allow community participation and benefit sharing | • Benefit-sharing mechanism should be in place and implemented  
• Women's participation is ensured (decision-making and asset control) |
| Year 2: CBNEs should be profitable | • CBNEs must generate above break-even income  
• Households should have increased purchasing power/cash needs are met |
| Year 3: CBNEs are sustainable and resilient | • Climate proof: disaster plans are ready  
• Sustainable supply of raw materials  
• Culturally appropriate skills/technologies  
• Sustained market |
| Year 4: CBNEs contribute to cultural protection and promotion (internal and external) | • Youth are more involved in all aspects of community enterprise planning, operations and management  
• Increased sales of products that highlight the cultural value of the community enterprises  
• Increased number of communities engaged in the production and marketing of traditional products  
• Increased markets for indigenous products |
There are some cases where longer engagement is required due to community organising issues. In Indonesia, a new group had to be established when a group the organisation was already working with was monopolised by some officers and the weaver members decided to form another group.

8.4.4 Outcome evaluation

Currently, there is no existing mechanism to systematically collect data post-project support. Due to resource limitations, it is difficult for the organisation to monitor community enterprises beyond the initial project period. However, continuing engagement with the marketing intermediaries informs NTFP-EP of community enterprises' continuing operations and their performance in terms of sales and ability to meet volume, quality and time requirements. Intermediaries usually provide feedback to the enterprise development team on any problem they encounter with the producer group. There are also plans to have post-training checks with EXCEED training participants, but due to the lack of human resources, this has not been implemented yet.

Former EXCEED training participant applying new beekeeping technology learnt from EXCEED host organisation, Keystone Foundation
8.5 Impact

8.5.1 Overall assessment

It is difficult to measure success according to the size and profits of the enterprises due to the different needs and aspirations of the community members. For some, as long as they meet their income needs, they are satisfied. The amount may be small from an external perspective, but it is the community’s or the producer’s decision to decide their target incomes.

The sustained and independent operation of the community-based enterprise is the main measure of success. The organisation is able to monitor this through the community enterprise’s continued engagement with their green intermediaries. NTFP-EP Philippines and Indonesia estimate a 70 per cent success rate. In Cambodia, CBHE started with 16 groups. Now, there are only 13 groups that are active. As there are no post-project monitoring mechanisms, it is difficult for some country offices to provide statistics.

8.5.2 Successes

The Sunflower Weavers’ Association (Sunflower) is one example of a successful community-based enterprise. It is a self-initiated community enterprise based in Manalog, a village in the ancestral domain of the indigenous Bukidnon-Higaonon community in the Philippines. Sunflower is composed of 70 members, with 39 active weavers. They regularly supply their handwoven textiles to local, national and international markets.

The women of Manalog have been trading their abaca-based handwoven textile, hinabol, for over 20 years. However, they were doing this individually, competing among themselves, and selling at a low price of 30 Philippines pesos per metre, the traders’ price. They were mainly selling to traders who would buy the products on a consignment basis. The women had to wait a long time to get paid, sometimes only in part. The low price led to hastily made textiles that were of low quality (loose weaves and bleeding colours) and in unattractive designs. Ultimately, trading this kind of textile for many years led to the decline of the perceived value of hinabol.

But in 2009, the women decided that they needed to work together if they wanted to improve their livelihoods from this textile. They organised themselves into an informal group and asked NTFP-EP Philippines for support. The women’s group went through organisational development, identifying officers and their roles and responsibilities, and was formally registered. They participated in quality and design-upgrading training from NTFP-EP and became the only group able to produce naturally dyed hinabol. The organisation also brought in a designer to work with the weavers in creating new designs.

NTFP-EP Philippines also worked with them to stabilise their raw material supply by starting nurseries and planting abaca in their backyards and in their ancestral domain. By doing so, they are sure of a steady production and lower cost of raw materials. Using natural dyes, natural fibres and a mix of contemporary and indigenous designs, the group is able to create their own niche in the growing market for natural and indigenous textiles. Their quality and designs have improved, and there is now market interest and appreciation for hinabol. By becoming organised and working together, the weavers are
able to enter new markets as they meet higher volume and strict quality requirements. They are also able to negotiate better prices that cover the cost of their labour and resource conservation, among other factors. Now, each metre of hinabol is sold at 100–125 Philippines pesos, which is a 300 per cent increase from its old price.

The road to success was not always smooth but the community enterprise has now been operating for almost eight years and it seems that they will continue to do so and grow. From the client side, several factors have contributed to their success:

- **The initiative and commitment of the group, including their local government:** The decision to organise came from the women themselves. They also had direct links with the local government at that time.

- **Strong leadership and a participative culture:** The association had a strong leader and there seemed to be a strong collaborative and participative culture in the village as evidenced by the communal facilities in their village, such as a daycare centre, community hall and health centre.

- **Hunger for new knowledge and openness to change:** The members adopted the new technology and new concepts that they learnt from the capacity-building activities.

From the side of the incubator, the factors that contributed to success include:

- **Responsive and holistic business incubation support:** The organisation did not focus on only one aspect of the business, but worked with the client on a range of factors, including producing a supply of sustainable raw materials, upgrading technology and market development.

- **Inclusive capacity building:** Building the capacity of members in enterprise management – and not just the officers – and eventually delegating and clarifying roles, addressed the problem of monopolisation or dependence on one or a few people to manage the enterprise.

- **Networking:** Linking up with research institutes provided the necessary technology to upgrade production capacity. NTFP-EP brought in the Visayas State University to provide training on abaca reforestation (planting native trees and abaca), and the PTRI for natural dyeing.

- **Competent and immersed enterprise development officer:** Genevieve Labadan, the enterprise development officer, has the competence and experience of over 15 years working with the Higaonon people. She understood the culture and the learning styles of the community and adapted capacity building accordingly. Most importantly, she had the trust of the community. She worked directly and passionately with the community, demonstrating the commitment of NTFP-EP.

### 8.5.3 Failures

Like mainstream businesses, not all community enterprises are able to survive past the development years. Even with good leadership and full development support from the incubator, there are still some issues that lead to the downfall of the enterprise.

There are two examples of community enterprises formed by two indigenous community federations which have failed. The main factor was the lack of clear boundaries between
the business and the federation, especially in decision-making and fund management. While the enterprise should be for the benefit of and owned by the members of the federation, the business and the federation/people’s organisation need to be managed separately. Funds that should have been used for operations and inventory to keep the enterprise going were used for non-business activities, like project activities or allowances of federation leaders. The mismanagement of finances eventually led to the cessation or slowing down of operations. It was also clear from this experience that there was a lack of transparency and accountability from the leaders involved. The failure to distribute benefits and ensure an inclusive business alienated some members who did not see any benefit in being part of the collective enterprise.

For some communities, their participation in the enterprise is not their priority livelihood. There is initial interest because it is a new project. But eventually, their other source of income becomes their main priority (such as farming). This is cultural so this is something that cannot be easily changed in a short timeframe of three to five years. In these cases, the enterprises do not function properly. Instead, production and sales are done sporadically. Another downside is that when NTFP-EP staff work closely with the enterprises, over-dependence may be developed. Without the staff, the enterprise may not be able to function anymore. A balance needs to be reached.

There are also some members who later realise that being a part of community enterprise is not for them. Other needs are more immediate. One example is of some honey hunters in Cambodia. They preferred to sell to traders and earn cash directly rather than sell through the collective enterprise and wait a longer period for their income. Considering this experience, the NTFP-EP business incubation needs to improve its client selection process.
In Cambodia, another problem experienced was the fast turnover of personnel and limited experience, which affected the incubation service in terms of relationships and momentum of support and mentorship with young community enterprises. If field coordinators are not well-enough equipped or committed, or if they fail to understand the level of support and empowerment required, this tends to also affect the characteristic of leadership, motivation and organisation of the enterprises.

### 8.5.4 Lessons for other incubators

- **DO provide comprehensive business incubation support.** Look at the whole value chain instead of just at the business itself to identify and address the challenges. This means securing inputs supply or developing the market if necessary by either providing support directly or by maintaining a network of partners to whom community enterprises can be linked to for complementary support. This also means a long-term commitment and engagement with the community. For clients without prior experience or exposure to businesses, the development time may be longer.

- **DO customise business incubation approaches and business models according to the capacity of the target groups.** This requires a thorough understanding of the target community, including cultures, beliefs and social structures. This is something that is gained over time and through actual immersion. Enterprise development personnel should be embedded in the community. For clients coming from remote areas, with limited exposure to markets and businesses, first-hand experience is key. Exposure to trade fairs and to other successful producer groups helps them to learn and adopt new concepts and methodologies. They become champions of change in their communities.

- **DO strengthen the link of sustainable resource management (SRM) to the business.** Develop a vision of which includes sustainability from the outset. Increase awareness of producer groups by showing links between natural resources and livelihoods. Incorporate SRM into business policies, in terms of raw material procurement, waste management or even profit allocation.

- **DO think of the market.** What has been helpful is developing market linkages for budding enterprises even at an early stage. This gives them a glimpse of the potential of their business. The marketing intermediaries established in the different countries provide a ready and relatively steady market for community enterprises. This is one of the strengths of NTFP-EP’s business incubation.

- **DO select good target clients for incubation support.** This might be difficult as project funds constrict the choice of target clients. However, within that project group, the selection process can be improved to select clients that have enough entrepreneurial interest and acumen to increase the likelihood of the community enterprise continuing beyond the initial project stage.
• **DO strengthen financial management capacity and establish checks and balances in the enterprise.** Money is a delicate matter when working with groups and community enterprises. Besides putting in place necessary checks and balances, it is also important to create a company culture of trust and transparency. Do think about including and developing social cohesion and values in your work.

• **DO invest also in strengthening the capacity and commitment of your staff.** The enterprise development officers are assets to the business incubation programme. Their capacities and their commitment have an impact on the dynamics of the community enterprise and the capacity of their clients. So, they too should be included in the investment of the business incubation programme.

• **DON’T isolate yourself.** Network with and learn from other business development support providers to enrich your own services. Engage the market in order to raise awareness among consumers.

• **DON’T just focus on the community.** Engage with the other actors of the value chain. There are many players in the chain: influence all actors to be more collaborative and a more effective part of the chain. This will also benefit the community, the main client.

### 8.6 Conclusions

#### 8.6.1 Relevance

NTFP-EP business incubation in NTFP-based and cultural community enterprises contributes to inclusive development, sustainable resource management, forest conservation and the promotion of sustainable production and consumption. For NTFP-EP, enhancing community livelihoods and providing opportunities to develop a thriving local economy is essential for conservation and the sustainable management of forested landscapes. By building the capacity and enterprises of forest-based communities and by developing quality products from sustainable sources, NTFP-EP aims to increase choices for sustainable livelihoods and lifestyles. By focusing on local resources, especially traditional knowledge-based industries, communities can also restore faith in their cultures and have the certainty that traditions can be the basis of growing economies as well.

The choice to work with remote communities addresses a gap in business incubation support. It is necessary to reach remote villages to decentralise economic development and create a more inclusive business sector. However, there is limited support for incubation in the early stages of community enterprises. There are high risks. Also, it requires more resources in terms of time and finance. Therefore, current trends of financing such as government funding or impact investment may not find this sector appealing yet. But through NTFP-EP’s interventions, when organised into groups, individual producers have more opportunities to access scaling-up support (technology acquisition, financing). However, not many organisations have the capacity to do this. NTFP-EP, over the years, has been building its core competence in this area.
NTFP-EP is one of the few business development service (BDS) providers offering comprehensive and adapted business incubation support in the region. NTFP-EP business incubation tries to provide comprehensive support, covering the whole value chain from raw materials and inputs to consumer education and market development. The organisation knows that it is not able to do everything alone; for this reason, it cultivates a network of partners from different sectors and actors. Community enterprises are linked up with other agencies and markets once they are ready to do so independently. The approach of NTFP-EP is adapted to the realities of communities living in remote areas. The long-term engagement of NTFP-EP during the incubation period provides community enterprises with the support they need for know-how to take root and for the enterprise to become stable. NTFP-EP is also one of the few BDS providers to use multiple languages in any capacity-building activity. NTFP-EP believes that language should not be a barrier to learning. NTFP-EP business incubation contributes to a more diversified and sustainable forestry industry. First, it provides alternative livelihoods options to extractive, pollutive or unempowering industries. Secondly, this sector does not receive much support, politically or market-wise. There are many barriers and challenges. There is also much criticism of the potential of NTFPs, in terms of their ability to contribute to poverty alleviation or to provide enough benefits to encourage conservation. However, increased or improved benefits can be achieved from the processing of NTFPs or creating finished products. By incubating NTFP-based enterprises, the organisation creates more examples or proof of concept that sustainable businesses work, and for this reason, we continue our work. By creating more products and business cases from forests beyond timber-based industries, NTFP-EP diversifies the forestry industry and increases its potential to contribute to national economic development. From NTFP-EP’s experience, new markets have to develop, which happens over time. When the organisation began community enterprise development, the fairtrade and eco-chic markets had just taken hold. Now, there is a wider variety of potential markets like these for community enterprises to engage with.

8.6.2 Future prospects
NTFP-EP still needs to improve its services. There is a lot to do, but at the same time, there is still a growing need for its support. Specifically, the organisation aims to develop its incubation process further in the following ways.

Reinforce competence and build capacity in business incubation. This means continuously learning from experiences and building capacity of the team, including developing standards of competency and expertise across countries and a strong peer group. There is also a need to scale up capacity to support advanced-level enterprises, and to bring the incubation programme up to date with current issues like climate change. This is where EXCEED plays an important role. At the regional level, NTFP-EP is conceptualising a regional business incubation support service for country programmes and looking for new countries to expand to, which includes support in financing, enterprise up-scaling, assessment and monitoring, and tools development.

Develop a regional minimum standard for effective business incubation for NTFP-based and cultural community enterprises. The organisation’s work is anchored on the
ground’, and it has a far-reaching network. This provides NTFP-EP with the opportunities to learn directly from and exchange experiences, and to continue to develop and adapt its business incubation methodologies and tools. While each country has its own contexts and specificities, through continuous exchange and sharing, NTFP-EP aims to standardise a minimum of capacities across each country and to explore new business models.

**Continue to expand networks.** Community enterprises have various needs that the organisation is not able to address alone. Therefore, the organisation is working to expand its networks in order to link clients to other support providers. NTFP-EP aims to extend its networks to include more product-based networks, where individual enterprises can go for product-specific support; to universities, both for research and development; and to reach young people who are interested in social enterprises. NTFP-EP also plans to engage and collaborate with other business development support experts in order to bolster its capacities and internal expertise. Through EXCEED, the organisation aims to reach and support more communities and organisations.

**Diversify and build capacity for financing business incubation.** There is a need to build NTFP-EP’s capacity to address financing needs among partners. The organisation is exploring the possibility of developing a diversified source of financing. This can include projects, consultancies and other mechanisms. However, the organisation still needs to increase awareness and understanding of available financing options and assess internal capacity.

**Strengthen knowledge management capacity.** This means that NTFP-EP needs to improve its monitoring and evaluation processes, especially in the post-incubation period. It also aims to maintain a database of good practice on areas such as community economy and livelihood development that will be available through the network. The organisation needs to proactively generate and contribute knowledge in the field of community-based NTFP and cultural enterprises in order to increase awareness of and engender support for the sector.

**8.6.3 Recommendations to policymakers**

Business incubation in NTFPs, cultural products and community-based enterprises is a challenging field. However, the opportunities and potential that they offer to sustainable development in rural and forest communities are immense and therefore cannot be ignored. NTFP-EP presents the following policy recommendations to improve business incubation in this sector.

**Incorporate SRM-anchored business incubation services in government community-forest tenure programmes.** Provide community-forest tenure programmes with complementary support services on business incubation in order to address the livelihoods needs of communities alongside operationalising their responsibility to manage their resources. Build the capacity and necessary resources of government personnel to understand, provide and support these needs. Collaborate with existing business incubators like NTFP-EP, which already has over a decade of experience.
Support micro and small-scale producers to access the growing green market. Provide complementary support to business incubators, by creating venues for small-scale producers to benefit from the green market, either through R&D support, technology dissemination and acquisition, financing and/or market linking.

Support the development of a diversified forestry industry. The sustainable and green market is growing. Governments should recognise the opportunities that are provided by forests, NTFPs and biodiversity products. Forest industries need to go beyond the focus on timber products and explore non-timber forest products. Support industry and market-development initiatives for NTFP products – through research, capacity, technology and trade links development.

Develop an ASEAN strategy for the promotion of NTFP-based industries. Southeast Asia has been an important source of raw materials, many NTFPs, for different industries. The regional community needs to take stock of these resources and explore how these raw materials can be developed to increase value-added product creation within the region, instead of exporting raw materials. Public procurement policies that support local products can also be vital in the creation of markets for forest and cultural products.

Create an enabling business environment for green and social enterprises. There are many social and green entrepreneurs that are willing to partner with community-based enterprises. Provide these green social entrepreneurs with an enabling environment, such as – but not limited to – tax breaks, incentives, capacity-building support, access to finance, community-enterprise matching platforms, and international market trade links to allow them to grow their businesses.

Notes
Thanks to Ruth P Canlas, Beng Camba, Crissy Guerrero, Femy Pinto, Tes P Matibag and Merry Tobing for their inputs.
Members of the 24 de Mayo Kichwa producer association with their first batch of Amazonian guayusa tea

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PlanJunto: a community enterprise incubator in Ecuador

by Wain Collen and Celia Salazar

PlanJunto is a social business in Ecuador with the mission to build sustainable community enterprises in fragile tropical ecosystems. Since 2013, PlanJunto's long-term vision is that of forest communities leading sustainable development in effective collaboration with their allies. Here, the authors describe how PlanJunto is evolving into an innovation centre for sustainable community enterprise in the Amazon. Using a process model that integrates institutional economics, organisational theory, co-management, adaptive management, participatory practices and lessons from successful community enterprises, PlanJunto aims to provide its graduate enterprises – and the other stakeholders and partners that support them – with the skills, tools, resources and access to information that they need to thrive, while providing upstream investors with opportunities to be a part of a new model of economic development in the Amazon.

9.1 Introduction

9.1.1 Incubator

Tropical forests are disappearing rapidly, with profound and sometimes devastating consequences at both the local and global level, including social conflict, the extinction of plants and animals, and climate change (Lindsey 2007). It is understood that solutions need to respond to local economic needs as much as global environmental needs. In Ecuador, various proposed solutions have included ecotourism, agroforestry, NTFPs, sustainable timber, payments for ecosystem services, and integrated conservation and development projects, among others. But after working for eight years in the Ecuadorian Amazon as PlanJunto’s founders and advisors, we have observed a concerning trend: these efforts usually fail to sustain themselves, putting into question the proposal of ‘sustainable development’ as a solution to deforestation. One example is the Pueblo Kichwa de Rukullakta indigenous group in Napo Province, who regularly refer to their forested territory as a ‘graveyard’ for economic development projects. Our observations mirror other experiences that identify that most efforts at combining conservation and development in the Amazon are still not meeting expectations (Nasi and Frost 2009; de Jong et al. 2010).

Yet in 2008, as the PlanJunto founders, while working with the Achuar indigenous group in Ecuador and community ecotourism, we experienced first-hand, that sustainable results were achievable – but that a new approach was required. The rural development field has been (and still is) dominated by ‘top-down’ experts, or donor-driven styles that have tried to ‘fix’ deforestation problems with linear change models (Sherwood et al. 2016; Nasi and Frost 2009). But it was consistently not working. Rather, a new approach was needed to
identify and translate relevant best practices from the domain of action-based research into sustainable community enterprises. Between 2010–2013, PlanJunto researched and crafted a process model that integrated elements from institutional economics, organisational theory, co-management, and lessons from successful community enterprises such as Zimbabwe’s Communal Areas Management Programme for Indigenous Resources (CAMPFIRE) programme (Child 2004).

For the last three years, we have been prototyping and refining the model in the field, with promising results. Our portfolio has grown from one community enterprise to four, including Amazonian tea, agave, sustainable timber and community solar river transport – each one with its own unique context and mix of stakeholders. This chapter explores how our organisation has positioned itself and developed into a business development service provider for community enterprises.

During the prototyping phase, PlanJunto offered specialised consulting services to address a set of specific problems in building community enterprise. Towards the end of 2016, with encouraging results from our prototypes, PlanJunto started re-positioning itself as a sustainable community enterprise innovation centre – offering a more complete package of services from incubating to advising and research – to take a community enterprise from seed stage to sustainability (Figure 9.1).

9.1.2 Context
The Ecuadorian context shares similar characteristics with much of the rest of the greater Amazonian basin, which is characterized by rapid change: increased infrastructure development, road expansion, the opening up of vast areas of forest to agriculture and timber extraction, mining and petroleum activities, migration, and socio-cultural change (UNDP 2016). The context can be described as multi-actor and multi-cultural, involving indigenous groups, central and local governments, NGOs and the private sector interested in the region’s development.

The importance of the Amazon forest in terms of local livelihoods, global climate regulation and biodiversity, as well as housing valuable non-renewable resources – mainly oil and minerals – has led to an influx of public, private and NGO actors whose interests can coincide or collide with local interests. This is driving a trend to form collaborations that combine local and/or national economic goals with global environmental goals. Local communities are by far the group most directly impacted by any changes. Around 80 per cent of the forests in Ecuador are owned or inhabited by indigenous communities, who are culturally rich but economically poor, with nearly 80 per cent classified as poor according to the Index of Unsatisfied Basic Needs (INEC 2010).

Indigenous land rights are respected at the constitutional level, but below-soil resource rights belong to the government. Overlapping rights contribute to the Ecuadorian Amazon being a region where conflict is a consistent part of the landscape (MAGAP 2014). For example, in the northern Amazon region, oil extraction has been underway since the 1980s, with dubious results for local communities. The central and southern regions – where three of PlanJunto’s projects are situated – are still largely intact, with very high levels of local
collective ownership. But connections to the market for forest communities – in a manner that improves livelihoods, while maintaining cultural and environmental heritage – remains underdeveloped, with many remaining on the subsistence level, or as unorganised small-scale producers of low-value crops for sale to intermediaries. For communities that have some sort of network, there are a number of attempts to develop sustainable development activities, like ecotourism, agroforestry, sustainable timber, and payments for ecosystem services.

**9.1.3 Target businesses**

PlanJunto markets its services to community enterprise ventures in fragile tropical ecosystems. At present, our community enterprise portfolio includes:

- **An organic and fairtrade Amazonian tea-processing business owned by the 24 de Mayo Kichwa community**: The project has been supported by the Runa Foundation, the private company Runatarpuna – the main market-access and technology-transfer partner – and the Crisfe Foundation, which have provided friendly terms of finance for a processing plant. PlanJunto has been hired by the Runa Foundation and Crisfe Foundation to incubate the project.

- **A solar river transport system – Kara Solar – owned by nine Achuar indigenous communities**: The project is a collaboration between the Achuar Indigenous Nationality of Ecuador (NAE) and the Aldea Foundation. Other stakeholders include the local provincial government, the Solar Electric Light Fund (SELF) in the US, and corporate supporters Torqeedo and Hanergy. Financing is primarily from the Inter-American Development Bank (IDB). PlanJunto is a formal strategic partner in charge of building the community enterprise systems and structures to sustain the solar transport infrastructure.

- **An agave cactus-distilling project with a Kichwa women’s group from Cayambe**: The project is another collaboration with the Runa Foundation and Crisfe Foundation, with the objective to produce an export-quality liquor from agave syrup, sourced by the women’s group using traditional harvesting techniques. The project is in an early phase, with strategic objectives to strengthen local organisational capacity and market access, strengthen agave land management, and product distillation and development. PlanJunto oversees the first two components.

- **A locally controlled sustainable timber project with the Asacapum Kichwa Forestry Association**: This is a fledgling project and supporting organisations include the private forestry company Verde Canandé and the Runa Foundation. PlanJunto has been hired to oversee organisational and institutional development for this multi-actor partnership.

Our current clients, with a shared vision and open to our methodological approach, face challenges designing and coordinating activities with indigenous communities that combine social, environmental and economic aspects in ways that should lead to enterprise success. As a result, the broad request to PlanJunto is to oversee a wide range of local, and inter-stakeholder-level issues. Quite often, just what this work entails is not clearly delineated by the clients, and is referred to as the ‘social’ part, or the ‘community’ work, or the ‘collaboration’ issues. Part of our added value is that we have the tools and knowhow to structure this work, and accompany community enterprise issues from start to end.
9.2 Institutional design

9.2.1 Staffing and structure

PlanJunto’s current organisational structure consists of a board of directors, a general manager, our external advisory board, a field operations manager, programme associate, accountant and field technicians (see Figure 9.2 and Table 9.1).

9.2.2 PlanJunto advisory board – a community of practice

The PlanJunto advisory board was established in 2013 and has been important for our organisation’s development (see Table 9.1). It has evolved according to both PlanJunto’s and our board members’ needs and abilities. To start with, as we began pioneering our new model, skills that were valuable to support the general manager were business and strategic development, entrepreneurship, and mentoring. During the early pilot phase, the advisory board’s networking potential was less utilised. As PlanJunto looks to build on our prototype results, the board’s networking capacity is becoming an increasingly important asset.

The advisory board operates in a largely informal and fluid manner. We want to avoid the group becoming a cumbersome space that puts inflexible demands on members’ time and attention, but which rather thrives on the shared curiosity and passion of its members toward building new forms of collaboration that address important problems. The group increasingly operates as a community of practice, whereby the experiences of all members feed into a type of collective knowledge pool that strengthens the group overall.
Meetings are called when needed, or smaller breakout meetings take place with those members who are interested in contributing. There are also periods where no meetings are held because they are not needed, or everybody is busy. As described by Wenger and Snyder (2000), the group shares knowledge in free-flowing, creative ways that foster new approaches to problem solving.

We are exploring ways to expand our community-of-practice approach to also incorporate community leaders and a nascent research network. Our philosophy is that it is ‘all about the people’ – a group of individuals with shared passion, commitment and belief in what they do as a special ingredient for a journey of enjoyment, learning and success (and probably some things that don’t work out as planned at all).

<table>
<thead>
<tr>
<th>Advisory board member</th>
<th>Area of expertise</th>
</tr>
</thead>
</table>
| David Elliott          | • Community enterprise  
| Founder, Madre Chocolate | • Strategy        
|                        | • Business management  
|                        | • Leadership         |
| Shannah Metz           | • Team management/talent  
| Vice president, people and talent, Teach for America | • Strategy         |
| David Clark            | • Strategy         
| Independent consultant, organisational culture/sales manager, REBBL Inc. | • Culture         
|                        | • Sales            
|                        | • Finance          
|                        | • Entrepreneurship  |
| Joanna Levitt          | • Impact investing  
| Director, Buen Vivir Fund at Thousand Currents | • Research         
|                        | • Community outreach |

### 9.2.3 Networks

In addition to the advisory board, PlanJunto's prototype work in the field has led to a growing network of support organisations connected directly, or indirectly, to field projects that provide additional skills and resources needed to take community enterprises to sustainability. This network has grown organically, and at present is composed of:

- Runa Foundation: finance, community engagement, intellectual property.
- Runatarpuna: market access, technology transfer.
- Crisfe Foundation: finance (grants and loans), financial capacity building.
- Aldea Foundation: finance, community engagement.
- Inter-American Development Bank: finance.
- Muyu1: market access.
- The Pastaza and Morona-Santiago provincial governments: finance and political positioning.

1. Muyu is an initiative developed by the Cofradía Hotelera in partnership with the Crisfe Foundation that seeks to create spaces, networks and bridges that help entrepreneurs to become economically and socially profitable.
These actors provide important capacities in providing finance, getting ‘graduate’ enterprises into the marketplace, and facilitating access to other services that were not initially core PlanJunto services. We aim to develop our network into a dynamic, decentralised but cohesive body united by a shared vision and well-defined roles and responsibilities. The network (Figure 9.3) will be the nexus for building a dynamic set of relationships between the founding partners, communities, investors, the market and academia. Our aim is that the network provides graduate enterprises access to information, skills, tools and resources, and provides upstream investors with opportunities to be a part of a new model of economic development in the Amazon.

Figure 9.3 PlanJunto’s network potential

9.2.4 Finance

We actively seek to avoid the tendency of many non-profits to not prioritise performance or results, or fall into ‘mission drift’ according to finance opportunities (Drucker 1990). The PlanJunto founders have been committed from the start to a clear value proposition, and we have incorporated a for-profit limited liability business. This decision has been beneficial in terms of pushing our team to focus on the business basics of solving a specific problem. Accordingly, we have prioritised values like customer service, efficiency, measured output and agile development, which has been important for strong prototype results, and steady (if not astronomical) growth projections.

During our prototype phase, PlanJunto has been paid a service fee by organisations supporting community enterprises who share our vision, and who require PlanJunto’s services. We plan that PlanJunto’s revenue streams will diversify to link with investment raised for our graduate enterprises, and from investments into financially promising graduates. This financial model is currently under development.
That said, there are characteristics of PlanJunto’s work for which a non-profit branch may become beneficial. PlanJunto is not a conventional business that is socially and environmentally responsible ‘on the side’: our mission is firmly targeted at positive social and environmental change. Furthermore, there are many exciting community enterprise ventures that either do not have the networks or any funding at all – which makes a PlanJunto intervention unlikely with our present finance model. So, we are in the early stages of evaluating the need to establish a non-profit arm – or partnership with an appropriate NGO partner – to support the current for-profit social business. We would maintain the business arm and principles for better-funded consulting, and could develop an NGO finance model for activities that respond directly to the above issues.

9.3 Services offered

9.3.1 Services offered

We have a set of evolving operational principles informed by science, practice and our advisory board (see eg Levitt and Rimington 2017). These principles form the foundation of our work:

- Explicitly manage power differences, competing claims, and different ways of knowing.
- Prioritise relationships and trust.
- Prototype early on and regularly, and build in a learning process.
- Pay attention to institutional development, but beware of top-down rule-making.
- Change agents are important, but don’t neglect the larger user group.
Self-organisation is important – without it, the venture will likely not last.

Much lasting social and institutional change takes place as a form of ‘flow’ and cannot be designed or controlled (Sherwood et al. 2016). It takes time, there are many possible outcomes, and continuity itself can be a powerful success factor.

With these guiding principles as an umbrella for our work, we have structured our service provision to include community enterprise incubation services, partnership building and negotiation, process and change management, and upstream advisory services.

**Community enterprise incubation services**
- Developing community enterprise business plans.
- Co-designing locally appropriate business models and business plans (management, governance, economic structures and systems).
- Building strong values and objectives that lead enterprise decision-making processes.
- Developing skills to overcome power differences at the multistakeholder negotiation table.

**Partnership building and negotiation**
- Setting the scene for the business to operate in the context of a broader community.
- Ensuring that all parties understand what they are getting into, what will be required of them, and what they can expect in return.
- Negotiating multi-actor collaboration agreements – often a cyclical process that needs to be revisited.
- Forming and facilitating committees, associations and other legitimate multistakeholder decision-making platforms.
- Community enterprise prototype design, implementation, adaptation.
- Using adaptive management as a management tool for prototyping using a simple but systematic learning and accountability mechanism (see Figure 9.4).

![Figure 9.4 Basic representation of adaptive management cycle](image-url)
Process and change management

- **Conflict resolution:** Timing and intuition is important in terms of identifying the need for a formal mechanism (one will likely be required at some time). It is redundant if designed too early, but should be in place before a serious conflict emerges that could derail the partnership.

- **Organisational, legal and institutional development:** We pay attention to both formal structures and informal relationships that define the norms.

- **Participatory monitoring and evaluation (PM&E):** This should be linked to the adaptive management process.

- **Capacity building:** This should be done with communities and with community allies.

- **Financial analysis and management, business management, innovation, change management.**

- **Co-design of benefit-sharing mechanisms.**

- **Leadership development:** Coaching and mentoring (initial stages of programme). PlanJunto is cultivating a mentor network to support PlanJunto’s portfolio of community enterprises.

- **Monitoring performance** and advising on quality and standards for community enterprises (oversight role).

These services are synthesised into a process model\(^2\) that broadly guides our work in the field (see Figure 9.5).

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2. The model structure was inspired by Borrini-Feyerabend et al. (2007).
Our principal innovations are:

• **A piloted (and evolving) science and practice-based framework:** PlanJunto applies a best-practice framework with lessons from social sciences that incorporate over 30 years of research:
  • Institutionalism (North, 1990; Ostrom, 1990).
  • Community-based natural resource management (Murphree 1997; Child 2004).
  • Co-management, co-learning and resilience (Berkes 2009; Folke 2006).
  • Innovation for complex settings (Giller *et al.* 2008; Leeuwis and Aarts 2011; Levitt and Rimington 2017).
  • Post-institutionalism and practice-based approaches (Cleaver 2002; Cleaver and Franks 2005; Sherwood *et al.* 2016; Aarts and van Woerkum 2002).

• **Local leaders as primary change agents:** The future of the Amazon is in the hands of local populations – we avoid the trap of ‘outside solutions’ by putting the tools for success into local leaders’ reach.

• **Making cross-cultural partnerships work:** That combines energy and resources in a manner that adds up to more than the sum of the parts. We prioritise relationships and diversity, leverage heterogeneity, and legitimise all forms of knowing (as in Levitt and Rimington 2017) and consistently negotiate for fair and efficient agreements.

• **Social and institutional innovation and change:** Solutions are not imported, or improvised, but grow through participatory design, practice, learning and adapting. That said, we also value institutional development through non-linear processes that resist design, such as self-organisation, responding to shocks and surprises, daily living and being, and informal relationships (Sherwood *et al.* 2016).

In summary, PlanJunto responds to a persistent problem with a targeted value proposition that continues to evolve. In doing so, we offer a set of services that may be somewhat unconventional compared to most incubators – however, according to lessons learnt over 30 years of social science, and from the results of our prototypes, these services are important. We aim for the following outcomes:

• **Enterprise graduates:** Have the leadership, skills and networks and the collective and multi-actor institutions and levels of self-organisation needed to engage with markets in a socially and environmentally sustainable way.

• **Investors and donors:** Gain easier access to a wider portfolio of community enterprises, and can invest responsibly – and with increased confidence – in traditionally risky, unpredictable scenarios.

**Upstream advisory services**

There is growing demand to work with indigenous forest communities, but this is a field characterised by lack of knowhow. PlanJunto acts as a gateway for sustainable partnership development. Our experience makes our team a knowledge resource for organisations which aim to work with Amazonian communities, but are not sure how to. Our aim is that the success of PlanJunto graduates will continue to convert the PlanJunto name into a standard and brand for excellence in the niche field of building sustainable economic partnerships with communities.
9.4 Incubation management
9.4.1 Selection
This is still a relatively underdeveloped area, but the following are the preliminary criteria we apply in selecting community enterprise participants for the incubator:

- **Community participation, ownership and benefit:** The enterprise idea should demonstrate how local ownership, participation, and benefit incentives are geared toward good local stewardship over forests. If local participation and incentives are insufficient, then sustainability will be limited.

- **Environmental sustainability:** Enterprises should demonstrate how environmental sustainability is built into the model. Enterprises that reduce deforestation pressures, biodiversity and natural habitat loss, and/or sustain the ecosystem services that underpin human well-being will be given priority.

- **Economic feasibility and scalability:** To ensure the efficient investment of resources, enterprise ideas will need to pass a ‘back of the envelope’ economic, market feasibility and scale test. The back of the envelope may be ‘bigger’ as in the 24 de Mayo case where there was finance available to undertake a detailed business plan and financial projections. Or they may be ‘smaller envelopes’ as in the case of the Kara Solar river transport project, where projections were simply not possible, as there were no prior examples to base figures on. In the latter case, more weight was placed on scalability and potential impact of the project, which ranked very highly.

- **Scalability/impact:** Projects that have the potential to be successful and replicated to reach more people tend to be a more efficient use of resources.

9.4.2 Performance oversight
Our mandate is set out by a shared intent and laid out in a community enterprise strategic plan, which includes impact and progress indicators. Our role is to support communities to set their own progress measures, and mechanisms to measure progress. These may include:
• Impact: Jobs created, revenue generated, hectares under conservation.
• Financial sustainability: Revenue, profitability, capital raised, alliances established.
• Capacities: New skills, leadership.
• Process: Level of satisfaction with the project, perception of responsibilities undertaken well, trust between parties, self-belief in capacity to manage enterprise well, learning, the identification of project challenges and strengths.

9.4.3 Graduation
As locally established success indicators are gradually met, PlanJunto’s role increasingly becomes one of oversight, advising, coaching and support.

9.4.4 Outcome evaluation
We do not yet have a fully developed data-tracking system since we are still graduating our first batch of community enterprises. We are generating data on graduate baseline information and progress indicators, which we are feeding into a data-tracking system to help identify success and risk factors.

9.5 Impact
9.5.1 Overall assessment
PlanJunto was founded in response to a persistent problem – that community enterprise in the Amazon is not meeting expectations (de Jong et al. 2010; Nasi and Frost 2009). The PlanJunto founders identified that the constituent parts to this problem were in some cases ‘traditional’ incubation challenges faced by private entrepreneurs, such as marketing, business and leadership skills, networks and finance or office space etc. But alongside these issues, community enterprise in tropical forests faces a set of additional challenges:

• The need to combine socioeconomic and environmental goals into the basics of the business model. We should bear in mind that very few companies in the private sector have done this successfully.
• Community business models need to consider a mix of both individual and collective incentives.
• Community businesses usually involve a mix of stakeholders, with varying degrees of experience, knowledge, power and capacity, trying to work together (and local stakeholders often have very little experience).
• A common objective among many of these enterprises is to change the way that local people interact with their natural environment – and so by definition are aiming for social change.

Despite these special conditions, the PlanJunto founders realised that efforts to build community enterprises were mainly formulaic, aiming to solve a problem with a purely technical solution, which could then be applied by local communities, as described by Leeuwis and Aarts (2011) and Sherwood et al. (2016). This approach too-often assumes that specific technologies are universally applicable, that sociotechnical change is a linear process, and that rural people are largely homogenous (Leeuwis and van den Ban 2013), among other assumptions.
It was this set of problems that PlanJunto saw as the main obstacle to sustainability, and which we set out to address first. In the context of an enterprise involving multiple actors and common-pool resources, new models are needed (not exclusive of the other requirements for a conventional business to succeed). PlanJunto first positioned itself as an organisation with the tools and skills to tackle the community enterprise-specific challenges that traditional incubator models do not incorporate, which is the really underserved niche. We then set up partnerships with other actors to ensure that the other requirements, like finance and market access, were not neglected. We believe that this approach has facilitated the successes of our community enterprise partners so far, as the 24 de Mayo pilot project detailed in the next section illustrates. The pilot project’s results are starting to drive growth in PlanJunto’s client and portfolio base, including an Andean Agave project and a contract by Runa to apply the model in a community forestry project. PlanJunto is also applying its model in the Kara Solar community solar river transport project, implemented by Aldea Foundation, the Achuar Indigenous Nationality of Ecuador and IDB, with intention to scale up across the Amazon basin.

9.5.2 Successes

The 24 de Mayo project is a community enterprise collaboration between five organisations that aims to devolve supply-chain responsibility over the guayusa Amazon tea supply chain to an indigenous producer association, 24 de Mayo. Key stakeholders in the consortium include:

- The 24 de Mayo Kichwa producer association.
- Runa Foundation: Main project proponent and financier.
- Runatarpuna: Private market-access partner.
- Crisfe Foundation: The foundation branch of a national bank that finances such projects.
- PlanJunto: we were hired to bridge and incubate the efforts and capacities of these organisations into a cohesive vision and successful community enterprise operational unit.

Over the last two years, PlanJunto has piloted its incubation model (Figure 9.5) towards this goal with promising results to date, in a context of complex, multi-actor collaboration.

Some key steps in this process have included:

- Writing a detailed business plan to construct a feasible business model.
- Identifying a set of potential partners, including a market-access partner, technical knowhow transfer and start-up finance provider, to bring the business plan to life.
- Negotiating agreements between stakeholders for the preparation phase of the business: Roles and responsibilities, ownership and legal structures, finance and decision-making mechanisms.
- Setting up and facilitating a multi-actor executive committee, responsible for decision-making during the preparation phase. The committee is composed of four community members, one member of the Runa Foundation and one from Runatarpuna.
- When necessary, providing direct support to the community, or other stakeholders, when specific action is required.
- Addressing power and knowledge differentials. For example, holding preparation meetings with the community prior to negotiation of a complex issue to help them develop a position.
• **Facilitating a local training programme** in basic business finance, leadership and business management.

• **Coordinating a guayusa-processing training programme** between the community and the company.

• **Supporting community enterprise leaders** to pitch for finance, and other network development in agri-food fairs.

• **Facilitating the selection and training** of company management and staff, in close collaboration with the company and the foundation.

• **Facilitating finance agreements** for infrastructure, and helping to coordinate the construction process.

• **Designing prototype management** and governance structures.

• **Strategic planning** – including strengths and weaknesses, opportunities and threats (SWAT), vision, mission, long-term objectives, work areas, activities, and indicators.

• **Participatory monitoring and evaluation (PM&E)**, in cooperation with the Runa Foundation.

It is important to note that PlanJunto’s role was not to undertake, as such, all these activities ourselves – in the end, it is up to the direct parties themselves. But rather, our role was to design and provide knowhow and momentum to a community enterprise process underpinned by the best practices available. Behind the above more-specific activities, there have been a host of less-tangible, usually human-centered activities that have been the ‘glue’ to hold things together: negotiating and re-negotiating agreements at multiple levels, lobbying specific parties when needed to overcome obstacles, providing special support when needed to weaker parties, the early identification of tensions and creative thinking to overcome them, and one-on-one relationship development with influential individuals, and so on. This ‘glue’ has been a key part of our success.

From an US$80,000 investment in PlanJunto’s work over three years, the financial benefits seen in Table 9.2 are significantly more secure, suggesting a solid business case behind our work.

<table>
<thead>
<tr>
<th>Stakeholder</th>
<th>Investment/benefit</th>
<th>Total over 10 years</th>
</tr>
</thead>
<tbody>
<tr>
<td>24 de Mayo community</td>
<td>Locally generated revenue</td>
<td>US$500,000</td>
</tr>
<tr>
<td>Runa Company</td>
<td>Savings in decentralising processing to 24 de Mayo</td>
<td>US$144,000</td>
</tr>
<tr>
<td>Runa Foundation</td>
<td>Loan to 24 de Mayo to cover start-up costs</td>
<td>US$40,000</td>
</tr>
<tr>
<td>Crisfe Foundation</td>
<td>Loan to 24 de Mayo</td>
<td>US$30,000</td>
</tr>
<tr>
<td><strong>Total financial investment</strong></td>
<td>and financial benefits from a successful 10-year project</td>
<td><strong>US$714,000</strong></td>
</tr>
</tbody>
</table>
9.5.3 Failures

One ‘failure’ that stands out for us was a breakdown in understanding between a community ally NGO and PlanJunto. We were hired by the NGO to support the development of a community ecotourism project. The community was a small, well-knit, indigenous community but, however, very isolated. It can only be reached by airplane. The NGO was a very hands-on supporting organisation, providing finance for the development of the tourism project, as well as bringing in tourists to the community – managing much of the administration of these trips, as well as setting up legal structures from its city base. PlanJunto was facilitating a two-day workshop with the objective (as we understood it) to help strengthen enterprise structures. And a necessary step early on is to establish roles, rights and responsibilities for the enterprise. Day one of the workshop went very well according to us, with active community participation and meaningful discussion and debate.

However, during the planning session for day two – in which we aimed to go deeper into the issues of rights and responsibilities – the NGO partner became critical of our approach, arguing that discussing rights would confuse the community and maybe now was not the right time. This made no sense to us, and actually violated a guiding principle of our work, that local ownership and a rights-based approach are key to locally owned forestry ventures.

Despite an excellent rapport with the community during the workshop, this second day was a watered-down affair, and our work was discontinued after that visit. Our interpretation of the response from the NGO was that the discussion around rights may have made them feel nervous about what their responsibilities toward their community partner were – in terms of financial reporting and decision-making that was taking place outside the community. We had not yet agreed with the NGO partner on ‘local control’ and ‘local rights’ as guiding principles. More importantly, it was necessary to talk upfront about what this meant in practice – in terms of decision-making, accountability and authority etc.

In hindsight, there are two ways to look at this ‘failure’. Firstly, we can view it as a problem of planning and consensus building. Given the protagonist role of the NGO for the project, we could have anticipated pushback, and should have kept them much closer to the planning process and ensured their buy-in from the start, or if necessary, identified rights as a ‘red flag’ or potential issue to resolve and adjusted our planning to accommodate their needs, or at least go more slowly. One the other hand, there are ethical issues in this example that needed to be highlighted, and so maybe the break in collaboration was an inevitable outcome. You cannot work with everybody all of the time.

9.5.4 Lessons for other incubators

• A process-orientated, relationship-based approach to development can be met with scepticism. This is notable in terms of pricing, time, positioning, results, and the pace of progress, in a field traditionally focused on projects and products that are easy to package. Consistent effort is required to clearly define, and redefine the incubator’s role and value proposition. Client focus, attention to securing results, and co-learning are key to gaining the confidence of decision makers.

3. Due to its sensitive nature, the project will remain anonymous.
• **Conflict and tension lurks around every corner**, and can quickly unravel conditions for cooperation. It is important to establish shared vision and values early on and use these actively. The time invested in bringing stakeholders together in formal decision-making spaces will reap rewards – in deepened trust, familiarity with styles, and stronger decision-making as multi-actor teams. Overcoming these obstacles requires creativity and flexibility.

• **Respect and promote all forms of knowing** (Levitt and Rimington 2017). Power and knowledge differentials are inherent in these contexts. Unchecked, these will become entrenched and weaken the enterprise overall. Less-experienced and weaker community partners sometimes need a prior space to evolve their positions on difficult issues, before coming together with more organised stakeholders to negotiate.

• **Foster leaders as positive change agents.** Strong individuals – from communities and funders – can both make or break a community enterprise. They need to be inspired and inspire, and will be ultimately responsible for driving the change needed for sustainability. Leaders need to feel both supported by and accountable to a board, multi-stakeholder executive committee and/or assembly of shareholders. Leadership in the community enterprise setting is less a natural talent than a learnt skill.

• **Shocks and surprises should be no surprise.** No matter how much effort goes into the ‘right’ design, it is impossible to control everything. Resilience to shocks will be important. Our early understanding is that local capacity for self-organisation is a key indicator of ability to weather and adapt to shocks.

### 9.6 Conclusions

#### 9.6.1 Relevance

The potential application of successful community enterprise incubation is significant. Over 65 per cent of Ecuador’s forests are under indigenous ownership. Over US$80 million is being invested in sustainable development in the Ecuadorian Amazon in 2017, through the Green Climate Fund (UNDP 2017). Over US$250 million is being invested in Peru’s REDD+ programme in a Joint Declaration of Intent with Norway and Germany (Statsministerens Contor 2017) – a large part of which funding will be targeting community sustainable development in tropical forests. Although there are still few clear answers for how to build locally led development in the Amazon, we believe that PlanJunto’s work in the field is at the forefront of finding solutions that last.

#### 9.6.2 Future prospects

PlanJunto is currently undergoing a three-year programmatic area restructuring – where the organisation evolves from a community enterprise business developer, into a community enterprise innovation centre, comprising three areas: consulting, incubation, and research.

**Incubation: from practitioners to trainers**

The incubator brings together Amazonian leaders into a programme of connection and learning, equipping them with tools, knowledge and access as well as advice, markets and finance they need to be agents of change in their communities. The space provides a platform for socially oriented investors with true affinity for regenerative economic values to connect with a portfolio of exciting community enterprises. PlanJunto also provides a
much-needed service catalysing private and public finance in a lowered-risk, blended-capital strategy.

**Research: linking practice with science**

Hanson (2016) claims that we lack organisations able to take promising results from science and convert them into social and institutional innovations that can help solve complex social problems — but that very large gains could be achieved by those able to do so. To strengthen our work, we are developing a research proposal that investigates this question: how can organisations foster social innovation in complex environments in a manner that strengthens sustainability? PlanJunto offers a real-life laboratory to innovate at the nexus of social science and practice over the next 15 years. By maintaining a link between PlanJunto’s fieldwork and academia, we hope to improve our work on the ground, and support academia to better understand how organisational models can foster social innovation in complex development contexts.

**9.6.3 Recommendations to policymakers**

After several decades of decentralisation of forest management rights in Latin America (Colfer and Capistrano 2005), increased financial flows for ‘climate-friendly development’ are contributing to a tendency to re-centralise forest management in Ecuador and Peru, mirroring concerns identified by other scholars (Phelps et al. 2010; Thompson et al. 2011). This approach aims ‘on paper’ to align the interests of a wide range of stakeholders (local indigenous, national development, global climate) to bring about desired environmental outcomes.

However, in attempting this untested alignment, Thompson et al. (2011) suggest an emerging crisis of governance that will compromise future project and policy goals, and the well-being of indigenous stakeholders. The decentralisation of forest rights was founded upon the principles of increasing efficiency, equity and democracy (Larson 2004), well-understood to create better conditions for effective and sustainable forest management (Edmunds and Wollenberg 2003; Gibson et al. 1998). However, the realignment of interests and rights to incorporate climate goals is currently focused on structures more comfortable to national authorities and the global North, and unless significant attention is paid to the way that indigenous peoples are incorporated into ‘climate-friendly’ forest governance, then the primary objective of mitigating climate change is remote (Thompson et al. 2011).

At their most local, initiatives to manage tropical forests sustainably will depend on indigenous people who live with the forests (Cronkleton et al. 2011). If political and financial incentives to reduce deforestation are to change society in a fundamental way over a generation or more, as a real transition requires (Rotmans et al. 2001), it is critical to strengthen political frameworks that empower indigenous actors with the rights and incentives to manage their forests in a manner that responds to their local economic needs alongside climate goals.
Women charcoal producers evaluate and test the consistency and quality of their coal compared to their competition, Calakmul, Campeche, Mexico

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Reforestamos and FEDA: fostering entrepreneurial forest-community businesses in Mexico

by Isaac D Rios-Valdez

The Forestry Entrepreneurial Development Agency (FEDA) is an initiative created by Reforestamos Mexico AC (Reforestamos) in January 2013. Like other incubators, it fosters entrepreneurial performance. However, the services that FEDA offers are mainly training in entrepreneurial and human-development skills as well as supporting entrepreneurs and development promotors in their process of development. FEDA works with forest communities from the Yucatan Peninsula to create competitive and responsible enterprises. Its objective is to use a sustainable rural entrepreneurial development model – replicable at regional, national and international levels – that contributes to stopping deforestation, increasing sustainable forest management, and guaranteeing a productive restoration of the landscape.

10.1 Introduction

10.1.1 Incubator: history of Reforestamos and FEDA

Reforestamos is a non-profit NGO created in 2002 whose mission is to achieve sustainable development through more and better forests. It has 10 initiatives in all,1 of which FEDA is one.2 Reforestamos has evolved from working exclusively on conservation projects to include the sustainability component, considering that sustainability must also integrate social and economic factors to conserve forests.3

Reforestamos has worked on community-forest development and with forest ejidos4 directly since 2001. Based on these experiences, the organisation’s development programmes are based on a people-centred approach, with the needs of the individual at their core.

Reforestamos has been greatly interested in the southeast of Mexico, specifically the Yucatan Peninsula, which owns the highest middle rainforest extension in the country, and houses a great quantity of flora and fauna. However, its ecosystem is threatened by changes

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2. For more information, see for example www.youtube.com/watch?v=bgYsUL7RinPA and www.youtube.com/watch?v=aL9aCR9fwQU
3. For a full list of Reforestamos’s annual reports see: www.reforestamosmexico.org/transparencia
4. An ejido is an area of communal agricultural land that combines communal ownership with individual use using a system that is supported by the state.
In land use, mainly cattle raising and agriculture. From 2008 to 2013, the organisation focused on becoming familiar with the area, mapping out forest-based businesses managed by ejidos that it had identified as lacking entrepreneurial skills. In 2010, Reforestamos identified the same need in timber producers who lacked design and commercialisation skills or the strategy to sell their products. As a result, Reforestamos helped to form the Citizen Network for Business Development (RED CIDEM), which promotes a model supporting rural people to develop entrepreneurial skills and responsible leadership.

In 2013, Reforestamos created FEDA, a pilot programme for RED CIDEM’s model and specific to forest settings. The main purpose of FEDA was to test and scale up entrepreneurship capacities in the Yucatan peninsula, using a specific approach, the intervention model for the promotion of human development through entrepreneurship (IMHDE) model. The IMHDE incubation model focuses on integrating the development of entrepreneurial characteristics of individuals using the enterprise as a vehicle for sustainable rural development. The aim is to support people to become leaders in human development in rural-forest environments and to incubate and support new forest entrepreneurs. After finding no universities or training colleagues that offered professional education with this focus, one of FEDA’s first challenges was to recruit and train field staff. In 2013, two members of staff were hired to train local community members and entrepreneurs in the IMHDE approach. These are referred to within the FEDA structure as development promoters and are the main field staff carrying out business coaching in the field. However, FEDA quickly realised that because the capacity gap in the Yucatan Peninsula is so wide, to scale up efforts they would need to train other NGOs, government and resource institutions in how to use the IMHDE model. FEDA now provides training services to other support institutions in the region as well as to local entrepreneurs. This is also an important part of FEDA’s strategy for creating an overall more enabling environment in Yucatan.

In 2014, Reforestamos and the Mexican Institute of Competitiveness published a state-forest competitiveness index report (Reforestamos and IMCO 2014). This report showed the high-risk levels of deforestation in the Yucatan Peninsula and confirmed the necessity of creating competitive and responsible forest enterprises, to ensure the conservation of forests and rainforests.

10.1.2 Context: landscape, market, socio-political context and ecology

The FEDA initiative works in the Yucatan Peninsula, which consists of the states of Campeche (eight municipalities), Quintana Roo (11 municipalities), and Yucatan (106 municipalities). Table 10.1 shows population characteristics, socioeconomic indicators, marginalisation levels, main economic activities and social and environmental vulnerability levels of those municipalities where FEDA works (CONAPO 2011; Velazquez and Franco 2015).

The peninsula is comprised of small urban centres. Ports and tourism benefit its economy, and it is inhabited mainly by indigenous communities located throughout the region. Most of the population works in rural sectors or urban centres which are not industrialised and which lack basic goods, services and infrastructure, making living conditions difficult. This results in poor income-generation opportunities, housing conditions, and health and
nutrition in the region (UDLAP undated). The main economic activities for people living in the Yucatan Peninsula are tourism, agriculture, trade, beekeeping and raising livestock (INAE undated). Both Campeche and Yucatan have high levels of poverty, whereas Quintana Roo has lower poverty levels thanks to tourism and its related public and private investments.

In the Yucatan Peninsula, indigenous populations are particularly vulnerable to precarity, underdevelopment, and a lack of education, which are serious obstacles to their development. Consequently, many people living in rural areas have had to migrate to cities in search of better lives, particularly Merida and Cancun. About 60 per cent of rainforest communities live in poverty. Those who work in the forest enjoy different levels of success: there are communities that have established forest enterprises with relative success, while others extract resources in an unsustainable way, putting the viability of the natural resources at risk in the long run.

While there are many technical services funded by the government and foundations which support community-forest enterprises by means of consulting and training in relevant skills and technologies, these services do not address entrepreneurial (market) and human (passion) aspects. A common outcome of these aid programmes is an increase in project abandonment once support is withdrawn, so that they fail to achieve their original objectives.

The peninsula has the largest area of rainforest in the country, and is home to many species of flora and fauna. However, its ecosystem is threatened by changes in land use. Low-investment activities which are profitable in the short term – such as agriculture and raising livestock – are favoured over other, more sustainable activities which yield benefits over a longer term. Yet there is scope for change. In Mexico, nearly half of all forests and rainforests are the property of ejidos and communities. In Yucatan’s rainforests, this percentage goes up to 61 per cent. As a consequence, the inhabitants have the capacity to make decisions which can redefine the fate of the forest.

Exchange of experiences in rearing sustainable livestock, Tizimin Yucatan, Mexico
<table>
<thead>
<tr>
<th>State</th>
<th>Municipality</th>
<th>Othon P. Blanco</th>
<th>Bakalar</th>
<th>Felipe Carrillo Puerto</th>
<th>Jose M. Morelos</th>
<th>Tizimin</th>
<th>Calakmul</th>
<th>Escarcega</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Population</strong></td>
<td><strong>Total</strong></td>
<td>224,080</td>
<td>39,111</td>
<td>81,742</td>
<td>37,502</td>
<td>64,104</td>
<td>28,424</td>
<td>58,553</td>
</tr>
<tr>
<td></td>
<td><strong>Male</strong></td>
<td>108,635</td>
<td>19,481</td>
<td>40,542</td>
<td>19,194</td>
<td>32,173</td>
<td>14,509</td>
<td>28,886</td>
</tr>
<tr>
<td></td>
<td><strong>Female</strong></td>
<td>115,445</td>
<td>19,630</td>
<td>41,200</td>
<td>18,308</td>
<td>31,931</td>
<td>13,915</td>
<td>29,667</td>
</tr>
<tr>
<td><strong>Socioeconomic indicators</strong></td>
<td><strong>% Population aged 15+ years and illiterate</strong></td>
<td>7.11</td>
<td>14.10</td>
<td>13.71</td>
<td>10.31</td>
<td>12.02</td>
<td>17.87</td>
<td></td>
</tr>
<tr>
<td></td>
<td><strong>% Population aged 15+ years with no primary education</strong></td>
<td>19.65</td>
<td>28.72</td>
<td>31.43</td>
<td>29.54</td>
<td>31.25</td>
<td>36.56</td>
<td></td>
</tr>
<tr>
<td></td>
<td><strong>% Occupants in homes without drainage or toilet</strong></td>
<td>2.15</td>
<td>23.74</td>
<td>18.10</td>
<td>11.24</td>
<td>7.79</td>
<td>7.98</td>
<td></td>
</tr>
<tr>
<td></td>
<td><strong>% Occupants in homes without electricity</strong></td>
<td>1.83</td>
<td>4.22</td>
<td>3.96</td>
<td>2.76</td>
<td>3.95</td>
<td>6.44</td>
<td></td>
</tr>
<tr>
<td></td>
<td><strong>% Occupants in homes without piped water</strong></td>
<td>1.57</td>
<td>2.53</td>
<td>1.57</td>
<td>1.07</td>
<td>2.67</td>
<td>31.40</td>
<td></td>
</tr>
<tr>
<td></td>
<td><strong>% Homes with some level of overcrowding</strong></td>
<td>42.19</td>
<td>62.85</td>
<td>63.39</td>
<td>53.98</td>
<td>56.42</td>
<td>64.49</td>
<td></td>
</tr>
<tr>
<td>State</td>
<td>Municipality</td>
<td>Socioeconomic indicators (cont.)</td>
<td>Economic activities</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>-----------------</td>
<td>--------------</td>
<td>---------------------------------</td>
<td>---------------------</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Quintana Roo</td>
<td>Othón P. Blanco</td>
<td>% Occupants in homes with earth floor</td>
<td>Livestock, Agriculture, Forestry, Tourism</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Gross income (pesos '000)</td>
<td>Livestock, Agriculture, Forestry, Tourism</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Gross economic outlays in thousands of pesos 2014</td>
<td>Livestock, Agriculture, Forestry, Tourism</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Degree of marginalisation</td>
<td>Livestock, Agriculture, Forestry, Tourism</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Index of marginalisation (0 to 100)</td>
<td>Livestock, Agriculture, Forestry, Tourism</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Degree of social vulnerability to climate change</td>
<td>Livestock, Agriculture, Forestry, Tourism</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

10.1.3 Target business

FEDA attends two types of target clients: groups of entrepreneurs and development promotors (see also Table 10.2). FEDA has the capacity to work with between 10 and 12 groups of entrepreneurs at once.

**Entrepreneurs:** People who live in forest communities and engage in production activities compatible with forest sustainability and profitability. These include charcoal, honey and *ramon* production, tropical timber handicrafts, agroforestry, and sustainable livestock raising. Entrepreneurs must have both the economic and time resources to invest in effectively developing their enterprise.

Table 10.3 describes productive activities and main challenges of these entrepreneurs, who are mostly linked to niche markets. Challenges include developing more efficient production processes, increasing production, distributing products efficiently and without using intermediaries, being constituted as a legal entity, managing resources, and producing competitive products in a competitive market. These challenges arise from a lack of an entrepreneurial culture. In the Yucatan Peninsula, forestry concessions were mostly run by private companies in charge of managing and commercialising forest goods. Local inhabitants would only provide labour for extracting forest resources. Subsequently, the state entered into a paternalistic relationship with forest communities, providing for all their needs, while the *ejido* was only responsible for social organisation. Yet since forest-resource management was delegated to the *ejidos* in 1983, no entrepreneurial training or development programmes were created to support them (Galetti 1999).

**Development promotors:** Includes staff from CSOs and governmental organisations that promote development directly in the landscape or as technical service providers (see Table 10.4). In 2013, FEDA's first challenge was training development promotors in the IMHDE model. Initially, Reforestamos hired and trained two development promotors at the beginning of 2014. But Reforestamos also wanted to promote IMHDE more widely in Mexico, as there were very few qualified development promotors. So, one of the services that FEDA offers is training other external development promotors in the IMHDE model. For example, the NGO ProNatura Yucatan Peninsula hired FEDA's services to train a group of development promotors (academics, members of government institutions). The main challenges faced by development promotors are related to the cross-cutting nature of problems relating to people and the environment. How to address economic, environmental and social problems in a holistic manner is a challenge.
<table>
<thead>
<tr>
<th>Target clients</th>
<th>Main challenges faced</th>
<th>Services required</th>
<th>Number of groups&lt;sup&gt;1&lt;/sup&gt;</th>
</tr>
</thead>
</table>
| Entrepreneurs          | • Linking to a preferential market niche  
• Being more efficient in their production  
• Increasing production  
• Distributing products efficiently  
• Working without an intermediary  
• Being constituted as a legal entity  
• Managing resources  
• Consumers choosing to buy their products, not the competition's | • Training to face challenges in marketing and business management  
• Acquiring new and better practices of production and sustainable use of natural forest resources  
• Access to credit or resources to improve production systems  
• Ability to supply directly to the final distributor  
• Understanding the best type of association for their business  
• Developing projects to manage resources  
• Achieving certification such as Fairtrade to differentiate products | 10–12 |
| Development promoters  | • Establishing projects that deal with problems in a transversal way, which addresses the three axes of sustainability (economic, environmental and social)  
• Having field staff able to promote entrepreneurship and human development  
• Coordinating with other organisations to avoid duplicating efforts and use of resources | • Training in professional approaches to economic, social and environmental issues  
• Training in how to promote human development and entrepreneurship skills  
• Creating collaboration synergies | 8–10 |

1. The figures in this column reflect the maximum number of groups that FEDA can work with at any one time.
<table>
<thead>
<tr>
<th>GROUP</th>
<th>No</th>
<th>LOCALITY</th>
<th>DESCRIPTION</th>
<th>Main challenges</th>
</tr>
</thead>
<tbody>
<tr>
<td>Selva Viva 3G</td>
<td>9</td>
<td>Tres Garantías, Othón P Blanco, Quintana Roo</td>
<td>Cooperative society of 9 women which produces and sells ramon-tree (<em>Brosimum alicastrum</em>) seed and leaf-based food</td>
<td>• Creating a new market as ramon-based food is a relatively new product ✓ Managing the construction of their factory ✓ Legally formalising their enterprise ✓ Establishing good accounting practices</td>
</tr>
<tr>
<td>Operadora Turística</td>
<td>14</td>
<td>Tres Garantías, Othón P Blanco, Quintana Roo</td>
<td>Cooperative society that provides ecotourism services in their forest area</td>
<td>✓ Making their business profitable</td>
</tr>
<tr>
<td>Ya’ax</td>
<td>6</td>
<td>Huay Pix, Othón P Blanco, Quintana Roo</td>
<td>Regional group of woodcrafters</td>
<td>✓ Linking their inventory with a sales strategy ✓ Linking production with market demand • Improving production-line efficiency to reduce costs • Achieving chain of custody FSC certification</td>
</tr>
<tr>
<td>Flonatur</td>
<td>8</td>
<td>Nuevo Becal, Calakmul, Campeche</td>
<td>Society of rural beekeepers who sell packaged and bulk honey</td>
<td>✓ Obtaining finance to increase production ✓ Linking packaged honey to niche markets ✓ Obtaining organic certification • Selling their product to Walmart</td>
</tr>
<tr>
<td>Meliponicultores</td>
<td>5</td>
<td>Valentín Gómez Farías, Calakmul, Campeche</td>
<td>A group which harvests and sells melipona bee honey</td>
<td>• Producing enough honey to satisfy market demand</td>
</tr>
<tr>
<td>Silvopasture Nuevo Becal</td>
<td></td>
<td>Nuevo Becal, Calakmul, Campeche</td>
<td>Group of livestock keepers wanting to implement a silvopastoral system</td>
<td>• Establishing an irrigation system ✓ Changing from extensive livestock to sustainable livestock production</td>
</tr>
<tr>
<td>Chaya-agro-forestry, Ucumsa</td>
<td>4</td>
<td>Ucum, Otón P Blanco, Quintana Roo</td>
<td>Company dedicated to processing food from the Chaya bush (<em>Cnidoscolus aconitifolius</em>) associated with an agroforestry system</td>
<td>• Producing enough volume to satisfy market demand • Positioning their product in their market</td>
</tr>
<tr>
<td>GROUP</td>
<td>No</td>
<td>LOCALITY</td>
<td>DESCRIPTION</td>
<td>Main challenges</td>
</tr>
<tr>
<td>--------------------------------------------</td>
<td>----</td>
<td>--------------------------------</td>
<td>-----------------------------------------------------------------------------</td>
<td>------------------------------------------------------</td>
</tr>
<tr>
<td>Emprendedores del Bosque Tropical</td>
<td>3</td>
<td>Noh Bec, Felipe Carrillo Puerto, Quintana Roo</td>
<td>Group of wholesale charcoal producers</td>
<td>✓ Investing in equipment to increase production</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>• Achieving chain of custody FSC certification</td>
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<td></td>
<td></td>
<td></td>
<td></td>
<td>• Packing and sell charcoal to supermarkets</td>
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</tr>
<tr>
<td>Silvopasture Noh Bec</td>
<td>8</td>
<td>Noh Bec, Felipe Carrillo Puerto, Quintana Roo</td>
<td>Group of livestock keepers wanting to implement a silvopastoral system</td>
<td>• Establishing an irrigation system</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>✓ Change from extensive livestock to sustainable livestock production</td>
</tr>
<tr>
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<td></td>
</tr>
<tr>
<td>Silvopasture 3G</td>
<td>8</td>
<td>Tres Garantías, Othón P Blanco, Quintana Roo</td>
<td>Group of livestock keepers wanting to implement a silvopastoral system</td>
<td>• Establishing an irrigation system</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>✓ Change from extensive livestock to sustainable livestock production</td>
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<td></td>
</tr>
<tr>
<td>El Zapotal</td>
<td>14</td>
<td>Tizimín, Quintana Roo</td>
<td>Alliance with ProNatura Yucatan Peninsula (regional NGO) for training</td>
<td>✓ Changing the paradigm between producers, and</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>development promoters in the field and its four clients</td>
<td>entrepreneurs (an evolutive change process)</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>✓ Emphasising that effecting internal change in</td>
</tr>
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<td></td>
<td></td>
<td></td>
<td></td>
<td>people is critical for building resilience of the</td>
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<td></td>
<td></td>
<td></td>
<td></td>
<td>enterprise itself so that it can better tackle</td>
</tr>
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<td></td>
<td></td>
<td></td>
<td></td>
<td>challenges</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>✓ Promoting a market-based approach over production</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>✓ Only selling products and volumes that meet</td>
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<td></td>
<td></td>
<td></td>
<td></td>
<td>consumer demand</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>✓ Being the protagonists of their own development</td>
</tr>
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</tr>
<tr>
<td>Centenario-Miguel Colorado</td>
<td>9</td>
<td>Escárcega, Campeche</td>
<td>Alliance with ProNatura Yucatan Peninsula (regional NGO) for training</td>
<td>✓ Marketing products at competitive prices that</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>development promoters in the field and its four clients</td>
<td>cover costs and generate a profit</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>✓ Emphasising that effecting internal change in</td>
</tr>
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<td></td>
<td>people is critical for building resilience of the</td>
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<td>enterprise itself so that it can better tackle</td>
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<td></td>
<td>challenges</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>✓ Being the protagonist of their own development</td>
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<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>✓ Breaking the paradigm, to show forest businesses</td>
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<td></td>
<td></td>
<td></td>
<td></td>
<td>that they can succeed and that they require win-</td>
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<td></td>
<td></td>
<td></td>
<td></td>
<td>win relationships</td>
</tr>
</tbody>
</table>

1. This column lists entrepreneurs' main challenges (✓ for accomplished challenge; • for challenge in progress) according to FEDA’s assessment.
Table 10.4 Main challenges faced by FEDA’s development promotors

<table>
<thead>
<tr>
<th>GROUP</th>
<th>No</th>
<th>LOCALITY</th>
<th>DESCRIPTION</th>
<th>Main challenges</th>
</tr>
</thead>
</table>
| Promotor group from Tizimín municipality      | 20 | Consisting of academics, government officials and CSO staff with influence in the municipality of Tizimín, Yucatán | ✓ Creating collaboration synergies towards a common agenda among the different actors involved  
✓ Generating people-centred strategies instead of environmental ones  
✓ Establishing a horizontal relationship between the technical service provider and the recipient | |
| ProNatura Península Yucatán AC                | 5  | CSO that works in the Yucatan Peninsula region | ✓ Providing added value so that products can be sold in the region  
✓ Scaling up projects to meet market niche challenges | |

Often, staff lack the skills and expertise to support human development and entrepreneurship. In addition, the lack of coordination among other organisations working in the municipality increases the risks of duplicating efforts and resources by different government institutions, which offer programmes and support with a unilateral focus and little or no coordination among them. This means that technical service providers also tend to act unilaterally and without coordination, even to the point of competing with each other to provide assistance to forest communities, leading to some recipients exploiting this fact and/or becoming increasingly dependent on external help.
10.2 Institutional design

10.2.1 Staff and structure

FEDA is a department within Reforestamos Mexico AC. FEDA has an office and staff in Chetumal City, Quintana Roo, Yucatan Peninsula. It consists of:

- **FEDA director**: Responsible for strategy direction and training staff under the IMHDE.
- **Alliance and communications coordinator**: Responsible for internal and external communication, inter-institutional alliance promotion, and training other organisations under the IMHDE model.
- **General field project coordinator**: Responsible for the promotion of human and entrepreneurial development.
- **Promoters of human and entrepreneurship development**: Two permanent staff are responsible for directly supporting the development of entrepreneurs in the field. The number of promoters is based on the number of clients and usually there are 4-5 group enterprises served by one promoter at the time (in total 11 group enterprises have been supported since the start in 2013).
- **On-demand graphic designer**: Responsible for creating branded and educational materials for client entrepreneurs.
10.2.2 Advisory board

FEDA does not have an advisory board of its own, but receives advice and support from members of the Reforestamos advisory board who help to improve FEDA’s strategy, in the following key areas of expertise:

- **Enterprise development**: Oscar Tenopala García advises on consultation and training in the promotion of human and entrepreneurship development.\(^5\)

- **Access to finance**: Javier Warman connects Reforestamos with El Buen Socio (a financial agency that supports environmental businesses), which has financed several entrepreneurs (see Table 10.9 re. access to credit).

- **Value chain development**: María Luisa Luque and Vincent Lagacé from Nuup\(^6\) advise on shortening links in the value chain and promoting good development practices for providers with retailers like Walmart and El Globo.

- **Technology transfer**: Edgar Anguiano assists in team coaching to widen the vision regarding new technology and innovation.

- **Marketing and strategy**: José Federico Suárez, ex-purchase director in Grupo Bimbo and vice-president of Reforestamos provides advice regarding marketing and logistics.

- **Individual coaching**: Javier Millán Dehesa, ex-director of human resources in Grupo Bimbo, expert in the integrity of the individual.

Additionally, Reforestamos has six operating and two supporting departments that focus on areas such as people management, administration, networks and alliances, and creating linkages with government organisations and the private sector to offer their experience to FEDA.

10.2.3 Networks

FEDA has five alliances with local universities allowing students to offer their services, professional practice or theses to support technical aspects of the initiative. In some cases, students base their thesis project or practical work experience with FEDA and are then assigned to clients to work on specific target areas identified in client workplans. Besides this, FEDA maintains a network of professional technicians that it hires to support projects on adequate forest management, best practices in sustainable cattle raising, and basic computer skills, among other tasks. A database of other key contacts with NGOs, government and private companies is also drawn upon for specific technical needs or exchange visit purposes.

FEDA also has alliances with other organisations within the Selva Maya Sin Fronteras, a German Agency for International Cooperation (GIZ) initiative. These include the Association of Forest Communities of Petén (Asociación de Comunidades Forestales del Petén or ACOFOP) in Guatemala, the Belize Audubon Society, the National Commission of Natural Protected Areas (Comisión Nacional de Áreas Naturales Protegidas) in Mexico, the Ministry of Ecology and Environment in the State of Quintana Roo, Friends

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5. Oscar Tenopala García is founder of the RED CIDEM Network (Citizen Network for Entrepreneurial Development) which actively promotes the development of responsible entrepreneurs that are committed to their own development and that of the country. See www.peced.com.mx/red/red_presentacion.html

6. See http://nuup.co/acerca
of Sian Ka’an (Amigos de Sian Ka’an), and ProNatura. All of these actors are working under the same initiative in the Selva Maya region with the aim of fostering human and entrepreneurial development using the IMHDE model as a common approach.

Participants at a FEDA training workshop, Bakalar, Quintana Roo, Mexico. Beekkeeper Eliut and harvester Victoria Ramon discuss their business values and vision

10.2.4 Finance
Reforestamos has 10 initiatives, which are approached in different ways with different donors. There are two main sources of income that support FEDA. These include private donors, partner funding and scholarships for FEDA staff training.

- **Private donors:** 90 per cent of FEDA’s funding comes from philanthropic investment funding from private companies like Grupo Bimbo, Santander Bank, Fomento Social y Ecológico Banamex and the BBVA Foundation, among others. The IMHDE model has been adapted thanks to such investment.

- **Partner funding:** Nearly 10 per cent of FEDA’s funding comes from partner organisations such as ProNatura Yucatan Peninsula and the Ministry of Environment and Territorial Development of the State of Jalisco, Mexico (SEMADET). These organisations are allied with Reforestamos and specifically with FEDA to improve its development processes such as providing entrepreneurial training for staff and clients.

- **Scholarships for FEDA staff:** About 1 per cent of FEDA’s income comes from
scholarships. For example, the International Union for Conservation of Nature (IUCN) funded training for FEDA’s staff, which was provided by the Tropical Agricultural Research and Higher Education Center (CATIE) on diversified management of tropical forests. FEDA also obtained a scholarship financed by GIZ that paid for training for the director in effective leadership skills.

10.3 Services offered

FEDA’s services mainly consist of training in entrepreneurial and human development skills. These focus on building capacity of the individual, using the enterprise as a vehicle for development. However, the actual trainings and enterprise coaching is done at the level of the group enterprise (the main enterprise structure of FEDA’s target clients) rather than the individual. The focus is on developing entrepreneurial skills and effective leadership because these will be important to the overall enterprise development process. This is different to approaches generally used by CSOs, universities, advisors, technical service providers and government institutions, which focus mainly on technical productive capabilities. Depending on the target client, FEDA offers different services (see Table 10.5).

<table>
<thead>
<tr>
<th>Target clients</th>
<th>Services FEDA offers</th>
<th>Objective</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Entrepreneurs</td>
<td>• Promoting human development skills</td>
<td>• Entrepreneurs display responsible behaviour and are protagonists of their own development, visionaries and creators of wealth. Entrepreneurs work closely with their environment and communities</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Supporting processes of human development and entrepreneurship</td>
<td>• FEDA’s staff promote changes which will allow entrepreneurs to achieve their vision and live a life they value</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Promoting entrepreneurial skills</td>
<td>• Entrepreneurs create more and better competitive and responsible enterprises</td>
<td></td>
</tr>
<tr>
<td>Development promotors</td>
<td>• Sharing the IMHDE model</td>
<td>• Guiding development promoters in implementing people-centred processes with a market approach</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Training field staff in IMHDE to provide FEDA services</td>
<td>• Helping development promoters to support rural producers to create more and better competitive and responsible community forestry companies</td>
<td></td>
</tr>
</tbody>
</table>

10.3.1 Services offered to client-entrepreneurs

FEDA uses the IMHDE model as an approach for promoting rural entrepreneurship development. This is a relatively recent approach that has been applied in forest ejidos. In the past five years, FEDA has been refining the IMHDE approach using experiences from the field with 10 different enterprises. The aim of this piloting period has been to establish
an approach that will help in achieving the desired performance of forest enterprises in the southeast of Mexico. FEDA uses a matrix of entrepreneurial skills (see Table 10.7) which guides the process of developing client's performance skills. Table 10.9 also provides an overview of FEDA's findings to date with IMHDE.

**Human development skills:** Promotes a change in behaviour from the inside out. To achieve that, FEDA implements the methodology found in Stephen Covey's *The 7 habits of highly effective people* (2009). FEDA also promotes communication, negotiation and effective leadership skills using a human development performance matrix that presents the consciousness levels it seeks to promote (Lonergan 2006; see Table 10.6).

<table>
<thead>
<tr>
<th>EMPIRICAL</th>
<th>SYSTEMIC</th>
<th>STRATEGIC</th>
<th>RESPONSIBLE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Is aware of his/her needs and prioritises them</td>
<td>Gets organised in a group to act</td>
<td>Assesses his/her situation and results</td>
<td>Acts confidently and trusts others</td>
</tr>
<tr>
<td>Creates solutions/ projects according to his/her needs</td>
<td>Recognises leadership in the group</td>
<td>Acquires knowledge from results</td>
<td>Has the ability to compromise through dialogue</td>
</tr>
<tr>
<td>Uses his/her own initiative</td>
<td>Performs well and promotes the performance of the group</td>
<td>Understands limits of action and participation</td>
<td>Is grounded in reality and in the change process</td>
</tr>
<tr>
<td>Acquires group awareness</td>
<td>Works creating and respecting rules</td>
<td>Rethinks life goals and assumes a project of service</td>
<td>Promotes responsibility</td>
</tr>
</tbody>
</table>

**Supporting human and entrepreneurial development processes:** FEDA's approach involves conducting socioeconomic, entrepreneurial and human evaluations with clients. This helps them to create a vision for better opportunities in their lives, opportunities that they see as desirable and attractive, and which help to continually improve performance. FEDA helps clients to see that change is possible by organising visits to other relevant and successful enterprises of a similar social and cultural strata, which are engaged in the same productive activities. Financial and risk-management training (cost analysis, managing cashflow, financial runs, evaluation and ongoing risk-management plans) are provided to help clients evaluate the viability of their enterprises. Throughout the process clients build up the knowledge of appropriate tools and technologies to facilitate better decision-making according to the resources available. FEDA also organises annual award ceremonies for entrepreneurs to recognise their progress in each of the main entrepreneurial and human development characteristics.
Development of entrepreneurial skills: FEDA aims to promote responsible entrepreneurial behaviour by generating a vision where clients recognise themselves as the main actors of forest development based on six generic entrepreneurial skills:

- Getting to know their market
- Defining their product
- Getting to know their competitive and comparative advantages
- Registering production methods and techniques
- Managing available resources properly
- Controlling product and process quality.

### Table 10.7 Matrix of entrepreneurial skills by level of consciousness

<table>
<thead>
<tr>
<th>Fundamental business operations</th>
<th>EMPIRICAL</th>
<th>SYSTEMIC</th>
<th>STRATEGIC</th>
<th>RESPONSIBLE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Market approach</td>
<td>Recognises potential clients</td>
<td>Researches the market</td>
<td>Creates a marketing plan for target market</td>
<td>Commits to social and environmental welfare</td>
</tr>
<tr>
<td>Product definition</td>
<td>Understands the differences between generic and specific products</td>
<td>Emphasises the originality of the product</td>
<td>Creates a customer satisfaction plan</td>
<td>Commits to human development</td>
</tr>
<tr>
<td>Comparative and competitive advantages</td>
<td>Defines and enhances the company's advantages</td>
<td>Identifies the viability of the company according to its strengths</td>
<td>Creates a plan for establishing conversion rates for new customers</td>
<td>Plans from a socioeconomic system perspective</td>
</tr>
<tr>
<td>Production methods and techniques</td>
<td>Manages with appropriate production methods and techniques</td>
<td>Analyses the entire production process and defines goals</td>
<td>Makes a systems development plan</td>
<td>Acts as a transforming leader and educator</td>
</tr>
<tr>
<td>Management of available resources</td>
<td>Efficiently manages available resources</td>
<td>Organises each administrative task to achieve specific goals</td>
<td>Makes a global financial plan and pricing strategy</td>
<td>Manages by defining general policies</td>
</tr>
<tr>
<td>Quality control of the product and the business process</td>
<td>Controls the basic elements of product quality</td>
<td>Manages the business risk of each part of the company</td>
<td>Creates a business expansion plan</td>
<td>Governs according to agreed principles</td>
</tr>
</tbody>
</table>
Using the entrepreneurial skills matrix, FEDA can pinpoint the entrepreneurial areas clients need to work on. To do this effectively, it is important to recognise the specific challenges faced by each enterprise, because people learn according to the level of attention that any task, problem or project demands. The more specific the issues are to them the faster clients will learn and build their capacity to resolve such issues.

10.3.2 Services offered to development promotors

Intervention model for the promotion of human development through entrepreneurship (IMHDE): Through five training modules, FEDA works with development promotors (technical service providers, staff from CSOs and government organisations) with the objective of promoting human development through entrepreneurship (see also Table 10.8).

Staff training process during the IMHDE: This consists of training in planning, execution and evaluation. Two questions are posed: What went well? How can you improve? Trainees are asked leading questions to help them to reflect on their training, which helps FEDA to evaluate how well they have learnt the principles of IMHDE. Besides theoretical and field training, FEDA also facilitates meetings to build synergies between the municipality’s development advisory board (which involves several government institutions), CSOs, and universities and representatives from the private sector involved with forest-related production.

10.3.3 Service delivery

Services are delivered to entrepreneurs through four main models:

- **Onsite training and coaching at the level of the enterprise:** Conducting workshops, establishing working agreements, helping clients to resolve issues related to their business performance, and offering coaching.

- **Technical assistance and consultation at the level of production and operations:** Technicians providing training in the tools and technologies or best practices needed to make client production processes more efficient and effective, to better manage their material and human resources, and to ensure that their quality-control system operates within and complies with market demands.

- **External consultations and peer-to-peer learning exchanges:** Entrepreneurs with similar entrepreneurial levels and challenges meet to work on their entrepreneurial skills and to share learning and experience (including successes and challenges), and develop annual operational plans. Skills in self-management and effective leadership are also promoted.

- **Exchange visits:** Clients visit other similar and successful enterprises to learn about how the potential impact the training they receive from FEDA can benefit their own enterprises.

Services offered to development promotors include:

- **IMHDE processes:** Advising government institutions and civil society organisations on human and entrepreneurial developmental processes.

- **Training staff** whose work is linked to landscapes and forests in IMHDE.

- **Facilitating meetings** to build synergies between different actors.
Table 10.8 IMHDE training modules for development promoters – objectives, content and expected results

<table>
<thead>
<tr>
<th>Module name</th>
<th>Objective</th>
<th>Content</th>
<th>Expected results</th>
</tr>
</thead>
</table>
| Human development as key to the development of landscape | Introduces participants to the intervention model to promote human development through entrepreneurship, describing principles and background | Introduction to IMHDE
Overview of the IMHDE model
How it is effective | Participants understand how intervention models work and previous strategies that have not worked |
| Pillars of the model and development variables | Participants understand IMHDE fundamentals, variables and guidelines to implement effective intervention processes | Fundamentals of IMHDE
- People-centred approaches are key to development
- IMHDE as a method of human development
- Understanding forest business as a vehicle for development
- Promoting effective leadership
- Training to resolve problems based on skills
- Implementing changes to help businesses grow exponentially
Development variables and directives | Participants are able to analyse the foundations of IMHDE and variables of development to combine landscape and human development approaches for effective change |
| Operations which promote human and business development | Participants understand how IMHDE operations lead to effective interventions | Operations to lead effective interventions when working with target clients:
- Establish trust with the client groups, understand their reality and work with them to create tailor-made interventions
- Work with clients to develop a vision for change
- Promote self-management skills, human development performance and effective leadership
- Encourage clients to see that change is possible
- Promote entrepreneurial skills
- Promote financial and risk-management skills
- Support clients to adapt as necessary, according to their resources and environment
- Encourage target clients to organise and learn how to take advantage of the benefits of collective action (reducing transaction costs, economies of scale, strengthening negotiations with buyers etc)
- Educate clients about skills required to grow their businesses exponentially
- Develop and implement an agreed progress and monitoring plan with clients that is followed up every two weeks
- Recognise each change that clients accomplish | Participants can create an intervention plan using the operations of the model |
<table>
<thead>
<tr>
<th>Module name</th>
<th>Objective</th>
<th>Content</th>
<th>Expected results</th>
</tr>
</thead>
</table>
| Intervention tools to promote change and planning | Provides intervention tools which promote human development, planning, financial education, effective leadership, marketing and group management | • Tools to promote personal change  
• Planning tools  
• Effective leadership tools  
• Financial tools  
• Marketing tools  
• Group management tools | Participants understand the use of tools to promote change in people and can use the tools for effective planning |
| Structure your intervention                     | Develop an effective intervention strategy                                | • Develop a baseline  
• Develop a strategy based on client needs  
• Develop an intervention plan  
• Evaluate a matrix for entrepreneurial skills and human development performance  
• Motivate the clients to engage | Participants can develop an effective intervention strategy                           |

10.3.4 Linking
FEDA links its client entrepreneurs with different actors and participation spaces:

- **Specialists** in different relevant areas (finance, administration, logistics and distribution, leadership, quality control, sales, etc) which are part of the Reforestamos networks of NGOs, government and private companies. Specialists are invited to participate in entrepreneur gatherings, and interact directly with client entrepreneurs, helping them to develop plans and strategies, and solve problems.

- **Private philanthropic initiatives**: At an annual event which is held for donors, client entrepreneurs showcase their products, enabling them to engage in public relations.

- **Forest Expo is the biggest tradeshow in Mexico**: This takes place every two years, enabling suppliers, government, CSOs and community-forest enterprises to come together and for entrepreneurs to showcase their work.

- **Regional forums** bring markets closer to community-forest enterprises, as they are able to present their products directly to consumers and suppliers.

- **Local events** are where community-forest enterprises can also showcase their products to local suppliers and consumers.

- **Brokering finance**: Reforestamos has a partnership with the financial agency El Buen Socio. Since 2014, FEDA has helped broker loans for 19 of its clients to a total amount of US$66,750.
10.4 Incubation management

10.4.1 Selection
FEDA selects the entrepreneurial groups it supports based on the following criteria: location (living in a specific municipality), productive activity (raising livestock, NTFPs, alternative tourism, etc), and demographics (female, male, young, elderly). The selection process to gauge whether FEDA can work with an entrepreneur takes between two and four months. However, potential client entrepreneurs/beneficiaries must also fulfil these profile criteria:

- They have a defined productive activity with at least one year’s experience, which has a positive impact on the forest.
- They live in rural forest ejidos or communities (communal property) in forests with more than 10,000 hectares that comply with the requirements of the law.
- They have overcome (or are in the process of overcoming) subsistence.
- They have the time and attitude to learn.

The exclusion criteria for potential client entrepreneurs are:

- They are engaged in productive activities that are detrimental to the forest.
- They are engaged in activities that will provide little benefit to the area under forest management or to productive forest restoration.

10.4.2 Performance oversight
Once clients have been vetted against these selection criteria FEDA carries out a socioeconomic study to develop a baseline for each client. This is to evaluate their potential performance in human development, entrepreneurial skills and to document information relating to their backgrounds and community governance. Findings from the initial assessment are then used to develop a workplan and trajectory for what the client is expected to achieve during the incubation process. The workplan is outlined in a work agreement between FEDA and the client and includes a tailor-made intervention strategy, responding to identified client needs, where both qualitative progress in entrepreneurial skills and more quantitative progress in business performance are included to measure progress.

The workplan is updated and evaluated annually. However, skills learnt are evaluated every three months to help FEDA regularly review its own services and performance.

10.4.3 Graduation
FEDA’s graduation profile is for client entrepreneurs to acquire 75 per cent of the strategic skills required to structure a competitive enterprise (see tables 10.6 and 10.7). FEDA conducts a performance evaluation of the enterprise to verify the skills entrepreneurs have acquired. The time entrepreneurs participate in the incubation process is usually three to five years. Once entrepreneurs graduate, FEDA remains in communication with them to monitor their performance.
10.4.4 Outcome evaluation

FEDA has an overall success rate of 55 per cent of entrepreneurs graduating (six out of 11). This is because for the first two years, FEDA did not use any specific selection criteria to engage clients. However, since the selection criteria have been put in place, FEDA’s current success rate with new entrepreneurs is now 100 per cent (two out of two client entrepreneurs have graduated).

For every client-beneficiary group, the outcome evaluation indicators are: level of sales, profitability, innovation (improving processes and goods or services that are offered), market penetration, area under forest management, area under productive restoration, forest area under influence (in the case of beekeepers, for instance), and ability to positively influence other (potential) entrepreneurs from their locality. These indicators help FEDA to measure the effectiveness of its intervention, disseminate achievements to other entrepreneurs, inspire other entrepreneurs and inform donors about the impact of their contributions.

To improve services provided relevant to the challenges faced by FEDA’s clients, it evaluates their achievements and areas of opportunity, efficacy and impact. Where an enterprise has been highly successful, FEDA evaluates the possibility of replicating the success elsewhere in alliance with CSOs and government organisations. Evaluations of graduate client businesses are captured in an evaluation matrix on an annual basis that is shared by email to past graduates. This helps track and record FEDA impacts once clients have graduated. Findings are used to communicate with donors but also to review the approach and services offered to clients.

10.5 Impact

10.5.1 Overall assessment

FEDA indicators for evaluating the success of its client entrepreneurs include:

- Entrepreneurial skills acquired
- Human-development performance
- Number of community-forest enterprises activated
- Number of entrepreneurs engaged
- Level of income achieved
- Quantity of profits
- Access to financing
- Area under forest management (in hectares)
- Area under productive restoration (in hectares)

Table 10.9 shows FEDA’s qualitative achievements and progress from mid-2013 to September 2017 using the indicators listed above. It shows that, as the proportion of client entrepreneurial skills increases, so too does income. This finding also correlates to the increase in access to credit. Also, it shows that the area of land under sustainable forest management increases, as well as land under productive restoration.
FEDA’s belief is that if you equip people with better entrepreneurial skills, they are able to approach business challenges proactively. Each client can better understand his or her potential and limitations, and be more aware of how sustainable forest businesses can lead to further benefits for both forests and communities (see Section 10.5.2).

Table 10.9 FEDA’s achievements and progress, mid-2013 to September 2017

<table>
<thead>
<tr>
<th>Concept</th>
<th>2013</th>
<th>2014</th>
<th>2015</th>
<th>2016</th>
<th>2017</th>
</tr>
</thead>
<tbody>
<tr>
<td>Work locations</td>
<td>6</td>
<td>7</td>
<td>7</td>
<td>7</td>
<td>7</td>
</tr>
<tr>
<td>Work groups</td>
<td>9</td>
<td>11</td>
<td>10</td>
<td>11</td>
<td>10</td>
</tr>
<tr>
<td>Generated income in Mexican pesos millions and US$ ‘000s$^1$</td>
<td>0.11</td>
<td>0.53</td>
<td>0.81</td>
<td>4.56</td>
<td>2.9</td>
</tr>
<tr>
<td>Access to credit in Mexican pesos millions and US$ ‘000s$^2$</td>
<td>-</td>
<td>81.15</td>
<td>115.26</td>
<td>554.24</td>
<td>517.61</td>
</tr>
<tr>
<td>% average advance of entrepreneurial skills to the point of no return$^3$</td>
<td>*</td>
<td>17</td>
<td>33</td>
<td>50</td>
<td>62</td>
</tr>
<tr>
<td>Direct beneficiaries</td>
<td>94</td>
<td>100</td>
<td>86</td>
<td>109</td>
<td>69</td>
</tr>
<tr>
<td>Indirect beneficiaries</td>
<td>584</td>
<td>596</td>
<td>548</td>
<td>662</td>
<td>310</td>
</tr>
<tr>
<td>Forestry area under sustainable forest management (ha)</td>
<td>209</td>
<td>1,442</td>
<td>1,460</td>
<td>20,443</td>
<td>22,100</td>
</tr>
<tr>
<td>Area under productive restoration (ha)</td>
<td>0</td>
<td>0</td>
<td>10</td>
<td>107</td>
<td>168</td>
</tr>
<tr>
<td>Number of volunteers$^4$</td>
<td>0</td>
<td>32</td>
<td>125</td>
<td>15</td>
<td>10</td>
</tr>
</tbody>
</table>

3. The ‘point of no return’ is where entrepreneurs have acquired a strategic level of business skills, which allows them to develop a profitable company with a vision of social responsibility. At this level, the entrepreneurs have adapted to market conditions and can execute continuous improvement plans, manage risk, multiply wealth, expand their business, and look for alternatives to make a successful company. In other words, from this point onwards, these businesses will not return to their initial state. The central value for Reforestamos is in the person, therefore a percentage average advance of entrepreneurial skills to the ‘point of no return’ is one of its main impact indicators.
4. Number of volunteers who donated one day of their time to help entrepreneurs with their infrastructure projects.

10.5.2 Successes

One such example of a successful community-forest enterprise is the Nuevo Becal beekeeping group in Nuevo Becal, Calakmul, Campeche that FEDA has worked with since 2013. The beekeepers protect their forest by combating the setting of forest fires which are used to clear land for intensive agriculture. There are several key outcomes resulting from FEDA’s support.
• **Beneficiaries understanding the value of the training:** FEDA’s training focuses on people-centred human development: changing the attitudes and behaviour of the individual. Clients were aware that the training provided was a process which would lead to them becoming forest entrepreneurs, and that they would not receive economic or material support. As a result, beneficiaries were able to acquire the skills and behavioural changes to allow them to become the main actors in their own development process.

• **Developing an entrepreneurial attitude in adverse environments:** FEDA works with people that want to be the main actors in their own development: people who are determined, and who are passionate about their productive activity. With the Nuevo Becal group, 12 out of 15 beekeepers did not continue with the process. In terms of numbers of direct beneficiaries, initially this might be seen as a failure. But in terms of impact, those three who did continue doubled their production, sold their packaged honey and achieved organic certification of 447 hives, as well as the safety and hygiene certification required to be a Walmart supplier. These beekeepers have set an example for Mexico and Central America, as well as for their community. With the aim of increasing production and eliminating intermediaries, FEDA provided the group with the tools to determine their percentage of profitability, cashflow and financial projections. As a result, the Nuevo Becal beekeepers have increased their production threefold, from four to 12 tonnes of honey, and from 140 to 447 beehives.

• **Working with potential suppliers and improving the brand:** In addition, to eliminate intermediaries, the group met with potential clients to learn how much, how, when and at what price the market demanded bottled honey. They also visited bottling companies in the region. The group received support from FEDA to enable them to comply with the quality demanded by the market (improved bottling process), and to improve the design of their brand and label for better marketing. As a result of developing their entrepreneurial skills, the group now has six presentations: 20 per cent of their income is from bottled honey and 80 per cent from the bulk honey they sell. They are in the process of applying for organic certification and undergoing safety audits to become providers for Walmart.

• **The constitution of the enterprise:** In 2014, FEDA supported the Nuevo Becal beekeeping entrepreneurs to legally constitute their associations as enterprises. FEDA went along with the group to define its organisational objectives and regulations including rights, obligations, and profit-sharing mechanisms based on levels of investment and risk.

### 10.5.3 Failures

Working with a group that offers ecotourism services in Calakmul, Campeche, FEDA made the following mistakes.

• **Working with people who did not have an entrepreneurial attitude:** This happened because FEDA did not have a clear profile for or evaluation of its client. The entrepreneurs needed to invest in resources and new skills. The challenge consisted in learning how to do massages (there were no massage professionals within a distance of 150km). However, the clients did not want to invest their earnings or access credit to cover their training materials. FEDA respected their decision, and after evaluating
the situation, decided to stop support, and set out to improve the selection process for future clients.

- **Seed capital is a medium not a goal for any kind of support for productive projects:** Four years prior to receiving FEDA support, the same ecotourism group had received 4 million pesos to build cabins. However, they were still seeking someone to bring clients to them. FEDA learnt that providing economic support but without training in entrepreneurial skills does not resolve the fundamental requisite to become entrepreneurs. Beneficiaries also need an entrepreneurial attitude and must be passionate and determined to ensure the success of their enterprise.

10.5.4 Lessons for other incubators

- **Don't forget the human and environmental components to enterprise development:** The enterprise is not the end, it is the means to achieve environmental, social and economic benefits: forests and rainforests managed in a sustainable manner. Promoting entrepreneurship without human development does not ensure transcendental human change; the difference is made when people develop their full potential and reflect these changes in the success of their enterprises.

- **Identify productive model(s) that work. It is key to successful human and entrepreneurial development interventions:** If the productive activity does not generate wealth or progress the enterprise will not be sustainable.

- **Do identify people with an entrepreneurial attitude during the selection process:** This increases the efficiency of incubation services offered. A good way to differentiate a producer from an entrepreneur is to know if they are willing to invest not only their time but their economic resources as well.

- **Help people who want to be helped and who you are able to help:** Helping people who don't want to be helped, or who are not ready for it, is a noble effort, but FEDA's experience shows that this results in vain attempts until the budget runs out. This is not the case with people who want to be helped: they are the ones who will take advantage of the promoter’s support and really change. It helps to build mutual confidence between the development promotor and the client, which enables entrepreneurs to better overcome challenges.

- **Do develop interventions at the level of the beneficiaries’ needs:** Every person is unique and irreplaceable. Every person lives a complex, diverse, ever-changing and multi-centric reality. Intervention strategies must be developed in accordance with the beneficiaries’ needs, their productive activity and their environment, and providing each with the motivation to learn. The support process is more effective if decisions are made with the beneficiaries, and if the intervention route, timeframes and goals are clearly defined in a bottom-up manner. The process must clarify the objectives of the intervention, specifying the goals and criteria for success, have the means to reach the objective, promote relevant changes, and define the duration of the support.
Win the war, and then begin the battle: To paraphrase the ancient Chinese military strategist Sun-Tzu (in Lawson 2012): The victorious promoter only seeks intervention after victory has been won, whereas he who is destined to defeat first intervenes and afterwards looks for victory. This means that a development promoter should first seek to win the war (through careful preparation and client selection) and only afterwards begin the battle (the intervention to work with and support the client entrepreneurs).

Only promote what you are willing to support: Engaging with and supporting client entrepreneurs means convincing them to find new alternatives. In a sociological sense, this can mean creating needs or expectations that tilt the balance in favour of certain actions around the individual, the community, the state or the country (San Martín 2000). Any external person can provoke expectations and suggest alternatives that can become a reality. However, these alternatives or expectations often do not support, or do not define a strategy for how to get there. This can generate frustration and distrust among forest communities.\(^7\) If you are not ready or are unclear on how to provide them with effective support, do not do it.

Small is beautiful: This principle, derived from Schumacher (1973), promotes obtaining the maximum quantity of goods for the least investment. We live in a world with finite resources. On the one hand, there are extractive strategies: taking resources from Point A to Point B without any return on investment – or there is the

\(^7\) Many forest communities distrust organisations or technical service providers that manage training or government resources, since in most cases the resources do not actually benefit the communities.
multiplication view where people from Point A manage their resources to satisfy the needs of those at Point B, while returning investment to Point A and reinvesting in the resource.

- **No one is a prophet in their own land.** This is a principle from the biblical text of Matthew 13:57: *And they were offended at Him. But Jesus said unto them, 'A prophet is not without honour, save in his own country and in his own house.'* In other words, it can be hard to promote human development approaches to others in your town of origin, workplace or family. This may be because the primary perception that people have of each other rarely changes, or that it is hard for people to believe that someone from the same origin as themselves can be a good example of success or share something of value. For this reason, development promoters should avoid working in their locality, family or workplace. In FEDA’s case the principle of hiring external staff or allocating clients to other colleagues is applied when clients are from the same village or sometimes even family.

- **Development promoters should foster the client’s vision and passion – not impose their own ideas:** When people do the things they are passionate about, they find their ‘element’ or what gives meaning to their lives (Robinson with Aronica 2009). They will seek resources both externally and internally, from their true self, to solve problems and challenges. This accelerates the transformation process, because that is how people flourish. For every opposing force or challenge, there will be an interior force of equal or more strength to face the challenge. In contrast, promoting things that people do not seek or are not passionate about results in stagnation that suppresses intellectual abilities and creativity and generates frustration.

10.6 Conclusions

10.6.1 Relevance

Fostering responsible community-forest enterprises makes forests more competitive and sustainable. Short-term activities such as cattle raising and agriculture are the main drivers for deforestation, and are responsible for 70 per cent of deforestation in the Yucatan Peninsula (Ellis et al. 2015). Besides this, rural subsidies in Mexico are not linked with work and productivity but instead encourage a mindset of subsistence and dependency.

FEDA’s support promotes changes from the inside out, so that entrepreneurs change their surroundings and, independently of their productive activity, they are responsible for their own development and multiplying their wealth. In this way, FEDA is contributing to the achievement of several Sustainable Development Goals: no poverty, zero hunger, quality education, decent work and economic growth, climate action and life on land.

10.6.2 Future prospects

FEDA’s future approach will be to expand its focus from local targets to develop a macro level strategy: generating a network of entrepreneur connectors (young professionals
who live in cities and want to help change rural forest landscapes) that will help FEDA connect with wider interests in global challenges such as climate change and conservation with locally controlled forest enterprises that demonstrate responsible and environmentally sustainable impacts. By strengthening this network of young professionals with a passion for forestry and sustainability FEDA seeks to bridge existing knowledge and communication gaps between rural forest communities and cities. And in so doing FEDA seeks to better connect these wider global interests and associated finance to the productive restoration and the needs of rural forestry producers so they can adequately manage their territory.

Reforestamos needs to better shape its FEDA initiative to have greater impact. These entrepreneur connectors will be better linked with other sectors (such as energy, ICTs, construction, industry, agriculture). They should help the network to better understand public policies, how to align subsidies, how to attract impact investment, and could offer training workshops on how to transform raw materials into finished products, in a similar model to that offered by Grupo Paisano (undated).8

The future strategy of FEDA involves building a pipeline of forestry enterprises and partnerships with young professionals in urban as well as rural environments, to improve the overall ecosystem of FEDA and its client enterprises. The intention is for FEDA's future funding to come mainly from those enterprises formed by the enterprise connectors. And to work with them to build their own enterprises and develop partnerships with investors, landowners and locally controlled enterprises. These connectors will thus be able to invest in and connect rural forest communities to more globalised markets. FEDA will also offer training services to other organisations to increase the scale of its impact. In this manner, FEDA will obtain enough income to be sustainable, will be able to provide more services and even create new businesses as co-investors with producers and help them to succeed and become profitable, giving FEDA a return on its investment.

10.6.3 Recommendations to policymakers

FEDA's impact is hampered by subsidies focused on seed-capital productivity and technical training. These approaches create passivity and dependency within rural communities, where a proactive and entrepreneurial attitude is the opposite of social patterns. FEDA recommends moving away from a culture of subsidies which promote patriarchal attitudes towards forest resources. For instance, payments for environmental services encourage landowners not to touch their land by paying them not to do so. This generates passivity in those who prefer to receive income without work.

Instead, subsidies should be focused on promoting entrepreneurial skills to produce goods in a way that is compatible with conservation or to offer a service that will generate environmental services such as carbon capture, water filtration or temperature regulation. For this, policies should promote work and competitiveness and evaluate their success.

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8. Grupo Paisano is a multidisciplinary group of investors and professionals from different fields, founded in 2013. It supports micro and small rural producers in Mexico using its Solidarity Economy Model – economic development of producers and their communities.
Two members of Kamusiime Memorial Rural Development Association, standing proudly in their plantations in Bushenyi district, western Uganda. Kamusiime are one of SPGS's most successful clients

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Sawlog Production Grant Scheme (SPGS): supporting small-scale entrepreneurs in Uganda

by Paul Jacovelli

At the turn of the millennium, Uganda’s forests were in crisis. Decimated by deforestation and poorly managed plantations, the need for commercial-scale tree planting was clear. Here, Paul Jacovelli describes the work of the Sawlog Production Grant Scheme (SPGS), nominally a state-run organisation but in practice semi-independent with a commercial focus. SPGS is different from most previous tree-planting initiatives in Uganda. Its objective is to build the foundation for a sustainable, plantation-based sector in Uganda – not just plant trees. SPGS’s experiences show that with the right environment, private-sector entrepreneurs are willing to invest in plantation forestry and – when provided with the right professional support – this can have huge benefits for rural development.

11.1 Introduction

11.1.1 Incubator

The Sawlog Production Grant Scheme (SPGS) gives conditional grants and provides technical support to private tree growers in Uganda. From its launch in 2004 until 2015, SPGS had directly supported the establishment of around 50,000 hectares (ha) of timber crops to agreed standards. With the objective of kick-starting a sustainable, plantation-based forestry sector in Uganda, SPGS has supported a range of clients, from organised community groups to large corporate clients. The majority of these clients, however, were small to medium-sized local entrepreneurs, with an average of 50 ha planted and split 50:50 between private and public land.

While not strictly a ‘business incubator’ SPGS has many similar features in the way that it supports small-scale entrepreneurs to develop sustainable businesses based on commercial tree growing. SPGS is also working closely with the Uganda Timber Growers Association (UTGA) to provide a more permanent business incubation centre.

At the outset, SPGS was a small component of the European Union (EU) US$14 million Forest Resources Management and Conservation Programme (2002–2006). This programme was significant because it made the clear link between the need for plantations to ‘compensate’ for protected areas of natural forests by encouraging timber plantations in selected areas. It also recognised the general shift away from the funding of state-owned plantations towards creating the environment for private-sector investment in the sector.
Due to the interest it created with private investors and its positive results on the ground, SPGS soon attracted further overseas development assistance (ODA) funds – from the EU but also the government of Norway (GoN) and of Uganda (GoU) (see Table 11.1). GoU’s budgetary contribution to SPGS since 2009 is also significant as it represents their ‘buy-in’ to the project.

<table>
<thead>
<tr>
<th>Phase</th>
<th>Years</th>
<th>Area¹ ha</th>
<th>EU² US$ millions</th>
<th>GoN³ US$ millions</th>
<th>GoU⁴ US$ millions</th>
<th>Total US$ millions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Phase I</td>
<td>2004–2009</td>
<td>15,000</td>
<td>6.3</td>
<td>-</td>
<td>-</td>
<td>6.3</td>
</tr>
<tr>
<td>Phase II</td>
<td>2009–2015</td>
<td>35,000</td>
<td>11.4</td>
<td>4.9</td>
<td>1.1</td>
<td>17.8</td>
</tr>
<tr>
<td>Phase III⁵</td>
<td>2017–2020</td>
<td>32,000⁶</td>
<td>16.0</td>
<td>-</td>
<td>1.1</td>
<td>17.5</td>
</tr>
<tr>
<td>Total</td>
<td>2004–2020</td>
<td>82,000</td>
<td>33.7</td>
<td>4.9</td>
<td>2.2</td>
<td>41.6</td>
</tr>
</tbody>
</table>

1 Includes only planted areas that were approved for grant payment (i.e. those that met agreed standards).
2 Calculated to include pro-rata cost of expatriate technical assistance.
3 Excludes GoN’s support of Uganda Timber Growers Association.
4 Based on budgeted commitments.
5 Phase III was delayed; the UN Food and Agriculture Organization (FAO) took over responsibility for project management in mid-2017.
6 Target for Phase III.

Uganda’s forest sector underwent a prolonged reform process from the late 1990s until 2003, which resulted in a new national forest policy in 2001 and the formation of a National Forest Authority (NFA) in 2003. The forest policy (MW&E 2001: 17) clearly recognised the importance of the private sector, in its policy statement on commercial forest plantations:

The private sector will play the major role in developing and managing commercial forest plantations. This may be either through large-scale industrial plantations on government or private land, or through small-scale plantations on farms.

SPGS started out operating within NFA but soon changed into a semi-independent initiative, under the supervision of GoU’s Ministry of Water & Environment (MW&E), which chaired the project’s steering committee. This was because SPGS promotes private-sector investment in plantations and the NFA is also actively seeking funds for its own planting.

11.1.2 Context
By around the year 2000, Uganda’s forests were in crisis with rampant deforestation of natural forests and a very poor plantation resource (<4,000 ha of poor-quality, mostly over-mature crops). With over 90 per cent of the people relying on wood for fuel, and with a rapidly developing economy and its population set to double to 60 million by 2030, the development of a sustainable wood supply was urgently needed.

Prior to SPGS starting in 2004, ODA had supported Uganda’s forestry sector for many years. The majority of this support was for conservation measures in the country’s natural
forests, some of which were biodiversity ‘hotspots’ (notably along the western Albertine Rift) but funds had also been given to the Uganda Forest Department (precursor to the NFA) to start timber plantations. On both counts there was little to show for a significant investment of public funds.

Within this environment of a looming shortfall of wood, SPGS was set up in 2004 to attract and support private-sector investment in tree plantations. There was very little private tree planting on any scale of merit in Uganda before SPGS came along, the exception being the private tea estates in the west of Uganda, which invested heavily in becoming self-sufficient in fuelwood, largely from fast-growing eucalyptus (Eucalyptus grandis) plantations. This investment was driven partly by the rising cost of sourcing fuelwood (as supplies diminished) and partly by the increased pressure from the public against international companies contributing to the deforestation of the natural forests. Other industries dependent on wood (eg tobacco, cement, construction companies and furniture makers) either did not have the external pressure or the wherewithal (land and
capital) to develop their own sustainable wood supply. As in many African countries, commercial tree planting in Uganda was largely considered to be the role of the state. By the turn of the new millennium, however, it was clear that the country needed to rethink its plantation strategy and, in line with many other countries, look towards the private sector to invest.

SPGS has other closely related objectives – to increase rural incomes and to enhance carbon sequestration. The former is being achieved by the creation of many jobs in plantation establishment and management (and associated support industries), while the planting of fast-growing trees supported by the project is clearly making a very positive contribution to carbon stocks. In the long run, these plantations will provide wood that would previously have come from the country’s natural forests.

SPGS also provides two key elements for potential investors: finance during the costly establishment phase and also sound technical support to ensure investors have fast-growing, quality crops, not just trees planted. This powerful package is further enhanced by the availability of state land suitable for commercial tree planting. As part of the sector reform, in 2003 NFA offered 25- or 50-year permits in specific central forest reserves (CFRs) that had been gazetted many years ago for plantation development. This combination has proved extremely successful in attracting investors to the sector.

11.1.3 Target businesses

SPGS’s target clients: SPGS was set up initially to attract and then support small and medium enterprises (SMEs) to invest in commercial-scale tree planting in Uganda. The grants are conditional on achieving certain standards and cover roughly half the costs of establishing commercial plantations within the range of 25 to 500ha.¹

It should be noted that SPGS’s clients are mostly entrepreneurs with a minimum of 25ha of land, although formal groups or associations are encouraged to combine resources to achieve this required area of land. (The most successful of these, the Kamusiime Memorial Rural Development Association, is described in Section 11.5.2). Due to a demand from clients to support communities in the vicinity of their plantations, SPGS also supports community tree planting. The community support provided includes technical advice (onsite training) and the provision of quality seedlings, but no cash payments. Even this initiative has a commercial focus, with a requirement that a minimum of 20 members in any one local village and their land are prepared prior to planting. Basic advice is given regarding the legal and institutional set-up of such associations: the community groups are encouraged to formally register their association and elect a spokesperson as a point of contact for the project. (It was expected that other organisations such as NGOs or local government would take on the mantle of supporting such groups, but that has hardly happened).

Phases I and II of SPGS recognised the importance of having some larger investors in the sector too, as these are the ones that ultimately will invest in downstream added-value processing facilities from which the SMEs can benefit. Location and the economies

¹. In SPGS’s Phase II, a reduced level of grant was offered to larger investors with between 501 and 3,000ha.
of scale are very important in forestry, which generally produces fairly low-value bulky products (i.e., logs). Thus, SPGS only supports clients with land suitable for planting in specified ‘clusters’ around a large investor. When the trees are ready for market, the SMEs will at least have the option of organising themselves into groups (such as cooperatives or associations) to process their wood or they can sell the timber to the larger grower(s).

A criticism sometimes directed at SPGS is that it does not target directly the ‘poorest of the poor’. This misses the objective of the initiative. SPGS has been the catalyst for attracting SMEs to invest in tree plantations on a commercial (i.e., profitable) scale. This investment is in rural areas and has already created many thousands of jobs and is putting money into the rural economy. Many rural communities have also benefited from larger investors’ corporate social responsibility too, by supporting education, health and infrastructure projects. SPGS’s goal is to at least lay the foundation for the development of a sustainable plantation sector in the long term.

**Number of people supported:** In Phases I and II of SPGS, around 450 clients were directly supported with grant payments and technical support. Many other people have benefited indirectly from SPGS’s influence too, as measured by the substantial tree planting that has occurred beyond the project’s contracted clients (this is discussed further in Section 11.5). Since the early days of the initiative, SPGS has been oversubscribed, which led to the development of an objective scoring system to rank applications. Factors which were important included the land being situated within a cluster, the current land use, previous tree-planting experience and a reasonable forest management plan (FMP). SPGS also designed and ran practical training courses to support its clients. Some 1,440 people attended training courses run by SPGS staff during Phases I and II (further explained in Section 11.3.2).

**Challenges:** As the plantation sector has developed over the last 15 years in Uganda, the challenges faced by investors have shifted too. Although finance is always cited as the key constraint, the SPGS grant softens this impact. Over SPGS’s lifespan there has been a shift from pure silviculture and management issues towards concerns over the end market for clients’ trees.

Prior to SPGS, the main challenges faced by potential tree growers in Uganda were the lack of finance and good technical guidance. There was also a lack of organisation, whereby individual tree growers were often acting in isolation from others. Finance is an issue because commercial banks consider forestry as a high-risk venture, partly because they often do not understand the business well but especially because of its longer time scales – even in the tropics.

Plantation forestry also has a challenging cashflow for the first-time investor, with the vast majority of the costs required at the critical establishment phase over the first few years of the crop’s life. Then there is a long wait until the main income is realised at harvest time. While some interim income may be forthcoming from thinning operations, the vast majority of the income comes from the final harvest.
SPGS has also brought tree growers together – into the SPGS ‘family’ – which has meant that they have received professional support while also encouraging them to share experiences with other growers facing the same steep learning curve. Developing a culture of commercial tree growing has been an important legacy of the project.

Providing sound technical advice has also been very important as the best practices promoted by SPGS were not widely adopted in Uganda prior to SPGS’s presence from 2003–4. These practices included using only improved seed, intensive land preparation and thorough weeding – in order to maximise the tree growth and quality. These practices are ultimately aimed at trying to ensure that the clients make the most from their investments in the hope that this will encourage them to carry on planting beyond SPGS, when they harvest their crops.

A number of SPGS’s clients have been surprised by the reality of the costs of tree establishment in Uganda and also the length of time for the crops to reach maturity. The common prevailing perception prior to SPGS seemed to be that you just stick the trees in the ground, then wait for them to grow to a certain size, sell them and then retire on the profits. The realities of commercial plantations soon hit home. SPGS grants help finance the first few years only, then it is up to the individual growers to maintain their crops. Some investors have also been shocked to learn of the realities of the economies of scale of forestry and the importance of location of their plantations in relation to the end markets. In Phase II of SPGS, only clients with land in one of six ‘clusters’ were considered for support. The clusters were generally located in proximity to a likely end-market, notably where the larger investors were planting.

The strategy of SPGS here has been to ensure that potential investors are aware of the plantation business, especially the expected costs and the likely cashflow scenario over the rotation. In addition to the establishment grant of circa US$425/ha (explained in further detail in Section 11.2.4), pruning and thinning grants (US$50 per ha and maximum 100ha per client) were introduced in Phase II to encourage clients to manage their crops well beyond the establishment phase. Facilitating investors to grow quality trees was always the objective of SPGS, not just chasing hectare targets. Of course, clients complain that the grant is not sufficient. However, the interest and results to date indicate that it has been sufficient to attract many entrepreneurs to invest in tree planting in Uganda.

Other early challenges faced by clients included a lack of quality planting material and a lack of reliable contractors to undertake establishment work. Both these issues were directly addressed by SPGS (described in Section 11.3.2).

As the clients’ trees have grown, their thoughts have turned increasingly to markets in order to make the most from their investments. In Phases I and II of SPGS, more attention was paid to establishing good-quality trees – for timber and large poles in particular. SPGS’s Phase III is planning to develop the value chains further by directly supporting downstream processing, notably in collaboration with UTGA.
11.2 Institutional design

11.2.1 Staffing and structure

SPGS is a semi-autonomous project that is supervised by the government of Uganda’s Ministry of Water and Environment (MW&E) (see also Figure 11.1). For Phases I and II, the project team was recruited independently of GoU, with the aim of bringing in young foresters under senior managers and technical advisors with largely private-sector experience.

All project staff were recruited locally and nearly all as recent forestry graduates from Makerere University. For Phases I and II, there were two internationally sourced technical advisors assigned to the project. The technical advisors supported the project manager and the forestry staff. Importantly, the chief technical advisor had over 20 years’ experience with commercial plantations in Africa and was tasked with reporting independently to the steering committee as well as working day to day with the project manager.

As SPGS expanded rapidly and the need for additional support was evident, a second technical advisor was recruited from Southern Africa: this person also had very practical plantation experience. Both technical advisors were active in training and mentoring the young forestry staff, which included exposure to the mature, commercial forestry sectors in South Africa and Swaziland. SPGS is overseen by a steering committee (described in the following section), which meets every three months and whenever the need arises in between.

11.2.2 Advisory board

SPGS’s steering committee was set up from the outset and comprises representatives from GoU (MW&E, NFA and the finance ministry), ODA partners, an independent, private-sector business person and a project manager. The steering committee is chaired by the senior GoU’s MW&E representative. Maintaining a balance between GoU oversight and
support for a commercially orientated project has been a challenge but largely worked well for Phases I and II. By the end of Phase II, however, the steering committee had swelled to 16 members and was dominated by public-sector representation. SPGS's success in achieving results and attracting ODA finance also attracted political pressure to expand support to smallholders and also to move into regions of the country considered marginal for commercial tree growth. The role and composition of the steering committee will thus be crucial if SPGS is to maintain its focus.

Throughout the life of SPGS, the technical support and strategic direction has come more from the technical advisors’ commercial forestry experience, supported by external consultancies in specific areas. Leading experts have frequently been brought in to ensure standards are constantly improving and that useful practices from elsewhere are adopted where appropriate. This approach has helped the project to respond to the needs of the growers, especially technically. Market-related issues are increasingly passed on to UTGA.

Mid- and end-of-phase reviews are carried out by independent, experienced consultancy teams. The terms of reference ensure that the team leader must have a background in international commercial forestry.

11.2.3 Networks

SPGS was always under pressure from its ODA financers to have a sustainability plan for life beyond the project. The main approach of SPGS has been to support the formation – and build the capacity – of Uganda Timber Growers Association (UTGA), an independent, membership organisation. Grower associations can play an important role in supporting the interests of their members but all too often they raise expectations too high and lose their focus, especially when ODA-driven. When well run, they can undertake lobbying of government where appropriate and also provide other valuable support to their members as requested, but especially for market-related matters. The challenge with such organisations is getting them on a sound business footing where they are self-sufficient. Lessons can be learnt here from successful grower associations such as Forestry South Africa, whose main source of funding is through a levy on timber sold by its members. However, to get to this point will take time as Uganda’s commercial forest sector is still immature.

SPGS was instrumental in kick-starting UTGA in around 2007 and was able to leverage additional finance from the government of Norway to support the fledgling organisation: this funding ceased in 2016. From experience in other countries’ plantation sectors, it was foreseen that such an organisation would ultimately benefit the private tree growers in Uganda, the vast majority of whom were clients of SPGS. During SPGS’s Phase II, capacity building of UTGA was a strategic objective, being seen as crucial for sustainability of support to growers beyond SPGS. This is becoming even more important as the SPGS-sponsored plantations approach maturity.

The importance of building capacity in UTGA has also been stressed in SPGS's Phase III, which began in late 2017. Membership fees alone are currently not enough to maintain UTGA's development and thus external funding is vital at least for the near future, with UTGA expected to take on some of the support that previously came from SPGS. Other
sources of income for UTGA come from its importation of improved tree seed, plant sales from a nursery started in 2016 (although mainly for demonstration and training purposes) and funding for specific activities, eg a joint Forest Stewardship Council (FSC) and Worldwide Fund for Nature (WWF) study looking into group certification of small growers. Commission on timber sales made on behalf of members is currently low but this is expected to increase as the members’ plantations mature.

After a slow start, UTGA is now on its feet and widely seen as having an important role in providing long-term support to commercial tree growers in Uganda. UTGA has a clear role to lobby GoU on key legal and policy issues on behalf of its members, as well as more practical support in terms of information and services requested by their members.

11.2.4 Finance
Prior to SPGS being launched in around 2003, there was considerable debate about whether the financial support to private growers should be in the form of grants or loans. For reasons of sustainability, loans were the preferred option as a revolving fund (which assumes the loans are repaid) would continuously support private growers. There was, however, little enthusiasm among financial institutions to manage such a fund. All the commercial and development banks approached had the same misgivings, highlighting their lack of understanding of forestry as an investment. In combination with the longer timescales before the investment matures, this meant that investments in tree plantations were very much in the banks’ ‘high-risk’ category. SPGS’s steering committee eventually agreed to offer establishment grants but made it clear that the grants would be conditional on performance and not paid up front. The performance targets and standards would be clearly defined in legal contracts between GoU and the client.

**Figure 11.2 SPGS Phase II budget detail**

- Planting grants 64%
- Project administration 16%
- R&D support to clients 5%
- Community support 4%
- Training & communication 7%
- Contingency 4%
In Phase II, around 64 per cent of SPGS’s total budget went into direct grants (Figure 11.2). These grants cover only part of the total establishment cost. The level of grant was set at the outset (2004) at around 50 per cent of anticipated establishment cost over one to three years. The establishment cost was calculated to be US$750 per ha and thus SPGS grants covered 50 per cent of this – US$375 per ha. In Phase II, the establishment costs were independently reviewed (by UTGA) and SPGS’s grant increased to US$425 per ha. The balance of establishment costs is borne by the clients, which also ensures that they have a vested interest in their trees. The SPGS model is thus a highly cost-effective way – in terms of government and ODAs – of developing the country’s timber plantation requirement, while at the same time significantly contributing to rural development and climate change goals.

By its very nature, SPGS relies on external funding to continue. Currently, this is a mixture of ODA and government finance (as detailed in Section 11.1.1). The incentives that SPGS offer (grants and technical support) have been used in many countries to build a homegrown timber resource for whatever reason. SPGS to date (2017) in Uganda has supported directly around 50,000ha of plantations. The entire country’s plantations are estimated to be no more than 100,000ha (Tugumisirize 2017). A 2010 report estimated that Uganda needs probably at least 200,000ha of plantations just to meet local demand, depending on the economic growth of the country and the efficiency of processing (Unique 2010). Any export-orientated industries would require additional raw material.

While SPGS to date has made significant in-roads to meet Uganda’s future timber needs, the project’s current funding ends in 2020. With the clear need for many more plantations to be established in the country, the long-term finance options after SPGS’s current funding expires in 2020 need to be considered. Alternative finance options to grants might be concessional finance (e.g., low-interest loans) or a combination of commercial and concessional finance, known as ‘blended finance’. The global finance world is currently looking at how to support new tree planting through such initiatives. With the investment already made in SPGS in Uganda – and the results it has achieved – continuing the initiative would appear to be the best option, provided it can keep its commercial, results-orientated focus. This will depend, however, on ODA and GoU funding being made available beyond 2020. Elsewhere, other finance options might be more suitable and possibly more likely to attract start-up funds from public sources. A study was supported in late 2017 by the UK’s Department for International Development (DFID), looking at options for establishing a Tree Fund for small-tree growers – initially in East Africa – and possibly using the trees as loan collateral.2

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2. This study is being organised by the Nature Conservancy and is due to report late 2018.
11.3 Services offered

11.3.1 Services offered
As noted earlier, SPGS offers financial support to SMEs prepared to invest in timber plantations in Uganda. SPGS also provides technical support in terms of professional advice from the initial planning and establishment phase and crop management for specific end markets. This support is administered by a team of professional forestry and administrative staff.

In order to deliver sound technical advice to SPGS’s clients, it was realised early on that the skills and experience required were generally lacking in country. Government institutions had not kept abreast of many advances in plantation forestry that would be crucial for investors to realise a decent return – from plantation planning and silviculture through to harvesting and processing. This is why SPGS developed its own in-house training programme (described in the following section), initially to fast-track training of its own staff and then to roll out the training to the projects’ clients.

Before SPGS staff could give professional advice to clients, they had to be trained themselves. Although most were forestry graduates, their tuition had not covered the intensive plantation management being promoted by SPGS. This was solved by having two experienced technical advisors fast-track training and closely mentoring SPGS’s newly recruited local staff. Regular study tours were organised to South Africa and Swaziland to give project staff and clients a vision of a mature sector based on plantations. Project staff were then facilitated to regularly visit the clients in the field – not just to inspect crops for payment but also to give practical advice and encouragement to clients, most of whom were new to the business of tree planting on a commercial scale.

11.3.2 Service delivery
Training: In the project’s early days, SPGS met with the existing training institutions in the country and concluded that to achieve the quick turnaround in plantation quality needed, it would have to undertake practical training itself, at least in the short term. Thus, SPGS developed a series of practical training courses to assist clients reach the standards expected to receive the grants. These courses concentrated on supervisory and field-manager level and evolved as the demand changed. A five-day plantation planning and establishment course was the foundation course, followed by plantation maintenance, which included weeding, pruning and thinning. Specialist courses were organised on demand, including fire protection, safe use of herbicides and even a weekend course for potential investors on budgeting and planning for plantation forestry. As the sector evolves and interest in the value chains and markets increase in Uganda, the training focus needs to shift accordingly. For this to occur there will need to be collaboration between the key actors in Uganda – SPGS, UTGA and the training and research institutions – to deliver more relevant, demand-driven training and research.

3. South Africa and Swaziland have circa 1.2 million hectares and 100,000 hectares respectively of plantations and many successful examples of SME involvement in the sector.
With regard to SPGS’s training courses, clients are expected to pay the costs of accommodation and transport to and from the venue, with SPGS providing the training and equipment for free. Within two years of starting, local project staff were running most of these courses, with the technical advisors supporting where required. With courses regularly oversubscribed, this service has been clearly welcomed by clients. The training courses were prioritised due to SPGS’s standards being strictly enforced prior to any payments being authorised. Where a field inspection by SPGS staff had found problems with the planting, a frequent recommendation would be for the client to send their key field staff to one of the organised training courses.

**Information and communication**: Undoubtedly part of SPGS’s success has been due to its dynamic communication strategy, which ensures rapid feedback in both directions. An important communication channel has been quarterly field meetings for clients, which have proved to be very valuable for discussing issues and sharing information. These were organised in the various regions or clusters throughout Phases I and II. SPGS started a newsletter in 2003 – *SPGS News* – which was published regularly from 2004 until 2014. *SPGS News* had a wide circulation, with hard copies circulated in country and electronic versions sent around the world to all interested in the project.

During Phase I, SPGS started to produce practical booklets on various plantation topics. At the start of Phase II (2009), to better-support clients and promote best operating practices, SPGS published a very detailed handbook – *Tree planting guidelines for Uganda* – which combined the individual booklets and added a lot more information.⁴ A copy of these guidelines was given to each client and extra copies sold at cost price. This is a highly illustrated manual written for the non-forester but with background explanations as to why certain practices are recommended. Ideally, this should be periodically updated to include new information as it becomes available, eg new pests and diseases, the availability of new clones and relevant research results.

Other sources of information for clients were a detailed *Frequently asked questions* booklet, which was regularly updated. The project also had an active website, with much information on the business of tree growing as well as all the consultants’ reports and other useful material for download.⁵

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⁵ SPGS’s website at the time of writing is offline. Digital copies of much of the material described can, however, be provided by the author.
**Expert support:** To provide practical advice in areas identified as important for the success of the scheme, SPGS also commissioned many short-term consultancies, especially in the early years. International experts in their fields were targeted in order to get the best possible guidance. These included site-species matching, growth modelling, training needs assessment, labour productivity, forest certification, pests and diseases, and value-chain analyses. Virtually all the consultants’ reports were made freely available online and summary articles were routinely included in *SPGS News*. This approach helped SPGS to ‘leapfrog’ to the latest innovations and recommendations in terms of best forestry practices.

**Improved seed and nursery certification:** From its early days, SPGS adopted a market system approach to strengthen critical gaps in the value chain. The first challenge was seed (and plant) quality. This area was tackled first because mistakes in forestry made at the start (such as planting the wrong species on a site or using poor-quality seed) cannot be rectified later on.

SPGS assisted directly by sourcing improved seed of the main species and selling on to clients and nurseries. This seed was (and still is) virtually all imported as almost all seed orchards or ‘plus’ trees (ie superior individual trees that would make good genetic parents) in the country have long since been converted into planks. In addition, great advances in tree breeding have occurred in other countries over the last 20–30 years, notably with *Pinus caribaea* var. *hondurensis* and *Eucalyptus grandis*, the two most popular species being grown in Uganda. This role has been passed on to UTGA, which now imports seed on behalf of its members.

A related problem was the poor quality of plants from many local nurseries. With the surge in demand for seedlings from improved seed sources, the local nurseries struggled to cope and some clients complained about poor-quality plants even when raised from good-quality seed. In response to clients’ requests (and also to raise the standards), SPGS initiated a nursery accreditation system, which has also been passed on to UTGA to oversee in the long term. This certification system – with annual inspections – has worked well and even if the nurseries are still basic by global standards, they can produce high-quality trees. Many people in the country are now aware of seed- and plant-quality issues. The scale of new planting in Uganda, while impressive, has not to date justified investment in modern nurseries, which would usually adopt a containerised system with soilless media and irrigation as standard.

**Contractor training and certification:** A similar situation to the plant-quality issue arose with regard to contractors in Uganda. As the planting expanded, a number of SPGS clients struggled to find reliable contractors to carry out establishment for them. Again, in response to a request from clients, SPGS assisted in capacity building and quality assurance of local contractors. A training package was developed in conjunction with local institutions and individual experts, which was offered to contractors (initially at least) at a subsidised price. This package consisted of four modules of around a week each, in labour management (including health and safety), contract management, business management and finally, forestry practices – the ‘SPGS way’. Once they had successfully completed these modules, the contractors would be certified and monitored as per the nursery certification system.
With both the nursery and contractor certification systems, any complaints are followed up and may result in companies being de-certified. Both accreditation systems have been handed over to UTGA to administer beyond SPGS. Nursery owners and contractors are attracted to join the scheme due to the free publicity (provided by SPGS and UTGA) for their services.

11.3.3 Linking
As described in the previous section, SPGS has used various communication channels to inform its clients: the regular field meetings, SPGS News and the project’s website were particularly useful in this regard. The nursery and contractor accreditation systems have been important for linking clients with reputable support services. As the project continued, UTGA took on an increasing role for linking SPGS’s clients with various networks, including service suppliers and increasingly market-related contacts.

SPGS has provided advice on the best practices for growing trees for specific end markets. As the crops supported under SPGS start maturing, however, many clients have begun asking about marketing and processing. With regard to markets and getting the best deals for clients’ trees, UTGA has been encouraged to take the leading role. This will be enhanced with support under SPGS’s Phase III. SPGS’s clients have always been encouraged to engage with UTGA, to ensure the long-term support of the sector. To date, UTGA has responded to requests from its members by importing improved seed, negotiating discounts for equipment (e.g., hand tools, herbicides and fertiliser) and lobbying GoU for an improved investment environment for forestry.

11.4 Incubation management

11.4.1 Selection
SPGS’s modus operandi evolved through studying what had and had not worked with other incentive schemes both locally and internationally. Once the standards and rules were approved by the steering committee in 2003, adverts were placed in the local press for people to apply to the scheme. At each subsequent phase, a similar approach was taken.

Applications for support are initially screened against a checklist, covering aspects such as land suitability for good tree growth, scale (minimum 25 hectares) and location (within one of the recognised clusters). Evidence of previous trees planting would obviously be a bonus; in Phase II, priority was given to those who succeeded in Phase I and had access to more land.

One of the key requirements for becoming an SPGS client was to have a forest management plan (FMP) that detailed the planned planting programme and also showed an understanding of the business, especially in terms of expected costs and timing of operations. SPGS provided guidelines to ensure that not just good silviculture was included but also environmental and social standards were incorporated into the FMP. An approved FMP formed the basis of a contract which would be signed between GoU and the client.
11.4.2 **Performance oversight**

The main regulation and monitoring of SPGS’s clients was through the regular inspections made by trained project staff. Onsite visits were made at least twice a year to each contracted client to check progress. Payments would only be made if the standards agreed in the contracts had been met. The clients themselves are urged to attend these site visits by SPGS staff and a field report is sent soon after each visit – not just with payment details but also with recommendations for any improvements to be made in their plantations.

SPGS’s management and advisory team report quarterly to the steering committee, in terms of planned versus actual performance figures. Mid-term and end-of-phase project reviews were conducted for both Phases I and II of SPGS: these were carried out by independent consultants, led by an experienced forester with commercial plantation experience in the tropics. Understandably over the project’s lifespan, social and environmental issues came increasingly to the fore and these were incorporated into SPGS’s standards where deemed necessary.

11.4.3 **Graduation**

Once SPGS started to promote itself more widely, it soon became very competitive, with applications far outweighing what could be funded. The SPGS team pushed for results (areas planted to the agreed standards) and regularly visited clients to inspect but also encourage them in their endeavours. Those clients that struggled to meet their commitments in any one planting season – eg planting targets not met or who had consistently poor-quality crops – had their planting contracts either annulled or revised downwards to a mutually agreeable level. They would also be encouraged to improve – eg by sending their managers on appropriate training courses or to invest more in maintenance. If there was no improvement at the follow-up visit, the client would be dropped (being formally in breach of contract) and the funds allocated to them would be offered to the next on the waiting list.

Clients who completed their contracts successfully would still be invited to field meetings, sent *SPGS News* and encouraged to join UTGA. Beyond SPGS support, it is hoped that UTGA will provide the necessary support to ex-SPGS clients.

11.4.4 **Outcome evaluation**

A database of SPGS clients is kept but is not publicly available. SPGS has records of areas planted by species and details of any payments made. Inspection reports are made after each field visit and indicate the areas planted and whether grant payments are due. These reports also highlight where a client has particular issues that need addressing – eg urgently weeding a young crop or strongly recommending a supervisor/field manager attends a training course. SPGS would periodically request other information from clients – eg employment and gender statistics – as these are frequently requested by the project’s funders.
11.5 Impact

11.5.1 Overall assessment
SPGS's success (or otherwise) can be measured by various achievements, the most important of which are: timber plantation areas established to set standards, the numbers of SMEs (clients) supported and the number of jobs created. Another clear impact of SPGS has been to raise the profile of the plantation sector in Uganda. Tree planting is now taken seriously by many in the private sector and this has gone well beyond SPGS's clients. According to NFA, an additional 30,000ha have been planted by the private sector over and above SPGS's 50,000ha: some of these were SPGS clients who, having access to more land, planted beyond the areas under SPGS contract. Significantly, this has encouraged the larger investors to stay and expand their planting (within the limitation of their land allocations from NFA). At the time SPGS started, most of the larger investors (four only >2,000ha) were mostly struggling on their own with little support in the sector. To date, these four larger investors have planted around 35,000ha of plantations in Uganda. Much more needs to be done, however, if Uganda is to become even self-sufficient in timber, let alone having a surplus to export.

There are other indicators that SPGS has been successful, such as the investment SMEs are now putting into processing to add value to their own (and other growers') trees. The proliferation of sawmills and wood-treatment plants are the first signs of this: some 15 small sawmills (mostly mobile bandsaws) and six treatment plants are currently in operation in Uganda (Kavuma 2017).

What sets SPGS apart from many initiatives to promote tree planting has been its commercial focus, not just on areas established but on its attention to maximising the growth and quality of the planted trees. SPGS introduced commercial plantation techniques tried and tested in other countries and quickly adapted them to Uganda's conditions. Many of these were built into the clients' contracts – eg minimum of 80 per cent survival three months after planting and evidence of using only improved seed from approved (certified) nurseries.

11.5.2 Successes
With its performance-based approach and combination of financial and technical support, SPGS has clearly succeeded in attracting investment into the commercial forest sector in Uganda. Investment has come from local entrepreneurs as well as international investors. Many local landowners now talk of planting trees for their pension or for their children's future.

In terms of successful SPGS case studies, the Kamusiime Memorial Rural Development Association in Bushenyi district, western Uganda, stands out. Kamusiime are a group of 22 small farmers, 14 of whom are women. They were legally registered prior to SPGS, with memorandum and articles of association. Members of Kamusiime combined their small plots of land and applied to SPGS as a group, to make up the minimum 25 hectares to be able to access the planting grant.

Within a few years, Kamusiime had established over 100ha to a high standard, and had become role models for SPGS and tree planting as a business venture in Uganda. Community groups and small tree growers from other parts of Uganda are now brought
there to be inspired. Members of Kamusiime’s committee were sponsored by SPGS to join a study tour of Southern Africa, along with other SPGS clients and staff. Kamusiime have more recently bought a mobile sawmill to create income initially from the thinning operations in their pine plantations. They have reputedly sold pine sawn timber to Southern Sudan and eucalypt poles to Rwanda.

Without SPGS’s support, Kamusiime would not have planted on the scale they have and certainly would not have had good-quality trees. The SPGS-introduced practices such as the use of improved seed and intensive early weeding were quickly adopted by Kamusiime, who regularly hit their planting and quality targets. Kamusiime’s excellent track record with SPGS helped them to access nearby NFA forest reserve land to expand their planting. By 2017, they had planted a total of 400ha, mostly commercial species – pines and eucalyptus – but also some indigenous hardwood species too. As with many other successful clients, Kamusiime inspired many other landowners in the region to think more seriously about tree planting, even if SPGS could not assist them all directly.

11.5.3 Failures
There have been failures along the way, which is hardly surprising given that commercial forestry was a new venture for the vast majority of SPGS’s clients. It quickly became evident that SPGS’s approach to establishing plantations was considerably more intensive than had been carried out in the country previously. However, through a combination of mistakes made early on and SPGS’s advice, most people soon adopted the best practices. Of course, the ‘carrot’ of an SPGS cheque once the agreed standards were achieved helped in this regard.

There have also been some clients who did not grasp the link between SPGS’s standards (ie best practices) and the eventual yield of high-quality timber. These clients would consistently just do the minimum to access the grant and very little more to maintain their crops. Other clients have seemingly little understanding of the market requirements for various products and are disappointed when their trees do not reach the specifications for higher-value markets (eg large transmission poles). The danger here is that such people will be disappointed at harvest time and not continue in the business.

With hindsight, SPGS should also have made potential investors more aware of the business of plantation forestry at the outset, especially the expected costs and the likely cashflow over the life of their investment. Investing in plantation forestry is not for everybody, with its front-loaded costs and long gestation period. Thus, greater emphasis needs to be placed on ensuring that potential investors understand from the outset the key issues with regard to the most relevant value chains. Hopefully such lessons learnt will be taken on board by SPGS III and UTGA in their support to any new investors.

11.5.4 Lessons for other incubators

- **High-level support**: In retrospect, SPGS struggled for long time to gain support from key public institutions in the sector for its approach. Some saw the project as a threat as its performance attracted considerable ODA support. The key institutions in the sector did not quickly embrace the new practices and standards that SPGS
promoted, although eventually it was obvious that the project’s approach was working, both in terms of attracting private investment and in the good-quality plantations being established. The shift towards the private sector is not something that comes easily to sectors which until recently were dominated by the state. Closer collaboration between SPGS and such institutions would have had an even greater impact on the sector since the project started.

- **Results and quality orientated:** The key lesson SPGS has learnt that is of relevance to other incubators is that of keeping a focus on producing quality results within the timeframe and agreed budget. This commercial approach has led to its success in attracting clients and the external funding required to continue the project.

- **Building trust with the private sector:** SPGS worked hard on building trust with clients, who in the early days were sceptical of yet another government-driven, tree-planting programme. However, the combination of timely payments (where appropriate), regular communication and sound technical advice soon gained people’s confidence.

- **Setting and enforcing standards:** The quality aspect was dealt with initially by setting clear standards and including them in the clients’ contracts. The next challenge was then ensuring these standards were applied routinely across the board with no favouritism. Success was purely down to the professionalism of the project management team.

- **Market system approach:** SPGS adopted a market system approach from the start, focusing first on growing quality timber and not just planting trees. This approach greatly helped the project to identify the constraints to achieving its results – for example, the lack of improved seed, the poor quality of most tree nurseries and the demand for silvicultural contractors. As the trees have grown, there has been a shift to processing and markets for thinning material: support in these areas has been increasingly taken over by UTGA.

- **The importance of applied research and practical training:** Throughout the life of SPGS, there has always been a need for research and training to support clients. The official (mandated) state-run research and training organisations, however, often cannot be relied on to provide cost-effective and timely support. The shift to demand-driven, results-orientated research and training represents a major change for such organisations and this will not happen overnight. However, it will be important for sustainability of the sector to have such facilities available in country and thus more effort needs to be made to build capacity, without losing the commercial focus noted earlier.

- **Innovation and communication:** Another valuable lesson learnt by SPGS relates to the culture of being open to adopting new ideas, whether they are technical or administrative in nature. This involves project staff keeping abreast of the business (internationally and locally) and also ensuring open communication channels with clients. SPGS’s communication strategy evolved into a powerful combination of methods to spread the word and also regularly engage with its clients.
11.6 Conclusions

11.6.1 Relevance
The need for commercial-scale tree planting has been clear in Uganda for a number of years, with a looming supply deficit predicted. SPGS has proven that given the right environment, private-sector entrepreneurs are willing to invest in plantation forestry and when this interest is supported professionally, this can have huge benefits for rural development. SPGS’s establishment grant, sound technical advice and (for around half of those planting) access to state-owned land for planting, has proved a winning combination. Establishing good-quality plantations is not enough on its own though, as the long-term success will depend on the development of a sustainable processing and value-added industry in order to make the most out of people’s investments. This would then create the demand and encourage replanting as well as expanding new planting.

Without the project’s support – both financial and technical – the extent and the quality of the planting would have been very much less in Uganda. In addition to the plantation areas established, SPGS has been responsible for greatly raising the awareness of tree planting as a business even for smaller entrepreneurs. The project has had a major impact not just in Uganda but is being looked at in many other countries to understand how it works and whether it could be transferred elsewhere.

11.6.2 Future prospects
As noted earlier, SPGS’s institutional positioning worked in its favour, especially for Phases I and II. While nominally a state-run organisation, it operated semi-independently and had a very commercial outlook. The challenge for Phase III and beyond is to keep the focus on commercial planting and to maintain the quality standards. There appears to be increasing pressure on the project to support more community-scale planting and also to go into areas considered marginal for commercial tree planting: both factors are more politically motivated than straight business decisions. SPGS’s strength to date has been its focus on attracting and supporting SMEs to invest in timber plantations. In terms of sustainability, however, there needs to be more focus on capacity building of UTGA, which is seen as providing long-term support for private tree growers in the country. Value chain development should be at the top of UTGA’s agenda.

11.6.3 Recommendations to policymakers
SPGS has proven to be a robust model that has achieved solid results on the ground, with 50,000ha of timber plantations supported that met agreed standards. For both the continuation of SPGS in Uganda and for those looking to introduce a similar initiative elsewhere, it is important, however, to learn the lessons as to why it has worked well to date. SPGS has a commercial, private-sector outlook and at least for Phases I and II (2004–2015), has stayed focused on commercial-scale tree planting only in those areas that support good tree growth and are in recognised clusters that are reasonably close to potential markets. SPGS is thus different from the majority of tree-planting initiatives of the past: its objective is to build the foundation for a sustainable, plantation-based sector in Uganda, not just plant trees. Understanding this helps explain the importance of having
project staff with a private-sector outlook and a steering committee that understands and supports this approach.

Promoting tree planting by very small-scale farmers and communities is undoubtedly important and supplements what SPGS is doing. But SPGS needs to keep its commercial focus if Uganda is to establish the plantation resource on the scale it needs. Whatever the scale of planting, valuable lessons can be learnt from SPGS, especially with regard to silvicultural practices aimed at maximising tree growth and quality.

While SPGS does not directly target the poorest of the poor, what it does do is create many jobs by attracting investment in rural areas. Already it has created significant demand for many rural services, including nurseries, contractors and other supplies required by the investors. As the sector develops, the added-value industry will create many more permanent jobs. SPGS's clients often also provide support to communities with many other benefits too, as part of their risk-mitigation strategy (also known as corporate social responsibility).

The willingness of SMEs to invest in the sector is not in question. But what SPGS has shown is that most require financial and technical support in order to give their investments the best possible opportunity to succeed. Given that SPGS grants cover only around 50 per cent of the total establishment cost, from the country’s point of view an expansion of SPGS would be a cost-effective way of establishing the country’s basic timber requirement, estimated to be around 200,000ha.

There are also significant economies of scale with plantation forestry to consider as well as the importance of location of the plantations in relation to potential markets. Access to public land in central forest reserves (CFRs) has been important for SPGS, accounting for 50 per cent of the 50,000ha planted under SPGS to date. However, there is still a lot of CFR land not currently well utilised (either not planted with trees or poorly stocked) which could be used for new planting. Fragmentation of CFRs has happened since 2003, with very few large, contiguous blocks now available for larger investors. With many not being planted for many years, consolidation of planted areas needs to happen, learning from SPGS's approach of annulling contracts from those who do not meet their planting targets after a short period.

To support the sector in the long term, plantation research and education must be addressed. Existing institutions are currently not providing the services required and thus will need to adapt or be increasingly sidelined as the sector expands. Closer collaboration between key stakeholders in the sector could greatly accelerate new planting and the sector's sustainable development: a win–win scenario for all concerned.
A member of the Vanlaxmi Tree Growers Cooperative working with organic vermicompost. Training on producing vermicompost was organised by SEWA through the Mehsana District Association

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SEWA: developing a business incubation ecosystem for smallholders and forest producers in India

by Reema Nanavaty, Megha Desai and Mihirbhai Bhatt

More than 60 per cent of the farmers in India are small and marginal and the greatest burden is on women. Yet women continue to have limited access to productive resources and services, markets, and marketing facilities in agriculture. The Self-Employed Women’s Association (SEWA) is a movement of self-employed women in rural and urban India. With more than 40 years’ experience, this chapter talks specifically about SEWA’s journey with small farmers and forest producers from rural areas as they seek their twin goals of full employment and self-reliance.

12.1 Introduction
SEWA is the largest trade union in India, with a presence in 14 districts in Gujarat. Over the years, the movement has spread from India to neighbouring countries like Afghanistan, Sri Lanka, Nepal, Bhutan, the Maldives, Myanmar and Pakistan where SEWA provides support to similar organisations focusing on women’s economic empowerment. SEWA aims to achieve the twin goals of full employment and self-reliance for its 1.9 million members who are poor women workers. Two thirds are from rural areas and 54 per cent of them are small and marginal farmers. SEWA is registered as a trade union under the Indian Trade Unions Act of 1926. The union is open for membership to self-employed women workers all over India. SEWA is funded through a variety of sources raised both from members and externally through grant funds and by a host of sister organisations in India and abroad.

12.1.1 Incubator
SEWA was established in 1972 as a trade union of self-employed women. SEWA believes in all religions irrespective of creed, tribe or caste. The creation of SEWA was inspired by Mahatma Gandhi, who led a successful strike by textile workers in 1917. He believed in creating positive organised strength by awakening the consciousness in workers. Gandhi argued that workers needed to develop both unity and personality, to be able to hold his

1. Ahmedabad, Mehsana, Banaskantha, Surendranagar, Kutch, Kheda, Vadodara, Sabarkantha, Gandhinagar, Rajkot, Panchmahal, Surat, Silvassa, Tap and 14 states of India including Gujarat, Bihar, Delhi, West Bengal, Rajasthan, Kerala, Uttranchal, Madhya Pradesh, Uttar Pradesh, Maharashtra, Assam, Meghalaya, Kashmir and Nagaland.
2. Sister organisations include SEWA Bank, SEWA Manager Ni School, SEWA Gram Mahila Haat, SEWA RUDI Multi Trading Company Limited, district associations, Grassroots Trading Network (GTN).
or her own against tyranny from employers or the state. And that for workers to develop this strength, labour unions should cover all aspects of worker’s lives both in the factory and at home.

In the years following its establishment, SEWA grew continuously and increased its membership and the diversity of member occupations. By the beginning of the Women’s Decade in 1975, SEWA had established itself on the map of the women’s movement in India. In 1977, SEWA’s general secretary, Ela Bhatt, was awarded the prestigious Ramon Magsaysay Award and this brought international recognition to SEWA.

SEWA is both an organisation and a movement. The SEWA movement is enhanced by its being a *sangam* or confluence of three movements: the labour movement, the cooperative movement and the women's movement. But it is also a movement of self-employed workers: their own, homegrown movement with women as the leaders.

From the beginning, SEWA’s approach has been to treat agriculture also as an industry, so that it moves from subsistence to becoming viable and profitable. At the heart of this effort has been organising farmers. The first level is village-level farmers’ collectives or groups. These are effectively further federated into 14 district associations, of which nine are registered. Strengthening rural worker organisations and economic empowerment is at the heart of SEWA’s approach. And that includes both capacity building and marketing as well as advocacy and lobbying. SEWA’s integrated approach to addressing poverty and promoting economic empowerment consists of four pillars: organising, capacity building, social security and capital formation (see Figure 12.1).

SEWA’s combined strategy of organising, policy advocacy and campaigning, capacity building, and value chain support is feminising forestry and agriculture through the following mechanisms:

- **Organising**: Forming social enterprises of small and marginal farm and forestry groups for collective trade purposes. Facilitating trade and licence registration for member’s enterprises.

- **Policy advocacy and campaigning**: Advocating for women’s rights in the forestry sector (such as rights to establish tree seedling nurseries, collect forest produce, and farm in the forest). Advocating for access to leasehold land for landless farm labourers.

- **Capacity building**: Providing training and mentoring skills relating to entrepreneurship, proposal writing, business development, market access, strengthening operations, new technology, product quality and standards certification, legal and financial issues, and business management, eg through the SEWA Manager Ni School (a school for new managers). Providing access to research and development experts within universities.

- **Value chain support**: Creating women-led value chains of small and marginal farmers based on the concept of *Anubandh* (developing the local economy through new supplementary income-generating activities such as seed collection, and creating value-added products). Helping with networking and finance (SEWA Bank, which is a cooperative bank, and 14 district associations provide farm-based funding support). Pooling investments in shared facilities and infrastructure such as business premises, electricity generation, machinery and equipment. Providing information on trade and business.
12.1.2 Context

India is the world’s largest democracy with a population of over 1.3 billion and is expected to become the world’s most populous country by 2030. Women make up most of the rural labour force (60 per cent), but only 12.8 per cent of women have ownership over land (GoI 2014; ILO 2017). In recent years the country has been rapidly going through economic reforms, bringing more jobs and employment. These changes are also noticeable in the informal sector, which is growing fast. There is a marked increase in women pursuing informal trades such as street vending and homebased and manual work. At the same time the number of workers in the agriculture sector is decreasing due to an increasing trend in out-migration and a disinterest in youth in these more traditional occupations.

The primary occupation of the majority of SEWA members is agriculture and most of them (84 per cent) have less than two hectares of land. At least half (53 per cent) have no access to irrigation and grow only one crop a year. This makes them extremely vulnerable to both market and climate shocks. Members also comprise marginal farmers or landless labourers, as well as a range of other sectors. Although highly diverse, SEWA’s members face many common challenges due to poverty, their unorganised status, but also due to policies that (although meant to help them) ultimately tend to benefit the rich and land owners.
The changing nature of work in rural areas and limited access and control over land is posing a challenge to many of SEWA’s members. In some states this is becoming a critical issue as the area of productive land normally used for growing food for local markets is being sold off at an unprecedented rate and used for other purposes. In the state of Gujarat, rising prices of essential food items have recently accelerated causing major food security concerns for landless and women workers and their households who depend on their income to buy food.

In addition to overall challenges related to poverty and marginalisation, gender is another important variable in the context of SEWA’s work. SEWA represents some of the most marginalised and vulnerable groups in Indian society and women face additional challenges in this context due to the way gender roles are constructed in Indian society. But rather than focusing on the individual woman, SEWA has always focused on the household as a unit (although the business incubation process is to be undertaken under the woman’s leadership). Naturally, this has helped SEWA put their member’s issues at the centre and enabled a far better understanding of household dynamics between individual women and their other family members. The emphasis has been on the holistic development of the household, where the women are the chief implementers and delivery agents. Purely by organising women into groups, making them aware, empowering them to speak up, listening to them intently and acting on their demands, SEWA has managed to effectively organise women throughout Gujarat. It has supported its members through a livelihood finance package comprising of a host of incubation services such as organisational strengthening, skills building and multiple financial services – long before concepts such as ‘microcredit’ and ‘livelihood finance’ became buzzwords.

12.1.3 Target businesses
SEWA targets women’s organisations in the informal sector who are often semi-literate or illiterate small marginal farmers or farm labourers. SEWA members mostly depend on their own labour for survival. They have very few assets or working capital. But they are extremely economically active, making significant contributions to the economy and society. In fact, in India, 64 per cent of GDP comes from self-employed income.

SEWA Founder Shri Elaben says ‘At SEWA, we analyse what work is for women. But we don’t stop there. We try to change the concept of work and try to provide a new direction and vision.’ SEWA continuously strives to generate more and more employment opportunities for its members, employing the latest technology and helping them to keep abreast of market trends to ensure inclusion for its members in the ever-changing economy. SEWA’s membership has also grown in the number of trades its members represent. SEWA organises 125 different types of trades in four major categories: homebased workers, producers and service providers, manual labourers and vendors.

3. Land is being sold for many reasons, many of which can be directly related to poverty. According to SEWA’s own investigations, the increasing costs of irrigation, debt crisis, health expenditure, additional income needs, or being cheated by brokers acting as intermediaries on behalf of others is contributing to serious income and food insecurities in the state.
SEWA’s members are informal-sector women workers who do not rely on one particular form of work. They pursue multiple activities to survive. In rural areas, women may work as a small farmer but also keep cattle. At the same time, they also do some homebased work such as weaving or embroidery appliqué. They also work on other farms. Therefore, we need to look at the future of work of the poor, of women and of traditional occupations to strengthen the position of informal sector workers in a way which brings them dignity and self-respect in harmony with nature.

SEWA is both an organisation and a confluence of labour, cooperative, and women’s movements. But it is also a movement of self-employed workers: their own, home-grown movement with women as the leaders. Women become strong and their tremendous economic and social contributions visible. But with globalisation, liberalisation and other economic changes, there are both new opportunities as well as threats to some traditional areas of employment. SEWA’s role is to monitor the changing needs of its members due to global and local dynamics, to understand their challenges and how they can turn those challenges into opportunities, and how they foresee their future of work.

While the overall trend is upward, there have been periods of fluctuation over the past decade. Membership has increased as a result of campaigns which developed into mass movements in some rural districts, or concrete gains from organising with workers like street vendors and homebased workers. But it is also because of support provided during crises. Over the years, the complexion of SEWA’s membership has changed significantly. In the last decade (2004–2016) alone, membership nearly doubled from just under 1 million to 1.9 million. Figure 12.2 shows a 30-year trend in membership increases from 1972 to 2004. More recent data from 2016, shows that SEWA’s Gujarat and all-India membership stood at nearly 0.7 million and nearly 1.24 million respectively.

**Figure 12.2 SEWA’s membership numbers 1972–2004 (millions)**
The following provides an overview of the different member businesses that are part of the overall structure and ecosystem of SEWA, both in Gujarat and internationally:

- **District associations**: Grassroots women-owned economic federations of farm and forest producers. There are now 14 district associations of grassroots, women-owned organisations (9 are registered). In each of the 14 districts of Gujarat where SEWA has organised women they have formed their own district association. These are registered locally at district level and provide services locally to their members. They coordinate with the SEWA’s technical service providers such as the Rural and Urban Development of India (RUDI) Multi Trading Company, SEWA Bank and Grassroots Trading Network (GTN) etc. Formed and registered more than 20 years ago, these sister organisations bring those services to their members in each district.

- **There are 91 farmer groups in 9 districts of Gujarat**: These farmer groups are village-level organisations. Their role is to assess the needs, demands and challenges faced by local farmers and to raise them at the district association level. They mainly organise training programmes, the collective procurement of inputs, and collective marketing.

- **RUDI Multi Trading Company Ltd**: This business is owned and managed by grassroots women producers who are small and marginal farmers. RUDI mainly provides forward supply-chain linkages to farmers. RUDI works through district associations to procure, process, grade, package and distribute to various markets.

- **Vanlaxmi Tree Growers Cooperative**: This is a grassroots landless farm labourer’s cooperative society of women.

- **Women’s forest and farm-based cooperatives and associations**: There are approximately 35 of these in 19 countries.
12.2 Institutional design

SEWA's institutional design as a business incubator is unique. SEWA promotes women's own economic enterprises around each step of the value chain model, which provides services to the other value chain service provider farmers and farmer groups. An ecosystem of the business incubation service has been developed, where each service provider is a sister organisation of SEWA with roots from grassroots women-owned and managed enterprises or organisations (see figures 12.3 and 12.4).

The design principle of SEWA is to be present in the whole value chain of its members so that they gradually move up the value chain and become economically viable and independent economic organisations. The essential idea behind SEWA's ecosystem of financial incubation services is that there is more than one organisation working in cohesion with others towards a common objective to incorporate women's enterprises into their value chain. As part of this strategy, SEWA has promoted the development of its sister organisations, which will eventually become institutionally and financially self-sustainable in the long run. The following are a brief description of each of the components of SEWA's ecosystem (see figures 12.3 and 12.4).
SEWA Bank has operated since 1975 and its work has been taken to rural areas by cooperatives and federations over the years. The impact on the lives of poor women has been tremendous. Poverty has reduced across a large section of women. In 1991 – two years after beginning its savings activity – SEWA Bank started disbursing loans to its members through its district associations and savings groups. SEWA's policy has always been to first build financial discipline in its members by encouraging a regular savings habit, and then offering credit a year or two later, by which time the members are creditworthy.

SEWA Bank and district associations have also established a credit programme, where members can take out loans:
- To free up mortgaged assets
- To purchase cattle
- As working capital (for buying equipment etc)
- To set up small shops for male family members (husbands or sons)
- For housing

![Figure 12.4 Flow of services and organisations within the SEWA ecosystem](image)
Access to finance is one of the four main pillars of SEWA’s agriculture campaign. Its members are non-bankable and thus access to finance is a major challenge. Problems such as borrowing at a high rate of interest and having to make distressed sales at lower rates maintains a vicious circle of poverty. To overcome this, SEWA organises the women into groups and inculcates savings. A self-help group (SHG) of members is then registered and linked with the SEWA Bank, through a district association. Because the bank is located in one place, in Ahmedabad, SEWA started collaborating with district associations (see below) to provide additional ‘satellite’ support, accepting deposits and disbursing loans to groups. The districts associations also provide information on the needs and demands of members, based on which SEWA Bank has developed their credit lines, portfolios, rates and repayment system which are suitable for members. District associations also provide linkages with local banks based on members’ needs.

SEWA Manager Ni School equips grassroots women with management skills to successfully run small enterprises. Founded in 2005, it follows a decentralised approach to train women in rural communities, training up grassroots ‘master trainers’ in technical, life and management skills. The master trainers then train other grassroots women at the village level. The training is hands on, demonstrative and needs based and is developed with consultation from members. The trainers have experience of running enterprises at the grassroots, of supply chain management and private-sector partnerships.

SEWA Gram Mahila Haat is a new marketing organisation involving village-based producers’ groups from nine districts, cooperatives and district-level associations. With support from the Gujarat government, rural producers are finding markets for their products through Gram Mahila Haat.

RUDI Multi Trading Company was initiated by SEWA in 2004 and was registered as a public limited company in 2007. RUDI is a rural distribution network that comprises the procurement, processing, packaging and marketing of food grains at the local level. It is unique in the sense that the owners and managers of the company are 15,000 small and marginal farmers themselves. RUDI is committed to providing a platform for 25,000 small and marginal farmers, rural women processors and RUDIbens of 14 districts of Gujarat to scale up and develop farming as a business. Its main objectives are to:

- Ensure food and livelihood security for small and marginal farmers and rural poor households
- Improve their bargaining power, market access and holding capacity
- Prevent them from entering into distress sales,
- Free them from the exploitative nexus of traders and intermediaries, and
- Develop a robust supply chain for procurement, processing, grading, packaging and marketing.

4. RUDIbens are saleswomen who are members of RUDI. RUDIbens procure raw agricultural produce from marginal farmers at market prices, then add value by cleaning, processing, packaging and selling the produce at affordable prices through the RUDI network (Pathak 2014). There are now over 2,000 RUDIbens earning an income of 5,000–7,500 rupees per month. This ensures inclusive growth by promoting participation of small farmers and poor women in the agriculture trade. Together with RUDI, SEWA has developed a proposal to raise funds to develop the system and provided services to the members across the districts and groups.
**District associations:** SEWA formed producer groups in remote villages to generate alternative livelihood opportunities which can provide sustainable livelihoods for local village communities. These village producer groups are federated at district level and are known as district associations, which are independent bodies of local members from specific districts. There are a total of 14 district associations of which nine are registered. SEWA runs various campaigns to facilitate expansion needs while the district associations work on market linkages, developing livelihood opportunities and livelihood linkages for members. The work of SEWA and district associations are different but interconnected like the branches of the banyan tree (see Figure 12.5).

**Grassroots Trading Network (GTN) aims** to strengthen, support, and expand market opportunities for grassroots producer organisations (GPOs), particularly women working in the production of handicrafts, handlooms, agriculture or industrial accessories (low-technology, labour-intensive factory products). Through trade facilitation, market development and advocacy, GTN seeks to build livelihoods and expand the benefits of globalisation to poor producers worldwide.

Since 2015, SEWA has increased its business focus, towards developing entrepreneurial skills among members such as ensuring control and reduction of expenses, strengthening and introducing new income sources, scaling up with the help of technology and increasing capacities to reduce costs automatically.

**12.2.1 Staffing and structure**

The union is governed by a two-tier level of elected representation. The members of each trade elect their representatives in the ratio of one representative per 100 members. These representatives then form the trade council (*pratinidhi mandal*). In addition, and
parallel to the trade council are trade committees (*dhandha samiti*) for each trade. The trade committee has no fixed proportion to number of members but varies between 15 to 50 members. The trade committees meet every month and discuss specific problems of their trades and possible solutions to them. Trade council members are members of their respective trade committees as well. The organiser of a trade group is the member secretary of that group's trade committee.

Every three years the trade council elects an executive committee of 25 members. The representation on the executive committee reflects the proportion of the membership. The office-bearers of the trade union are elected from among the executive members. It has become the practice to elect the president from the trade with the largest membership. At the grassroots level, SEWA organises and provides awareness to informal-sector women to establish and register their own economic organisations. As each organisation becomes a member of a specific trade committee, they then gain representation at the executive committee levels.

The SEWA ecosystem – SEWA, its sister organisations and district associations – all are committed to providing services to their members. All are independent bodies, having their own executive committees and registered under different laws. Their staffing systems are also different. But they are connected with the common objective to serve the needs of the members. Among the staff of each organisation, the structure is the same and all organisations have a bottom-up approach where the grassroots trade leaders make up almost 88 per cent of the executive committee of each organisation. Figure 12.6 shows the ecosystem services of SEWA where different organisations intersect. For example, among the staff, there are organisers from the districts while technical staff are from the organisations which provide services to members through districts association.
12.2.2 Advisory board
SEWA itself does not have an advisory board, but the economic organisations promoted by SEWA who provide business incubation services to the farmer’s organisations do. The RUDI Multi Trading Company, SEWA Bank and GTN have their own advisory boards. The advisory boards consist of 7 to 10 persons having expertise in their own areas such as business management, marketing, banking, auditing; academic, educational and management institutions; or human resource organisations etc.

In addition, SEWA and its sister organisations SEWA Bank, SEWA Manager Ni School/SEWA Gram Mahila Haat, SEWA RUDI Multi Trading Company Limited, district associations and the Grassroots Trading Network (GTN) hire the services of consultants on an ad hoc basis for their management, financial, legal or technical expertise (in agriculture, forestry, packaging, value addition, education etc). SEWA also consults with the executive committee members of its sister technical organisations like RUDI and GTN which all have expertise in their own thematic areas and also provide services. Sometimes SEWA collaborates with international partners for specific advisory services. For example, more recently SEWA has worked with the International Financial Corporation (IFC) to revise the strategies of SEWA and its sister organisations to match with the changing economic and business scenarios in the country. SEWA has also collaborated with the external consultants McKinsey & Co and Boston Consulting Group, to develop a long-term marketing strategy. India has been undergoing rapid policy and economic reforms. Global dynamics, economic change and climate change all have a direct impact on the livelihoods of the grassroots members of SEWA. It is essential for SEWA to understand and foresee these impacts. These strategic studies were conducted with the aim to make SEWA sustainable and more relevant for its members in changing scenarios.

12.2.3 Networks
To increase the collective strength of small farmer groups and federations, SEWA felt an increased need to have a network of small and marginal farmers at the national level. There was no platform available to the farmers for lateral learning and knowledge sharing, hence SEWA initiated the All India Women's Farmers' Association (AIFWA), a network of women's farmers at the national level. AIFWA was created with the following objectives:

- To create and strengthen the network of small and marginal women farmers’ organisations in India
- To increase the visibility, voice and representation of small and marginal women farmers, and
- To improve dialogue between them and national policy-making bodies.

At the regional level, SEWA initiated the South Asia Farmers Forum in 2007 in Nepal, Sri Lanka, Bangladesh, Afghanistan and Bhutan. The objectives of SEWA’s work in South Asia is to develop the networking and knowledge-management skills of member-based organisations of women farmers and to facilitate and improve dialogue between these organisations and policymakers at the national, regional and international levels.
SEWA also draws on a wide network of technical and academic institutions, management schools, and network organisations who are working on farm and forestry issues, not only in Asia but also globally. These include UN, government, network and private-sector organisations. SEWA and SEWA's sister organisations collaborate with them to develop technical expertise, capacity building, research and development, market collaborations, development, new technology for strengthening operations, new climate-smart and affordable technology, finance mechanisms, value-addition processes, policy advocacy, packaging, and marketing for the women's organisations based on their needs.

SEWA has organised and registered a cooperative of uneducated landless farmers and many other economic organisations of small and marginal farmers. The cooperative has facilitated access to government land (10 acres) for a 30-year period for organic farming, forest development, climate promotion and an ecotourism centre. SEWA has also established linkages with the forestry department for nursery and forest development. The model has been replicated in other areas in two other districts.

12.2.4 Finance
Being a trade union, SEWA is funded through various income streams. Services provided to members by SEWA's sister organisations are on a payment basis, but this is an affordable fee, paid by the members directly. This is also part of SEWA's overall strategy and philosophy, as members should become financially independent enough to pay for services. Membership fees are paid separately by members to SEWA itself but also at an affordable rate of 10 rupees a year (US$0.15), which due to the size of the membership is not an insignificant amount. SEWA is also able to raise funds from grants, from financial services of SEWA Bank such as interest paid on soft loans, and through the issuance of shares in sister companies.

12.3 Services offered
12.3.1 Services offered
In SEWA's experience, often members initially find it hard to identify what their support needs are, because of the complexity of their problems and the dynamics of their environment. SEWA's approach therefore has been to ‘involve’ rather than ‘intervene’, with the aim of gaining members' confidence and building a vibrant relationship with them. Once a foundation of trust and understanding has been built it becomes easier for members to analyse and identify their needs and challenges and put forward a set of demands which SEWA can act upon.

Some years ago, SEWA initiated its agriculture campaign to better understand the issues facing agricultural workers. The campaign includes a programme of education to increase awareness of technical skills, costing and pricing, and to build linkages with technical, research and marketing organisations so that members can strengthen their productivity, yield and income. The aim is to increase bargaining power, and to identify the areas of interventions or types of safeguards needed to provide economic security to agricultural workers.
At the grassroots level, SEWA focused on organising agricultural workers into cooperatives that would federate at the regional level. The initial campaign addressed four major needs: access to inputs, credit, markets and capacity building, with the following outcomes:

- Several cooperatives of landless women farmers were formed, who were then able to lease land from their village *panchayat*. SEWA then provided training to these women to use their land to raise and sell saplings, grow fruit trees and vegetables, and to sell them to earn a living. Soon, the women also demanded training in processing the fruits and vegetables.
- SEWA initiated integrated land and water management (ILWM) activities covering 40,000 small and marginal farmers across 400 villages. This activity emphasises land treatments, watershed development and harvesting.
- Fodder banks, grain banks, seed banks, and tools and equipment libraries were set up. They are all run by local communities themselves and provide the respective resources at rates affordable to the poor.
- For facilitating marketing, SEWA and the government of India established SEWA Gram Mahila Haat, which enables the marketing of rural agricultural produce, salt, gum and handloom products for SEWA’s members. It also tries to link poor women’s organisations to the private sector to access not only larger markets at the national and international level but also modern technical skills.
- For ensuring the livelihood security of its members, SEWA has also initiated the concept of a work security fund that is built up by regular contributions made by SEWA’s members themselves. The fund helps members in the face of natural and manmade disasters by acting as a safety net that will help them restart their businesses or learn new skills without depending on aid or charity.

In the last decade, SEWA has extended its services further and its business incubation ecosystem has emerged. To make them more efficient, it has helped introduce innovations (trainings, inputs and service delivery) and technology to make it more sustainable. In all endeavours, SEWA’s Gandhian principle is at the forefront. Innovations include access to price information, rural distribution network for collective rural marketing, farmers field schools, irrigation techniques, climate-resilient agriculture practices, and integrating energy with agriculture to bridge the nexus between women, agriculture and clean energy. SEWA is also working towards providing agriculture insurance that is affordable to its members to protect them from adverse financial impacts. At national level, SEWA has formed a network of farmer’s organisations with 1.97 million members to which SEWA connects through conference capacity-building programmes and linkages.

Supportive services like savings and credit, healthcare, child care, insurance, legal aid, capacity building and communication services are important needs of poor women. If women are to achieve their goals of full employment and self-reliance, these services are essential. Recognising the need for supportive services, SEWA has helped women take a number of initiatives in organising these services for themselves and their SEWA sisters. Many important lessons have been learnt in the process of organising supportive services for and by poor women. For example, women are ready to pay for the services and in
fact, this results in the financial viability of the supportive services. They do not have to be totally dependent on subsidies and grants. Some supportive services like savings and credit, health and child care have formed their own cooperatives. These cooperatives have gained operational self-sufficiency. SEWA Bank has achieved financial viability for many years now, while the other cooperatives are steadily moving towards this.

**Box 12.1 Types of services provided to farmer groups**

Responding to the needs and demands of farmers, SEWA and its sister organisations provide following services to the farmers groups in 14 districts in Gujarat, 13 other states in India and seven other countries in Asia and Africa.
- Organising grassroot women's trade
- Social enterprise awareness
- Registration for trade and licences
- SEWA Bank and 14 district associations provide farm-based access to finance support
- Infrastructure/facilities, equipment, power
- Mentoring and capacity building (technical, managerial, entrepreneurship)
- Accounting and law
- Value addition
- Networking
- Proposal writing
- Information on trade and business
- Business development, market access
- Strengthening operations, improving technology
- Training on product quality and standards certification
- Policy advocacy
Box 12.2 Access to agricultural inputs

**Seeds and fertilisers:** Farmers need access to quality seeds and fertilisers to improve production. SEWA's agricultural campaign focused on getting the necessary licences. In each district, facilitated by district associations and SEWA's agriculture campaign, 16 groups now have licences for seeds and 16 for fertilisers. The district association assesses the needs of the entire district and the groups procure the seeds and fertilisers.

**Community grain banks:** SEWA established grain banks (grain storage centres) to ensure food security to the poorest of the poor and vulnerable sections of society. When grain is abundant, the community stores excess grain. During droughts, poor harvest periods or natural disasters, grain is loaned to households in need. Members return the borrowed grain with interest so that the reserves are constantly increasing, enabling greater borrowing over time. Communities have access to food grain throughout the year and the bank also provides local procurement and local employment.

**Vermicompost:** SEWA promotes the use of vermicompost and organic cultivation. Almost 18,462 farmers from Gujarat, Bihar, Rajasthan, and Jammu and Kashmir have started to use vermicompost on their own farms. As demand became clear, SEWA established production plants at village level. Training is given to local farmers and 582 members from 14 groups are now producing vermicompost on a commercial basis. Current production is 1–1.5 tonnes per month per member. The groups use it on their own fields and also sell to others.

**Tools and equipment libraries:** Most small and marginal farmers and agricultural workers have no or limited access to the latest technology, tools and equipment, leading to low productivity. SEWA has established tools and equipment libraries at the village level in 14 districts of Gujarat. Farmers can borrow tools for a nominal rent. The library is managed by a local village group.

**Greenhouse technology development:** Some crops grow in certain climates only. However, these crops are needed all year. SEWA members have successfully developed a greenhouse which benefits farmers by maintaining inside temperatures. Five greenhouses have now been set up in Gujarat. SEWA has also trained women from Afghanistan and Kashmir on construction and technical aspects of greenhouse development.

**Plant clinics:** SEWA has established plant clinics in two districts to address issues of pests and disease which affect agriculture production for small and marginal farmers. Each clinic covers 7 to 10 villages and is run by a master trainer called a 'plant doctor'. Farmers are able to have their soil tested and receive advice based on their soil, seed types, organic fertilisers and other micro-nutrients, and cropping patterns. They are also provided with information about biopesticides and other solutions to pests and disease which are becoming more prevalent due to climate change.

12.3.2 Financial services

Our own experience with the SEWA cooperative bank model is focused on strengthening poor women by providing social security products in addition to other financial services. This is achieved by building women's organisations on the principle of mutuality. This not only helps them to access loans, but more importantly it also provides a suite of products including risk products such as insurance for the impacts of adverse weather. It is managed by the members in a democratic manner. Given the organisation is member-
centric, SEWA Bank was also the first to venture into areas of financial literacy and counselling as the need was articulated by our members.

The farmer groups avail credit from SEWA Bank. District associations assess their credit needs and borrow from SEWA Bank to lend on to farmers groups. Up until the last agriculture season in 2017, 14 district associations borrowed loans worth over 160 million rupees (about US$2.49 million) for its farmer members. The advantage of a SEWA Bank loan is that it is readily available on time and does not require elaborate documents.

To help provide members with cheaper credit, the district associations have also linked up with nationalised banks. However, these banks require too much documentation to issue loans. Obtaining these documents from different government offices itself takes up to two to three months and requires several visits. Farmers have neither the time nor the resources for it, and therefore struggle to provide the required documentation. SEWA's experience shows that only 15 per cent of small and marginal farmers can access agriculture loans from nationalised banks.

**Rainfall insurance:** The region in which SEWA works is particularly prone to adverse weather conditions, acerbated by climate change. These weather shocks can result in prolonged droughts or excessive flooding. This creates a severe production risk for small-scale farmers: entire crops can be destroyed by circumstances beyond their control. Informal insurance mechanisms are unable to provide protection when a weather shock affects an entire region. It is for these reasons that SEWA started rainfall insurance for the farmers.

SEWA first pioneered the provision of rainfall insurance in Gujarat in 2006. According to Nanavaty and Bhavsar (2013),

> The policy is based on a rainfall index that uses a specified weather station to measure the rainfall in a particular region. Pre-agreed thresholds are set corresponding to either too low or excessive levels of rainfall. The policy covers the duration of the monsoon season and is separated into five phases corresponding to the separate phases of crop production from sowing to harvesting, all of which require different thresholds. When the thresholds are breached, an automatic payout is made to all policy-holders in that geographic area.

There are no limits as to the number of policies that an individual may take out, so the women can get a level of coverage that meets their requirements through multiple policy purchases. By providing insurance against bad weather events directly rather than bad yields indirectly, weather insurance reduces the transaction costs associated with damage and claims verification. It also helps overcome moral hazard and adverse selection. Use of an independently verifiable index means that covariate risks can be transferred to international markets and effectively reinsured against. Protection is also extended to landless agricultural workers as well as farmers who may either own or lease their land.

SEWA’s rainfall insurance scheme is now in its fifth year. The initial pilot scheme focused on 75 villages. Today, this protection against adverse extreme weather is offered to
more than 3,000 farmers. Year-on-year feedback and revisions to policy provision and marketing means that the product is now at a stage that it can be rolled out to a greater number of farmers across India.

**Future prices:** Since 2006, SEWA become involved in reducing price risks faced by small and marginal farmers. More specifically, the availability of price information can allow smallholder farmers to make more informed cropping decisions as well as receive a better price for their produce in the marketplace. Grassroots feedback from rural poor members with access to spot and futures prices revealed three key benefits of price dissemination:

- Cropping decisions were changed in anticipation of higher prices for certain crops. As a result, a number of smallholder farmers were able to attain a better price because they focused on producing the relatively scarcer crop for which prices were higher in the futures market.
- Price information translates into more bargaining power for smallholder farmers vis-à-vis trader middlemen: awareness of market prices ensures that farmers demand and receive a fairer price for their labour and expenses.
- Price dissemination enables farmers to jointly procure agricultural production at the village level, selling directly to the processor such as the local mill. Thus, price dissemination can assist in the transition from subsistence agriculture towards a surplus agricultural industry and towards improved livelihoods for more than 20,000 smallholder farmers from 100 villages.

### 12.3.3 Service delivery

SEWA and its sister service organisations provide an array of services to members (see also Table 12.1). These services are delivered as a mix of in-house, virtual and on-farm service provision. The following are a few examples of how technical services are delivered to farmers.

**SEWA’s business incubation ecosystem:** SEWA’s integrated approach has helped to understand needs and demands of and challenges faced by the trades and trade organisations. These issues are raised in the trade representative meetings every month. Based on that information, SEWA coordinates with the SEWA’s sister service organisations to link up for provision of the required support services to the trade groups or organisations. The sister organisations visit trade groups or geographical locations through the district association to gain a first-hand understanding of the issues and challenges. The service organisations then design tailor-made service solutions. The service organisations send their technical experts to districts associations and both jointly provide services to the clients.

Where required innovations and technology cut across the districts or groups, SEWA together with its sister service organisations plans out its clients’ needs for skill building or enhancing their operations through technology to hire other members in the value chain of their trades to design a programme to raise funds and start building skills. For example, RUDI Sandesha Vyavhar is a market information system (MIS) for RUDIbens.
Table 12.1 Services offered by SEWA’s sister organisations in the business incubation ecosystem

<table>
<thead>
<tr>
<th>Organisation</th>
<th>Services</th>
</tr>
</thead>
<tbody>
<tr>
<td>SEWA</td>
<td>• Understanding needs, demands and challenges</td>
</tr>
<tr>
<td></td>
<td>• Trade-wise organising</td>
</tr>
<tr>
<td></td>
<td>• Social enterprise awareness</td>
</tr>
<tr>
<td></td>
<td>• Networking</td>
</tr>
<tr>
<td>SEWA Bank</td>
<td>• Savings and credit services</td>
</tr>
<tr>
<td></td>
<td>• Insurance</td>
</tr>
<tr>
<td></td>
<td>• Price risk mitigation</td>
</tr>
<tr>
<td></td>
<td>• Financial literacy training</td>
</tr>
<tr>
<td>SEWA Manager Ni School/SEWA Gram Mahila Haat</td>
<td>• Capacity building, mentoring (financial)</td>
</tr>
<tr>
<td></td>
<td>• Value addition</td>
</tr>
<tr>
<td></td>
<td>• Infrastructure/facility needs, production premises, machines, equipment, electricity</td>
</tr>
<tr>
<td></td>
<td>• Registration for trade/licences</td>
</tr>
<tr>
<td>SEWA RUDI Multi Trading Company Limited</td>
<td>• Market access/business development</td>
</tr>
<tr>
<td></td>
<td>• Information on trade</td>
</tr>
<tr>
<td></td>
<td>• Registration of trade/licences</td>
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<tr>
<td></td>
<td>• Value addition</td>
</tr>
<tr>
<td></td>
<td>• Infrastructure/technology</td>
</tr>
<tr>
<td></td>
<td>• Packaging</td>
</tr>
<tr>
<td>District associations</td>
<td>• Financial literacy</td>
</tr>
<tr>
<td></td>
<td>• Access to funds</td>
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<tr>
<td></td>
<td>• Legal aid and accounting services</td>
</tr>
<tr>
<td></td>
<td>• Strengthening operations</td>
</tr>
<tr>
<td></td>
<td>• Technological infrastructure</td>
</tr>
<tr>
<td>Grassroots Trading Network (GTN)</td>
<td>• Green technology for irrigation</td>
</tr>
</tbody>
</table>

Farm planning and management: The challenge for any small and marginal farmer is to decide what crop to plant and which seed to buy. SEWA provides farm planning and management services to farmers. Through this, they learn about which crops can be grown in each season and the benefits of multi-cropping.

Tele-agriculture: Besides the use of computers and peripheral devices, SEWA uses satellite communication – or tele-agriculture – in its capacity building and communication programmes for farmers. SEWA organises tele-agriculture sessions with scientists from agriculture universities on pre-seasonal and post-harvest technologies. Special sessions are conducted on the use and advantages of hybrid varieties of seeds.

Farmer field schools: SEWA identified a group of women farmers who were members of SEWA and were interested in learning about new methods and agriculture practices. These members were identified in consultation with the entire village after a series of meetings. These women were then provided with 21 days of agriculture training. These
trainings were organised with a leading agriculture university in Gujarat. The women were taught about the use of technology in agriculture and also newer technology such as greenhouse development. The women were also trained as master trainers in agriculture, to provide further training in villages to other women at the grassroots level. As a result of these trainings, productivity has improved and yield has increased by 50 to 100 per cent and consequently there is an equal increase in their income. Also, through training in areas like farm planning and management, the women have learnt to make the maximum and optimal use of their resources.

12.3.4 Linking

Market linking: SEWA’s agricultural campaign links farmer groups with marketing organisations to provide access to markets such as the Krishi Bazaar agriculture markets, district markets, direct marketing to companies, or rural markets through RUDI. These markets help farmers get a better price for their products. Currently, Krishi Bazaar markets are held twice a year at 12–15 locations in different districts of Gujarat. On average, transactions worth 50,000 rupees take place in each bazaar.

SEWA initiated RUDI because a major problem facing small rural farmers is the fact that they harvest different crops in small quantities and have very limited marketable surplus. When the farmers do have a surplus, they are typically forced to sell it either at the market yard or to local traders and intermediaries. Since the farmers have nowhere to store their goods in the village, and they do not have the time or money to take their goods back and forth from their fields to the market, they have almost no negotiation leverage and are forced to accept extremely low prices. The traders and intermediaries then consolidate the goods purchased from the farmers, add a sales commission, and sell the goods in bulk to large agricultural processing companies.

RUDI helped to set up this processing centre in Anand district. Its operation is overseen by the Anand district association and RUDI buys the processed products to sell.
RUDI helps farmers get fair prices and increased income. For example, farmers selling castor oil previously made 365–370 rupees per tonne for their produce, but with RUDI, they now make 470 rupees per tonne. RUDI is helping rural villages keep their scarce resources within the village while helping the Indian economy take a significant step in the direction of truly ‘inclusive growth’. RUDI procures food grains from small and marginal farmers locally. As with the marketing information system (MIS) and RUDIbens discussed previously, this process gives the farmers better prices and negotiation leverage and direct access to markets at their doorstep, thereby eliminating the need for exploitative traders and intermediaries.

As a result of RUDI, nearly 90 per cent of sales are ploughed back into the village economy and thus rural money circulates within the rural area and contributes to the strengthening of the rural economy. Since the focus remains on procuring locally, RUDI eliminates the need for middlemen, thus lowering incidental expenses. RUDI processing centres also create alternate employment opportunities at the village level. The communities have access to good-quality, pure farm and non-farm products at fair and affordable prices. When the poor are able to sell their produce as well as buy food for consumption at fair prices, their income as well as food security is ensured.

**Institutional linkages:** SEWA has developed institutional linkages with organisations such as FAO, the International Crops Research Institute for the Semi-Arid Tropics (ICRISAT), the International Fund for Agricultural Development (IFAD), AIFWA and Riod (a civil society network). SEWA also works with government agriculture universities for building skills and capacity of its members and promotes farmer group linkages with relevant government schemes.

**SEWA and FAO** collaborate to reduce poverty and improve rural development in Asia and Africa. Through local initiatives aimed at helping to empower rural women and youth, the aim is to drive improvements in food security and nutrition (FAO undated). Using exchanges of experiences and knowledge on good practices between different regions in Asia and Africa, the linkage aims to promote the inclusion of women and youth in rural economies, enhance rural women’s access to financial resources and technologies, and to establish sound governance practices, measures for gender equality and pro-poor policy advocacy (ibid).

**SEWA and ICRISAT** have developed information and communications technologies (ICT)-based knowledge-sharing platforms and other agricultural innovation initiatives, to improve the productivity and profitability of smallholder agriculture. These platforms include the SEWA KSIConnect, a virtual learning exchange and knowledge transfer series, the SEWA AgED Open Courseware (promoting open online courses to enhance the skills of SEWA members), and Radio SEWA and Video SEWA (which provide advice on agricultural innovations developed by ICRISAT). All these are carried out through farmers’ groups and farmer field schools established by SEWA (ICRISAT 2014).
**Policy advocacy:** SEWA and IFAD have piloted an initiative to promote the inclusion of smallholder farmers and their organisations in policy dialogues at various levels and strengthened regional, sub-regional and national farmer organisation platforms in Asia (IFAD undated). The Farmers' Forum, established in 2005, is an on-going, bottom-up process of consultation and dialogue between smallholder farmers’ and rural producers. Small and marginal farmers from India exchange learning from each other and work towards climate-resilient farming.

While SEWA focuses its efforts in Gujarat, SEWA has also expanded its work on green initiatives through creating networks with AIFWA and Riod. These networks have created initiatives in 14 states of India. Additionally, SEWA has started similar initiatives in Afghanistan with 150 individuals with the government of Afghanistan.

**SEWA’s agriculture campaign** works with 1.25 million farmers at the national level to address issues faced by agriculture workers and small and marginal farmers. The campaign has been working to address the issues of women’s identity and asset building for women in agriculture. Following SEWA’s negotiations with the government, almost 155,000 farmers – including women – have now received their official *khedut pothi* in their name. *Khedut pothi* is a farmer’s book which records the land holding, type of soil, etc of the farmer. This provides official recognition of these women as farmers and land holders. Not only that, but nearly 63,000 women now have official identity cards as agricultural labourers. Without this card, an agricultural labourer has no say over their wages as they do not have an official ‘identity’ as an agricultural worker. As a result of these *khedut pothis* and identity cards, women agricultural labourers can now negotiate for minimum wages, which increases their bargaining power, and benefit from various government schemes for agricultural workers. In addition, women can also benefit from financial linkages to remortgage their land and ensure their names are on the document. This strengthens women’s tenure security and helps safeguard their investments.

**12.4 Incubation management**

**12.4.1 Selection**

SEWA leaders and organisers regularly visit villages to meet members (although members also visit the SEWA’s district offices). During these village visits, meetings are conducted to discuss progress and challenges. SEWA analyses whether issues raised are individual or cut across trade and geographic locations and can be addressed by its sister organisations or through other external support. Unlike many other business incubators, as members of SEWA, farmers’ issues are addressed via their district associations irrespective of any formal incubation selection process.

**12.4.2 Performance oversight**

SEWA is member-based organisation thus participatory evaluation is vital. Several tools are used to evaluate members’ business performance. Monitoring tools, needs assessment surveys, outside evaluations, performance indicators, members’ livelihoods, amount of revenue and sustainability are all assessed. The use of tools is designed
based on the level of the organisation being evaluated. Once members join SEWA, they benefit from SEWA's awareness-raising programmes and technical trainings through, for example, farmers field schools and government colleges. They also benefit from access to information about the market, input services or collective purchases of inputs etc. Slowly, they witness the formation of their groups and the financial benefits this brings. In this way, members can evaluate their progress and, as awareness and access increase, they seek more support and services.

SEWA evaluates its work against a yardstick developed by its members many decades ago. At the end of each year, the organisations evaluate themselves based on eleven key questions. Each of these questions are interconnected. Questions 1 to 7 are linked to the goal of full employment. Questions 8 to 11 are those concerned with SEWA's goal of self-reliance for members.

As SEWA leaders are members themselves, they visit the villages and organise joint meetings and visit farms as required. Each leader organises 500 to 3,000 members depending on the geographic locations and needs. Meetings keep the leaders informed of members' needs and their progress in the value chain. As SEWA works closely with small and marginal farmers, its development is an iterative process, where each level of value chain attained is achieved as a group.

12.4.3 Graduation
Institutional sustainability and financial sustainability (50 to 70 per cent) are the two main criteria which are considered as graduating points. Based on the experiences of SEWA, organisations take five to seven years to attain institutional sustainability, and eight to 10 years to attain financial sustainability. Until then, SEWA provides ongoing support to these organisations, which also include formal farmer organisations.

12.4.4 Outcome evaluation
The main criteria which are used to evaluate outcomes include the number of members involved, revenue generated, income to members, institutional sustainability and financial sustainability. SEWA's district associations collect data from the farmers of their districts on trainings imparted, provision of inputs to farmers, seed plots, sales of fertiliser, usage of the tools and equipment library, and loans to farmers during the completion of the farming season. The yields and income of the farmers are also measured. Participatory tools have also been developed where farmers themselves can evaluate their savings in input costs and increased yields. In the trade committee meetings, farmer leaders discuss the benefits and challenges of the services, which forms the basis for SEWA to evaluate and strengthen the services it offers. Now SEWA has introduced a membership management system – an online app where the profile and data of each member is collected and saved. This data will be analysed to strengthen services and to make future plans.
12.5 Impact

12.5.1 Overall assessment

The performance of the incubation process is measured through in-house assessment. Where required, outside assessments are commissioned to meet donor requirements. Assessment of incubation is also done by funding agencies through progress reports, monitoring visits and meetings with the SEWA team.

The assessment of farmers or farmer groups is done based on savings made in relation to input cost, increased income and alternative employment generation due to various interventions. For formal organisations, the assessment is done based on the revenue generated, number of members served, and increase in income for the members. SEWA assesses the impact of its agriculture campaign on the number of members, provision of seeds, provision of certified fertiliser and pesticides, use of the tools and equipment library, agriculture loans taken, market linkages, turnover and income to farmers. Other parameters are the members of SEWA who are invited by government for training and awards or recognition given to SEWA member farmers by other recognised organisations. SEWA also measures impact based on number of women using organic farming methods, soil testing, usage of natural pesticides, or innovative technology etc.
SEWA has had many recent successes. Under IFAD’s Farmer’s Forum programme, SEWA led the agriculture campaign in India and was declared a lead organisation for the United Nations 2014 International Year of Family Farming. SEWA’s agricultural campaign has provided agricultural inputs like certified seeds, tools and equipment, fertilisers and vermicompost for organic farming amounting to almost 38 million rupees in the past five years. It has trained over 52,500 members from 1,251 villages.

A turnover of almost 170 million rupees has been achieved by marketing castor products in the last five years. This has proven that agriculture can be viewed as an industry. Total agriculture turnover of over 76 million rupees in 2017 has been achieved to showcase the success of this model to the world, and how the accessibility of every input is important and can be achieved holistically through backward and forward linkages. As a result, SEWA has proven that agriculture can develop as an industry also.

Likewise, SEWA’s campaign ‘We Will Not Sell Our Land’ reached 2,159 villages. The workshops and studies were conducted on the impact of foreign direct investments and free trade agreements (FDI-FTA) on farmers and the status of traditional crops and family farming. To consider the issues of minimum support price of cotton, SEWA drafted a resolution. On National Farmers’ Day in 2014, five women were awarded silver medals and certificates by ICRISAT.

12.5.2 Successes

A key success story for SEWA is the case of the Shri Vanlaxmi Women’s Tree Growers Cooperative in Ganeshpura, Mehsana district, Gujarat, India.

SEWA’s initiated its work in Mehsana district in 1986 to restore its environment. Initially, women working as agricultural labourers were organised to tackle issues related to the environment. Due to rapid industrialisation and in the absence of the necessary backward-forward linkages for inputs and marketing, these small and marginal farmers and agricultural workers in Mehsana district were slowly losing most of their land and assets. Excessive irrigation from bore wells drastically reduced the water table and rendered the remaining water high in fluoride content. The cost of irrigation increased hugely. Due to the unpredictable rains, many small farmers lost their livelihood, and had to take up casual labour. Women agriculture workers were even harder hit: they could find no alternative work and often had to walk miles to collect the necessary fodder and fuel.

The Shri Vanlaxmi Women’s Tree Growers Cooperative had fought for two and a half years to regain access to land on which they could farm. However, it was only when the problem was looked at from a different angle that the solution became obvious. With perseverance, SEWA managed to negotiate a lease for government-owned land for the Shri Vanlaxmi Women’s Tree Growers Cooperative. These women gained access to state land by registering themselves as a tree growers’ cooperative rather than an agricultural cooperative. Because of this, they were granted access to government revenue wasteland.

The main aim and goal was to form the Shri Vanlaxmi Women’s Tree Growers Cooperative for the benefit of members in terms increasing the fertility of the land and providing
consistent employment opportunities through reforestation. The cooperative is a success story of women's empowerment and poverty alleviation through sustainable self-employment.

The cooperative was initially established after getting a 10-acre plot from the village panchayat (village council) on a 30-year lease in 1986 (see Box 12.3). When the land was first leased it was covered with shrubbery, thorny cactuses and infested with snakes and other poisonous reptiles. It took the women folk of the village over three years to clear the land, till it and make it arable. In addition, to register the cooperative, many challenges were faced by its women members. But their consistent efforts, self-confidence and perseverance over five years, engaging in tough debate with government, paved the way.

<table>
<thead>
<tr>
<th>Year</th>
<th>Event</th>
</tr>
</thead>
<tbody>
<tr>
<td>1986</td>
<td>Women receive wasteland from local government on 30-year lease</td>
</tr>
<tr>
<td>1987–90</td>
<td>Wasteland cleared and levelling done</td>
</tr>
<tr>
<td>1987–90</td>
<td>Women receive training on nursery raising. New nursery started on district office land from forestry department, government of Gujarat</td>
</tr>
<tr>
<td>1989</td>
<td>Plantation created on cleared land</td>
</tr>
<tr>
<td>1989–90</td>
<td>Women receive training on rainwater harvesting</td>
</tr>
<tr>
<td>1989–90</td>
<td>Borewell constructed</td>
</tr>
<tr>
<td>1990</td>
<td>Seasonal farming begins and women receive various technical trainings</td>
</tr>
<tr>
<td>1991</td>
<td>Cooperative formed</td>
</tr>
<tr>
<td>11th July 1991</td>
<td>Cooperative registered</td>
</tr>
<tr>
<td>1991 onwards</td>
<td>Women receive various training through the federation on managing a cooperative</td>
</tr>
<tr>
<td>1995–96</td>
<td>Tools and equipment library established</td>
</tr>
<tr>
<td>2003–04</td>
<td>Vermicompost beds prepared and fully organic farming begins</td>
</tr>
<tr>
<td>2007–08</td>
<td>Women receive training on food-processing techniques for the fruits, vegetables and medicinal plants grown on the farm</td>
</tr>
<tr>
<td>2008</td>
<td>Farm further developed as an ecotourism centre</td>
</tr>
</tbody>
</table>

As all members of the cooperative should benefit equally, given their efforts towards creating a smooth-functioning business, the land was apportioned into equal plots and each plot was assigned a specific number. A lucky draw system was used: the members drew lots and had to irrigate the land according to the plot number they picked. However, the members had insufficient tools for agricultural work. The Hindustan Petroleum Company Limited provided the required tools worth 165,000 rupees to the cooperative.
Another challenge was fetching water and to make the land fertile. Finally, with training and assistance from the Indian Petrochemicals Corporation Limited (IPCL) they were able to make an artificial plastic pond/well for water storage up to the level of 10ft. This was also not fool proof as seasonal water could only partially meet the requirements of the farm. SEWA helped them set up an 800ft-deep bore to provide them with water for daily use. This enabled them to grow an integrated crop twice a year. The women also learnt how to maximise their production. Using scientific agricultural practices, including horticulture, agroforestry, drip irrigation, compost pits, and rainwater-harvesting techniques, they managed to improve the cooperative's operations.

In all, 149 acres of land has been converted from waste to cultivable land in 23 villages. The basic agricultural expenses are borne by the cooperative group. Out of each members' total earnings, two thirds of the profits go back to the group, and one third is kept by the member. This has helped to make the cooperative successful while enabling members to earn a livelihood. Advice from professional and technical experts in afforestation was also sought to undertake innovative activities and required diversifications under this initiative. For example, scientific techniques for tree plantation, division of agricultural land and inter-cropping have been applied, based on research done by Jagudan Centre of Gujarat Agricultural University.

Members of the cooperative have also been able to support farmers from surrounding villages and provide them with required seeds on a regular basis. Gujarat State Seed Corporation in Gandhinagar issued a licence to the cooperative making it an official seed distributor for this purpose. Members were also provided with training on the making of vermicompost fertiliser, the sale of which also contributes to their livelihood earnings. Member have also been provided with training on food processing such as the making of pickles, lemon juice, lemon ginger juice, lemon pickle, snacks, mango pickle, and mixed-vegetable pickle etc. Using this knowledge, members produce and sell their produce in the nearby villages, making them self-sustainable and self-reliant. Over last eight years, members have also practiced organic farming in Ganeshpura, using vermicompost as a fertiliser. This has resulted in good-quality food with an increased shelf-life, which has increased sales. The members are provided technical training, teaching them innovative techniques related to agriculture and farming at institutes like the Indian Farmers Fertiliser Cooperative Limited (IFFCO) and Krishi Vigyan Kendra (KVK) etc, a front-line agricultural extension centre funded by the Indian Council of Agricultural Research. This has helped members become leaders and managers in their own right, making the cooperative more organised and sustainable.

12.5.3 Failure

Initially, non-certified seeds were used by members for farming which resulted in poorer-quality crops and resulting in higher expenditure than earnings. After gaining technical knowledge and training, members utilised certified seeds obtained from the Gujarat State Seed Corporation in Gandhinagar. The cooperative also obtained a licence for official distribution of seeds to the farmers in surrounding villages. This has led members to earn their livelihood and a step towards sustainability.
12.5.4 Lessons for other incubators
Several lessons can be learnt from the business incubation case study of SEWA. These include:

- **Focus on organisation**: Organised strength is the surest way to combat poverty. Organisation makes the poor stronger and more influential. Collectively, small farmers and forest producers can fight and access their rights in a more assured way.

- **Work with producers on formality**: Formality of farmer groups and forest producers is important to access services and rights. In this regard, becoming a registered entity helps to increase voice and visibility and actions can be validated and improved.

- **Bring in new technology and innovation**: New technology can make agroforestry more competitive – and more attractive to new generations.

- **Foster entrepreneurial thinking within traditional subsistence sectors**: Considering the farm as an enterprise brings many benefits to small farmers and forest producers. It opens up new avenues and opportunities for additional income and sustainability.

- **Work with the entire value chain, not just production enterprises upstream**: Having a sole focus on increasing farm or forest produce is not enough. Involving small farmers and forest producers in the entire value chain produces better results.

- **Strengthen capacity and networking through exchanges**: Knowledge sharing through exposure and training for beneficiaries as well as policymakers is key to continuous improvement and learning.

12.6 Conclusions

12.6.1 Relevance
Most SEWA members depend upon agriculture. They are small and marginal farmers or landless agricultural sharecroppers and casual labourers. They are among the most vulnerable groups in the agriculture sector. Yet in spite of their huge contribution, they are not politically, socially or economically recognised. More than 60 per cent of the farmers in India are small and marginal and the greatest burden is on women. Yet women continue to have limited access to productive resources and services, markets, and marketing facilities in agriculture.

With over four decades of experience, SEWA has realised that women farmers face steep challenges: their lack of access to support services such as capacity building, extension services, market information, technical education, tools and equipment, credit and market linkages. SEWA believes that there is a need to improve the collective strength and bargaining power of women farmers. This can be done through an integrated approach under the leadership of women. In addition, SEWA’s approach has been to treat agriculture as an industry so that agriculture moves from subsistence to becoming viable and profitable.
12.6.2 Recommendations to policymakers

The following policy recommendations have emerged from the SEWA experience of working with smallholder farmers and forest producers.

- **Develop a framework for the future of work** that enables and strengthens worker’s/people’s economic organisations such as worker’s companies, cooperatives, enterprises etc.

- **Motivate rural youth** to take up agriculture as a sustainable livelihood through skill development programmes linked to employment and entrepreneurship.

- **Promote and incentivise collective and contract farming** for smallholders through technical support, micro-credit and market access to increase benefits to the poor. Developing linkages with existing government schemes and programmes is key.

- **Establish strong supply chains that ensure local procurement and distribution** – this is critical for helping small farmers and forest producers to get reasonable returns of their investments. Both government policies and the private sector must be supportive and work in favour of small farm producers.

- **Establish a fund that takes a long-term view of the poor**, makes significant patient investments, and provides tempering support. SEWA sees the need for a fund providing financial services like the SEWA Bank but by other financial or government institutions. This would allow the tiny and micro enterprises of women and poor to go to scale, at their own pace, allowing them to graduate to small and medium enterprises, thus enabling the informal sector of women workers’ enterprises to enter the mainstream.

- **Support the development of new areas of technology for employment generation** that are green and support local enterprises. This can include the concept of ‘e-villages’ where electronic hubs are established at the local level for people to gain new skills and market products and services online (eg e-retailing, e-banking, e-tourism etc).
Concluding principles for the design of forest business incubators

Duncan Macqueen and Anna Bolin

In this concluding chapter, we assess the key elements for success in the design of forest business incubators, based on the experiences shared in the case studies here. From seeking to engage the most promising entrepreneurs and promoting community ownership, to sustainable financing options that could work at scale, the conceptual beauty of forest business incubation for locally controlled forest businesses is that it aligns many separate agendas under one roof. It must make business work. And to do this, it must secure rights and legality, advance sustainable forest use, develop market access, and deliver social and economic inclusion and benefits. We hope that this book contributes to understanding why forest business incubation is important, how it is being developed in practice, and how we might advance it for the benefit of both forests and people.

13.1 Introductory remarks

When deciding to write this book we were struck by how difficult it was to find examples of ‘business incubators’ in forest landscapes within developing countries. Few organisations that would call themselves ‘business incubators’ work with the type of forest and farm enterprises that the Forest and Farm Facility (FFF) and Forest Connect Alliance members work with. Many of these are group enterprises belonging to forest and farm producer organisations (FFPOs) of various types, whose members are smallholder forest farmers, indigenous peoples or community members with access to communal forest resources. The potential reasons for this are outlined in Chapter 1.

In many of the more bespoke forest business incubator cases described here, those organisations say that the reasons why they started developing their own business incubation support in forest landscapes was because there is no one else doing it, even if they do not call themselves ‘incubators’. And for many, this was because business incubation was perceived to be a critical gap in delivering positive development and environment outcomes. As a result, the incubator spectrum in forest landscapes is diverse, as shown in Table 13.1. Three cases come from for-profit companies (of a more traditional business incubator type), five come from rather different NGOs, two from second-tier FFPOs and one from a dedicated public programme for plantation establishment. At present, if one looks globally, it is probably fair to say that most business incubation in forest landscapes is being provided by NGOs. With NGOs quite often dependent on project funding of relatively short duration, this would seem suboptimal. In the concluding Section 13.7 we consider whether a better alternative might be possible.
<table>
<thead>
<tr>
<th>Chapter number</th>
<th>Incubator name</th>
<th>Business model</th>
<th>Geographic location</th>
<th>Experience</th>
</tr>
</thead>
<tbody>
<tr>
<td>2</td>
<td>Agribusiness Incubation Trust Limited (AgBIT)</td>
<td>For-profit company, agribusiness specific, value chain specific</td>
<td>Zambia</td>
<td>5 years</td>
</tr>
<tr>
<td>3</td>
<td>Asia Network for Sustainable Agriculture and Bioresources (ANSAB)</td>
<td>Not-for-profit NGO, agribusiness and forest focus, value chain generalist</td>
<td>Nepal</td>
<td>25 years</td>
</tr>
<tr>
<td>4</td>
<td>Be Green Trade</td>
<td>Not-for-profit foundation, forest focus, value chain generalist</td>
<td>Bolivia</td>
<td>5 years</td>
</tr>
<tr>
<td>5</td>
<td>FEDECOVERA (Las Verapaces Cooperatives Federation)</td>
<td>For-profit second-tier producer organisation (cooperative), forest and agribusiness focus, value chain generalist</td>
<td>Guatemala</td>
<td>41 years</td>
</tr>
<tr>
<td>6</td>
<td>Inkomoko</td>
<td>For-profit company, agribusiness specific, value chain generalist</td>
<td>Rwanda</td>
<td>5 years</td>
</tr>
<tr>
<td>7</td>
<td>Javlec (Yayasan Javlec Indonesia)</td>
<td>Not-for-profit NGO, forest specific, value chain generalist</td>
<td>Indonesia</td>
<td>18 years</td>
</tr>
<tr>
<td>8</td>
<td>NTFP-EP (Non-Timber Forest Products Exchange Programme)</td>
<td>Not-for-profit NGO, forest specific, value chain specific</td>
<td>Cambodia, India, Indonesia, Malaysia, Philippines</td>
<td>13 years</td>
</tr>
<tr>
<td>9</td>
<td>PlanJunto</td>
<td>For-profit social business, forest specific, value chain generalist</td>
<td>Ecuador</td>
<td>4 years</td>
</tr>
<tr>
<td>10</td>
<td>Reforestamos Mexico AC and FEDA</td>
<td>Not-for-profit NGO, forest specific, value chain generalist</td>
<td>Mexico</td>
<td>4 years</td>
</tr>
<tr>
<td>11</td>
<td>The Sawlog Production Grant Scheme (SPGS)</td>
<td>Not-for-profit public-sector programme, forest specific, value chain specific</td>
<td>Uganda</td>
<td>15 years</td>
</tr>
<tr>
<td>12</td>
<td>Self-Employed Women's Association (SEWA)</td>
<td>Not-for-profit second-tier producer organisation (association), forest and agribusiness focus, value chain generalist</td>
<td>India and 19 other Asian countries</td>
<td>45 years</td>
</tr>
</tbody>
</table>
It can be seen from Table 13.1 that, to counter regional biases, the business incubator cases were drawn from Africa, Asia and Latin America. The cases with the longest track record were from umbrella producer organisations such as FEDECOVERA (founded 41 years ago) and SEWA (founded 45 years ago) both of which continue to provide business incubation services to their member (and other) cooperatives. NGO examples have the second-longest track record with ANSAB and Javlec established 25 and 18 years ago respectively. The most recent arrivals on the scene are dedicated for-profit agribusiness incubators with little more than five years of practice. The arrival of different models over time reflects trends in development thinking – with a much heavier recent commitment to for-profit private-sector models of business incubation. This for-profit approach certainly gives much-needed emphasis to a ‘market knows best’ approach which has been missing in many (but by no means all) NGO attempts to support locally controlled businesses. Yet, observations of the lack of penetration of the approach into forest landscapes suggest that providing business incubation services in these socioeconomic and cultural contexts are particularly challenging and most definitely less profitable. It also suggests that here may be things to learn from the earlier cooperative and NGO attempts to achieve sustainable locally controlled businesses in which a ‘market needs a helping hand’ approach often prevailed.

The recent focus on business incubation (in the last five or so years) contrasts with much older past investments by governments to attract foreign direct investment (DFI). Attracting FDI involves the provision of a preferentially attractive business environment (eg attractive incentives and terms compared with other nation states) for often large-scale external corporations to base part of their value chain production capability within a developing country. In contrast, business incubation seeks to grow promising internal businesses through a series of interventions within the existing business environment. Of course, some business incubators undertake advocacy to improve the business environment – but this is not their main purpose. They are primarily established to nurture and accelerate local entrepreneurship.

As noted in Chapter 1, nurturing and accelerating entrepreneurship in urban environments is relatively straightforward owing to large urban markets and large numbers of potential entrepreneurs. By way of contrast, business incubation towards sustainable business development in forest landscapes is a relatively new concept for which the founding incubator principle of ‘shared space’ does not really work. All the case studies in this book highlight a prior gap in appropriate services for locally controlled forest and farm enterprises. With growing concerns over deforestation, climate change adaptation and mitigation, and persistent rural poverty, the business incubation concept is now gaining momentum as one means of aligning increasing rural income with productive and sustainable forest business that increases carbon sequestration while also diversifying rural incomes to improve climate change adaptation. As seen in Table 13.1, quite a range of organisations have started to offer business incubation services to local entrepreneurs within FFPOs. Since this will fill a critical niche in implementing climate actions and the Sustainable Development Goals (SDGs) more broadly, it is worth taking stock of how this is being done in forest landscapes and what seems to be working and not working. Distilling such lessons is the objective of this chapter.
13.2 Clients that incubators might service in forest landscapes

An important starting point is to observe, within the case studies presented in this book, the types of client that are being serviced by business incubators. As noted in Chapter 1, conventional (i.e., primarily urban) business incubators tend to have relatively strict entry requirements in terms of clients – seeking to engage the best entrepreneurs in the most promising early-stage businesses to take them to the next level of business performance. When we chart the types of clients engaged by business incubators in forest landscapes (in Figure 13.1), however, we observe a slightly different picture. Figure 13.1 displays the four main patterns of clients engaged by case-study incubators, against the number of incubators servicing that pattern of clients. As we can see, only one business incubator services exclusively early-stage businesses. But in this case, Inkomoko provides services to entrepreneurs and small and medium enterprises (SMEs) across all sectors of the economy and so has a larger pool of clients to draw on than purely those in the forest landscape. The ideal participants for its accelerator programme are young companies that have been in business at least six months and have already begun to generate revenue. More commonly, three incubators provided services to both early-stage businesses and new start-ups. This can best be explained through the observation that in many forest landscape contexts, entrepreneurial education (indeed education of any sort) is a scarce commodity. There simply are not enough established early-stage businesses in many forest landscapes to have the luxury of restricting services to likely success stories. Quite often, successful forest business incubation has to work at a more basic level to conduct market analysis, build basic business understanding, and help establish new start-ups. For example, Be Green Trade in Bolivia initiated 10 of its more promising cases from a broader pool of 60 possibilities, but continued to nurture the others because of the limited options beyond these.

![Figure 13.1 Number of case-study incubators serving different patterns of client businesses](chart.png)
In Figure 13.1 the most common strategy of engaging clients (adopted by five incubators) was to engage a mix of start-ups, early-stage and mature ‘lead-firm’ businesses. The reason for engaging lead firms of more mature market status is because they can often act as aggregators and processors of material coming from several or many local FFPO businesses. In some cases, the incubator even puts equity into the lead firm with a view of developing market access for FFPO products. For example in Nepal, ANSAB put equity into the establishment of Himalayan Bio Trade Limited which acted as a processing, packaging and international sales outlet for 20 local handmade paper-producing businesses based around community forest user groups in Dolakha and 16 more in Bajhang. This strategy of engaging lead firms that support the business activities of start-ups or early-stage businesses appears particularly relevant to business incubation in forest landscapes where aggregation of product from multiple locations is a key challenge. For example in Uganda, the Sawlog Production Grant Scheme’s (SPGS) clients were mostly entrepreneur tree growers with a minimum of 25ha of land, but formal groups or associations were encouraged to combine resources to reach this area. In addition, SPGS only supported clients with land suitable for planting trees in specified ‘clusters’ around a large investor. The intention is that when the trees are ready for market, the small tree-grower businesses will at least have the option of organising themselves into groups (such as cooperatives or associations) to process their wood or could sell to the larger grower(s) with the latter more likely to have or be able to access investment capital for processing plants.

In terms of sectoral types of locally controlled forest and farm business that a forest business incubator might choose to service, the case studies show some diversity. All incubators sought to analyse and support in some depth detailed value chain interventions (which requires some in-depth market knowledge of particular sectors). Nevertheless, as Table 13.1 shows, the majority (eight case studies) are described as value chain generalists open to working on any market-led opportunity, while only a few (three) focused on specific value chains. For example, ANSAB has been providing its services to locally controlled forest and farm businesses as part of a larger programme of rural development, and incubation remains as one process within that programme. Targeted sectors include community forest products, especially NTFPs, but ANSAB also routinely works with agricultural product businesses, especially ecosystem-based commercial agriculture (ECA), and also focuses on emerging markets for biomass-based energy (charcoal briquettes), and ecosystem services, especially ecotourism.

As for how many clients a typical forest business incubator might service in any one year, Figure 13.2 shows that most of the incubators serviced between 20–40 client businesses per year. Some smaller newer incubators such as PlanJunto and Reforestamos Mexico serviced fewer clients, while some larger incubator programmes such as the agribusiness incubator Inkomoko or the large NTFP-EP programme serviced more.
These statistics are only indicative, but suggest that for a manageable programme to be sustainable in forest landscapes, it is necessary to engage more than a few clients, but that staffing and resourcing usual constrain numbers to below 60 per year.

13.3 Institutional design features to consider in forest landscapes

Some basic principles of the design of business incubators can be deduced from the case studies about what works in forest landscapes. First of all, the structure and staffing of a forest business incubator seems to be divisible into sections that cover internal administration and finance alongside external services which might include all of the areas listed in Section 13.4. These are almost always managed by a chief executive (a core business specialist) who reports to some kind of advisory board. The incubator’s core staff may be as few as 5–10 in newer smaller incubators such as PlanJunto or Reforestamos Mexico, to 40–50 or more in larger more established incubators such as ANSAB or Javlec.

In almost all cases, these core staff were complemented by a large number of draw-down experts in various fields for which services were demanded. All incubators had some form of specialist networks in the areas pertinent to their business to complement their core capabilities and ensure clients receive relevant support – even when this might be quite specific in nature. For example, for SPGS in Uganda, the specific needs of tree growers were accommodated by locally recruited forestry graduates from Makerere University. For Phases I and II, there were also two internationally sourced technical advisors assigned to the programme who were active in training and mentoring the young forestry staff. For the more generalist agribusiness incubators such as Inkomoko, client services and special projects teams were set up. Each of these have a leader, who oversees a team of
consultants including the following: business development managers (BDMs), business development associates (BDAs), business analysts (BAs) and trainers. Each team is also supported by 2–3 international mentors, volunteers who join Inkomoko for a period of 8–12 weeks at a time and who assist with mentoring and advising.

The establishment of an advisory board can pay dividends in terms of creating the sort of networks of experts which a forest business incubator might need. For example, PlanJunto’s advisory board was initially established to support the general manager during the initial phases of developing the organisation. But as PlanJunto started gaining experience to feed back to the board it increasingly started operating as a community of practice. The idea is to start expanding this shared knowledge space to other employees in the organisation, community leaders and partners. Including a financial expert in the advisory board can be an important strategy. In the case studies, many noted links to financial institutions providing appropriate finance for community-based forest and farm enterprises as a key factor in success.

In some cases, networks of past graduates can also be a useful resource. For example, on a needs basis, ANSAB also seeks advisory support from the entrepreneurs who have graduated from the previous incubation support, and other personnel that were trained before by the organisation and currently being involved as practitioners and professionals.
in the respective field. ANSAB uses this wide network for the delivery of its services. It has access to a roster of more than 200 experts and relevant organisations that ANSAB works with on a needs basis. The roster has been maintained as a database that the organisation updates periodically. In addition to its past graduates, ANSAB often calls for the expression of interest from the relevant experts to be included in the roster. Furthermore, ANSAB uses the multistakeholder platforms coordinated by itself such as Nepal NTFP Network (NNN), Public Private Alliance (PPA) for certification and sustainable marketing of NTFPs, and the ECA Forum to bring together representation and views of the relevant stakeholders including the government line agencies.

In terms of where the business incubators would seek to deliver services, Figure 13.3 shows that most forest business incubators provide services at the client's business. This contrasts sharply with the ‘shared space’ models of conventional business incubators. In addition, there is a relatively heavy emphasis on virtual service provision through websites or other social media platforms, and the use of exchanges, where client businesses are taken to see other functioning businesses from which they can learn. The need to visit clients raises resource issues to do with transport and the timing of service delivery. Forest business incubators tend to have quite high numbers of field staff who require mobility – and therefore require higher levels of funding than their urban incubator counterparts. The tactic of using exchanges to improve business incubation is perhaps still underutilised as a service option (it being quite resource intensive). But many forest and farm producers are naturally risk averse, and respond best to new ideas when seeing their successful adoption by like-minded practitioners, which has encouraged several incubators down this route.

**Figure 13.3 Design of service delivery in case-study forest business incubators**

- **At client business**
- **Virtual**
- **In-house**
- **Exchanges**

- **Number of incubator cases with this type of service delivery**
Because of some of the cost implications of business incubation service provision in forest landscapes, financing for forest business incubators is a key concern. The case studies in this book provide some insights into the sources of income that such incubators rely on and what percentage of incubator costs are born by the clients. Figure 13.4 shows the patterns of financial resourcing that provide income streams for the work of forest business incubators. It was not possible from the case studies to break down the percentages of income coming from each stream. As can be seen, only one incubator (PlanJunto) was entirely reliant on client payments for services to cover its operating costs. This is, on reflection, a function of the interesting model used by PlanJunto in which it services both indigenous community enterprises in the Amazon but also the businesses who want to trade with these types of enterprises. In that case, it is the larger buyers who finance PlanJunto’s work with indigenous community enterprises.

The most common pattern of incubator financing was through a mix of public grants (eg projects) and some client payments for services – which was the case for Inkomoko, NTFP-EP and SPGS. To this mix, two incubators (AgBIT and FEDECOVERA) added income from the sales of their own products. In the case of FEDECOVERA, this forms a substantial part of business incubator financing as FEDECOVERA is set up as an umbrella processing and marketing agency for its member cooperatives for significant value chains relating to timber, coffee, cocoa, tea, cardamom and ecotourism – as well as having a substantial financial lending arm which generates income through interest payments. Two incubators mixed public and private grant financing while providing services free to client businesses (Javlec and Reforestamos Mexico) with one incubator (ANSAB) also selling some services to clients.
It has been often noted that NGOs that depend on project funding risk falling into the trap of responding to financing opportunities of projects rather than following their own mission – which can interrupt business incubation support. Or, the reverse can also be true – too much focus on client turn-over and fees can lead to perverse incentives to focus on the number of clients going in and out the door rather than the quality of services they get. In these cases, some incubators managed this challenge through having a mixed funding model. And others, like PlanJunto, deliberately chose to establish a for-profit social business to ensure the organisation could stay committed to their own value proposition. ANSAB organises its programmes through winning external grants and then utilising its internal resources to run business incubation services. With their financing model, service fees to the incubatee have been mostly subsidised (project based), but are also sometimes fee-based, which is 50–100 per cent depending on the nature of the support and the capacity of the clients. For example, village-based entrepreneurs and enterprise managers are offered essential support services free of cost most of the time, whereas the national-level lead-firm entrepreneurs and enterprise managers receive services on a fee basis, especially when participating in structured trainings.

Receiving a training certificate at the Xibi women’s restaurant and craft business in Toledo, Belize
13.4 **Portfolios of services that might be offered**

Forest business incubation caters to many products and services. Table 13.2 gives an indicative list of the sorts of businesses that might be serviced by a forest business incubator.

<table>
<thead>
<tr>
<th>Subsector</th>
<th>Secondary division</th>
<th>Example</th>
<th>Potential contribution to sustainable development and climate action</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Biomass energy</td>
<td>Fuelwood</td>
<td>Firewood branches and chopped logs</td>
<td>More efficient and sustainable production of fuelwood contributes to local livelihoods and forest restoration, while reducing emissions through energy substitution</td>
</tr>
<tr>
<td></td>
<td>Charcoal</td>
<td>Rough charcoal or compacted briquettes</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Wood pellets</td>
<td>Pellets</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Wood chips</td>
<td>Chipped wood that may be dried</td>
<td></td>
</tr>
<tr>
<td>2. Industrial round wood</td>
<td>Logs</td>
<td>Sawn logs that may or may not be debarked</td>
<td>More sustainable forest management improves livelihood options and capacities and reduces emissions from forest degradation</td>
</tr>
<tr>
<td></td>
<td>Pulpwood</td>
<td>Sawn logs (including small logs and branches)</td>
<td></td>
</tr>
<tr>
<td>3. Primary processed products</td>
<td>Sawn wood</td>
<td>Planks and posts</td>
<td>Sourcing sustainably drives the above while more efficient production enhances competition with less climate-friendly alternatives</td>
</tr>
<tr>
<td></td>
<td>Veneer</td>
<td>Thin sheets of veneer</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Pulp for paper</td>
<td>Pulp feedstock</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Paper products</td>
<td>Paper and paper board</td>
<td></td>
</tr>
<tr>
<td>4. Secondary processed products</td>
<td>Furniture and parts</td>
<td>Wooden office, kitchen or bedroom items</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Builder's joinery</td>
<td>Plywood, wood panels, shingles and shakes</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Shaped wood</td>
<td>Unassembled parquet, strips, friezes, etc</td>
<td></td>
</tr>
<tr>
<td>5. Timber construction</td>
<td>Engineered wood</td>
<td>Modern wooden architecture in homes and commercial property</td>
<td>Increasing wooden construction stores sequestered carbon over long periods and can drive sustainable forest management</td>
</tr>
</tbody>
</table>

Table 13.2 Typology of product and service subsectors that can form part of the portfolio of sustainable forest-related enterprises
<table>
<thead>
<tr>
<th>Subsector</th>
<th>Secondary division</th>
<th>Example</th>
<th>Potential contribution to sustainable development and climate action</th>
</tr>
</thead>
<tbody>
<tr>
<td>6. NTFPs</td>
<td>Food products</td>
<td>Fruits, nuts, seeds, including coffee and honey</td>
<td>Sustainable and profitable enterprises increase the incentive of local people to manage and restore forests of a more biodiverse nature while improving local livelihoods</td>
</tr>
<tr>
<td></td>
<td>Oils and resins</td>
<td>Cosmetic and medicinal oils, resins and gums</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Fibre products</td>
<td>Thatch, wickerwork furniture, crafts</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Ornamental plants</td>
<td>Flowers, houseplants, urban amenity planting</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Medicinal plants</td>
<td>Various internal and external remedies</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Animal-derived products</td>
<td>Wildlife harvesting and captive breeding</td>
<td></td>
</tr>
<tr>
<td>6. Services</td>
<td>Tourism</td>
<td>Parks, recreational sites</td>
<td>Sustainable and profitable enterprises internalise what are normally value externalities and so incentivise local people to manage and restore forests of a more biodiverse nature while improving local livelihoods</td>
</tr>
<tr>
<td></td>
<td>Biodiversity conservation</td>
<td>Forest protection and management</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Watershed protection</td>
<td>Riparian strips, cover and steep slopes etc</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Climate regulation</td>
<td>Sustainable management and restoration</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Amenity, health and culture</td>
<td>Cultural practices, local amenity value</td>
<td></td>
</tr>
</tbody>
</table>

With such an array of potential value chains and markets to develop, forest business incubators must cater to a number of different service needs for their business clients. From the case studies in this book the most common services that are provided are shown in Figure 13.5.

As can be seen from Figure 13.6 there are a number of services that are offered by almost all forest business incubators: business training and planning, accounting and financial management, and support for market needs assessment. These are clearly core areas of support that should therefore be built into core staff capabilities of any forest business incubator. Additionally for forest businesses, resource management, product development and technology sourcing and upgrading are also key elements of business incubation support. In other words, in forest business incubators there is a need for technical know-how pertaining to forest management and the use of processing technology that forms an integral part of business incubation.
What is also striking is that, because many businesses in the forest landscape involve collective or group ownership to achieve economies of scale (or buy-in to collective community resources) training in management capacity and leadership alongside work to improve organisational management, with regular mentoring, are key areas that require attention. For production from multiple grouped smallholdings, or through multiple community members, quality assurance issues become an important service area. Another striking characteristic is the need to understand community dynamics and be able to deal with power imbalances, knowledge and cultural differences between business partners. In this context, the incubator is likely to need to work a lot harder in the less business-oriented and more human-focused elements of developing relationships and trust between partners. This is somewhat different from more urban businesses led by single entrepreneurs.

Beyond these obvious priorities, forest business incubators offer services from the routine such as branding and marketing or investment advice to more specific areas such
as technology maintenance and repairs or website development. Some of these more specialised areas may be the sort of service that is best provided through the networks of experts that are typically cultivated by forest business incubators. Figure 13.6 displays from the case studies in this book the most commonly developed networks for forest business incubators. Specific technology expertise, market promotion functions, legal compliance support and certification seem often to require external support networks.

Figure 13.6 Networks most commonly cultivated by case-study business incubators

While investment advice has been noted in the services provided by forest incubators, the subject of access to finance for business clients in forest landscapes merits some additional commentary. Forest businesses are typically seen by financial service providers as high risk (although several more innovative providers are finding ways to offset such perceptions of risk through the use of trees as collateral). Nevertheless, accessing finance can often prove problematic for forest businesses. Because of this, forest business incubators can play an important role in brokering or delivering such finance. From the case-study incubators, it can be seen in Figure 13.7 that most attempt to broker finance with local financial service providers.

Some forest business incubators, especially NGOs, can access project-based finance that they can then pass on to client businesses as grants. In a few cases, forest business incubators actually provide direct access to equity or loan finance. For example, SEWA has set up its own bank (SEWA Bank) to improve credit access, savings and insurance services for its members. Similarly, ANSAB has set up an equity fund for enterprises that have potential for positive socioeconomic and environmental impacts to the community, but seriously lack capacity to access mainstream financing. For the equity support, a
certain percentage of the shareholding is covered by ANSAB during the establishment of enterprises, mostly waived for the community-based enterprises. Cases of the waiver are mostly for the enterprises which were established for specific development purposes, such as testing of new models and demonstration. If support is provided for establishing an enterprise with a proof of concept, then these financial costs are partly or fully recovered back by ANSAB’s equity fund. The duration of the equity fund is fixed primarily based on the business plan, and normally ranges from 5 to 10 years. The equity fund is managed by an equity fund management committee in the organisation. FEDECOVERA has developed its own financial services from a fund worth more than US$6.6 million that it has built up over time. Over the years, interest from loans made has become an important income stream to FEDECOVERA’s overall portfolio. Capital for the fund is raised from several sources, both internally and externally, but FEDECOVERA also uses its relationship with one of the largest rural development banks to act as a financial intermediary for its members. This enables it to offer a range of different savings, credit and insurance services with different guarantee options and favourable interest rates. Members and non-cooperative groups and individuals can access credit for both business and personal purposes. Loan applications are evaluated by a credit committee and verified by field technicians. The credit mechanism is tailored to the specific commodities and value chains that make up the core of member’s businesses and are meant to support the growth and sustainability of each business line.

Additional services that deserve mention here include evolving operational principles to guide work with indigenous peoples and common-pool resources in the Amazon developed by PlanJunto. These are context specific and focus on the importance of managing relationships and power balances at the community level with an emphasis on learning and trust building:
PlanJunto first positioned itself as an organisation with the tools and skills to tackle the community enterprise-specific challenges that traditional incubator models do not incorporate, which is the really underserved niche.1

In addition, ANSAB has maintained an online database of small and medium forest-based enterprises in Nepal and regularly disseminates price information of 33 forest products and high-value crops through its marketing information system, which has also been used by some interest groups, mainly the Nepal Herbs and Herbal Products Association (NEHHPA), an agriculture magazine and a television programme for dissemination through their channels. Furthermore, ANSAB has developed and maintains a database of relevant business development service providers, buyers and financers. The relevant ANSAB networks, for which the organisation has also maintained a database, are made available to the clients that will help them to access essential business development services (BDS), markets and further networking support.

**13.5 Management tips for incubators in forest landscapes**

The management of business clients involves processes of selecting, evaluating performance and then graduating clients. Each of these processes involves some form of assessment against criteria developed by the incubator.

When selecting which business clients to service, for example, forest business incubators use selection criteria, a practice they hold in common with conventional incubators. However, some of the criteria which are used might seem rather unusual to a conventional incubator. For example, Figure 13.8 shows the most commonly used client selection criteria, by numbers of incubators using that criteria. For example, the most commonly used criterion is that of the degree of community ownership, participation and benefit. The reason for using this unusual criterion is straightforward. Forest landscape resource use tends to have communal impacts. Without collective ownership of the business, or at least participation in and benefit from that business, the risk of resource use conflict and consequent business failure is high. This applies also to the second most-frequent criterion on ‘potential impact/need’ where the term impact is often broadly interpreted to include not only economic impacts but also social and environmental impacts. For example, SEWA as a member-based organisation with a very strong focus on group formation for empowerment, undertakes a needs assessment during that organisation process – which it uses to prioritise which business groups to support.

PlanJunto is the only incubator among the case studies that specifically positions itself as a broker for joint partnerships between community enterprises and their buyers. They have two main clients in these partnerships. One client type is made up of indigenous community enterprises in the Amazon. The other is the businesses who want to do business with these types of enterprises. They inevitably face challenges designing and coordinating activities with indigenous communities in a way that will lead to successful results. Community ownership, participation and benefit-sharing mechanisms in the local businesses, not to mention overall impacts within the communities with whom PlanJunto engages, are critical to success.

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1. See Chapter 9, Section 9.5.1 Overall assessment.
Another important observation is that business incubation in forest landscapes does often need to involve some technical advisory skills in sustainable resource management so as to ensure environmental sustainability. This might need to involve both how to sustainably manage natural forests and how to optimise sustainable productivity for key domesticated/planted agroforestry crops. The most obvious example of this sort of knowledge was visible in SPGS whose clients involve smallholder plantation tree-growers, but almost all of the incubators either had as core staff or had access to technical experts in sustainable resource management.

In terms of performance, case-study incubators tended each to undertake some form of preliminary assessment of the client business. This forms a baseline against which subsequent progress can be monitored. Within the forest sector, business clients can vary quite widely (although this is not always the case as in the smallholder tree-grower clients of SPGS). What seems apparent is that each forest business incubator develops a series of progress criteria that are more or less specific to the business in question (although again in the case of SPGS there are much more defined requirements for plantation establishment and management upon which future support is contingent). This general pattern of tailored performance criteria allows the incubator and client to establish a relationship of trust and mutually agreed expectations over the types of services that are to be delivered and what is expected of each party.

For example, Planjunto operates on a mandate-based or shared intent that is initially developed together with the community enterprise managers laid out in a strategic plan,
which includes impact and progress indicators. The entrepreneurs set their own progress measures, and mechanisms to measure progress, but PlanJunto provides support to ensure they can regularly monitor the sustainability of the enterprise. ANSAB adopts a similar process where progress is measured against a business plan that has been developed together with the entrepreneur at the beginning. Targets are agreed in line with the projections set out in the plan. Similarly, AgBIT conducts an initial enterprise review for each incubatee to identify growth opportunities, needs and gaps that need to be addressed to facilitate successful growth. The enterprise review also identifies which gaps can be addressed directly through business incubation and which gaps can be addressed through other linkages. Based on the enterprise review for each business, specific milestones and outputs of the business incubation process are agreed between the incubator and the business and then regularly assessed.

In terms of ‘graduation’ this was only really understood as a concept for forest business incubators with a clear institutional mandate for incubation (such as AgBIT or Inkomoko). In such for-profit incubators with cycles of six-month business service delivery respectively, graduation is often linked to achieving set targets and milestones. For example, in AgBIT, these milestones differ from business to business depending on the stage of the business, the needs identified at the start of the business incubation process and capacity of the business to sustain their business growth without further support from the incubator. Specific criteria used may include completion of a business plan, increased number of new customers reached, increased sales, new funding raised, new investments, completed new product development and launches, new employment created, fulfilment of specific regulatory compliance requirements, and improved management capacity, among others. If the client business achieves these before the six-month cycle is up it may graduate early, or if it has not yet completed the agreed milestones, an extension may be granted.

For other NGO incubators or support programmes, they may gradually limit their support until clients are more or less independent (ie with the main graduation criteria relating to not needing further the incubator’s services). So, for example, NTFP-EP maintains support to its clients over a period of typically three to five years and provides different levels of coaching throughout so that they deliver against the social and environmental objectives of the programme. Of course, this is also often related to project funding, but in the context of business incubation this fits with the estimated average time needed to ‘graduate’ from the incubation process. In the case of FEDECOVERA which provides support to its member cooperatives, there is no graduation process at all, since the members can at any time call on the advisory services and networks of the umbrella cooperative.

For many of the case-study incubators, records are kept of the client businesses that have been supported. For example, AgBIT maintains data on each graduated client on various parameters including sales, customer acquisition and maintenance, employment, new funding raised, new product launches, and other business growth statistics. The data help the incubator track performance of past clients over time to enable the incubator further to refine its service offering. Similarly, ANSAB keeps close monitoring of the enterprises supported, and measures their effectiveness on the ground through a detailed impact tracking system (ITS) even after their graduation. ANSAB maintains updates of
these enterprises on a yearly basis, where the enterprises provide information based on the outcomes from these enterprises annually. Lead firms are used for collecting the information from the enterprises. Through this process, ANSAB has developed records on the 1,196 business clients involved in the production and value addition of forest and farm products, and their trading both at the national and international levels.

13.6 Tracking and communicating impacts of forest business incubation

Each of the incubators in this book measures success of their incubatees from social, economic and in many cases also environmental perspectives. In part this is because many of the cases described in this book have been set up with particular social and environmental objectives in mind – which allows them to capture development aid to support their work. It seems common for forest business incubators, for example, to collect information on forest management capacity in the client businesses and the impact of their support on the forest area that has been established or has come under sustainable management (eg hectares of planted or sustainably managed forest). All capture basic information on numbers of jobs created and economic performance and in some cases also social investments (such as investments into community infrastructure). Figure 13.9 displays the main factors that were measured in terms of measuring the impact of forest business incubation.

Figure 13.9 Main factors measured to assess impact of forest business incubation against the numbers of incubators citing that factor

![Bar chart showing main factors measured to assess impact of forest business incubation](chart.png)

- Client financial revenues/profitability
- Job creation
- Environmental impact
- Number of clients graduated
- Women and youth entrepreneurship
- Incubator financial viability
- Client investment/value addition
- Client efficiency
- Human capacity development
- Client institutional sustainability
- Social impacts of sector support
It can be seen that economic factors dominate the assessment of impact (as might be expected from programmes focusing on business incubation). Some of these are external impacts (e.g., on client profitability and jobs created) while other are internal impacts (e.g., the numbers of clients and incubator financial viability). However, for forest business incubators, there tends also to be some effort to assess the impacts on the forest resource (e.g., environmental impacts) and as many of the case-study incubators also have strong developmental objectives, some measurement of social impacts takes place such as advances in women and youth entrepreneurship, human capacity development, or social impacts through sector support.

Beyond measuring their success, each of the case studies described in this book also recorded the key factors that had led to the success they had achieved. Figure 13.10 illustrates the top six best practices that incubators felt had led to success among the case-study incubators.

Figure 13.10 Factors leading to successful outcomes of forest business incubation against the numbers of incubators citing each factor

The most frequently quoted success factor was phrased as the clarity of vision and responsibilities. Many of the case-study incubators develop from the outset an agreed memorandum of understanding or contract between incubator and client to capture each side's expectations and so ensure that this clarity is maintained. The importance of relationship building between the different parties involved in the process of enterprise development was also frequently mentioned. For example, although PlanJunto had some strong results to highlight success of its enterprises, the key factors in this process were a host of less-tangible successes to do with managing and building key relationships:
Behind the above more-specific activities, there have been a host of less-tangible, usually human-centered activities that have been the ‘glue’ to hold things together: negotiating and re-negotiating agreements at multiple levels, lobbying specific parties when needed to overcome obstacles, providing special support when needed to weaker parties, the early identification of tensions and creative thinking to overcome them, and one-on-one relationship development with influential individuals, and so on. This ‘glue’ has been a key part of our success.²

PlanJunto’s experience in using a process-orientated, relationship-based approach is that it can be a difficult package to sell to all partners involved. Different expectations in terms of pricing, positioning, results, and the pace of progress means that the incubator must clearly define, and redefine its role and value proposition. This requires a holistic value-chain approach involving many actors to link remote forest landscape production with markets.

It is worth also noting that many of the case-study incubators attributed their success to a long-term commitment to forest business incubation. This has been vital not only to secure resources for the work, but also to build the extensive sets of skills and networks of experts that are capable of doing it effectively. Similarly, within client businesses, strong leadership, organisational management and human capacity development are not necessarily attributes that can be built quickly in remote forest landscapes. Rather they are skills that take time to teach and develop, and often require co-learning and support from a board or assembly of shareholders.

Naturally, the careful selection of clients and the customised approach to those clients feature in these success factors. Without the core drive from real entrepreneurs it is unlikely that any business, however strong the support, will flourish over the longer term.

13.7 What next in building resilient and sustainable livelihoods at scale?

In Chapter 1 we introduced the critical role that forest businesses can play in incentivising sustainable forest management and restoration (to secure their future supply) that will help mitigate further climate change. We also highlighted their importance in diversifying rural economies to reduce poverty and provide local climate resilience for the 1.5 billion people who live in those forest landscapes. Such diversification and resilience would be all but impossible through the monoculture expansion of large corporations whose profits are concentrated outside the forest landscape. Instead it must come through the incubation of many diverse locally controlled forest businesses, often aggregated into groups to achieve market efficiencies, that can enrich local livelihoods, capabilities and environments. And it must happen en masse, such that the collective scale and agency of entire populations and landscapes are involved. Forest business incubation is critical to achieving that. But the challenges of cost recovery in such business incubation services in remote forest landscapes are daunting. There are significant gaps in the provision of these services.

² See Chapter 9, Section 9.5.2 Successes.
We have seen how long histories of cooperative support, a subsequent wave of NGO forest business support and, more recently, the piloting of for-profit business incubators have been attempting to fill this gap of forest business incubation. We have noted how the economics of business incubation in forest landscapes work against a purely for-profit model (indeed in Chapter 1 we also noted evidence that a purely for-profit incubation motive reduces positive impact amongst clients). Yet, at the same time, we have observed how the alternative NGO reliance on short-term project funding can also work against effective business incubation. Are there long-term solutions? We consider three promising options for more sustainable financing of forest business incubation below.

The first option might be to channel development aid and/or climate finance towards the sustainable provision of forest business incubation. This is quite possible, although it does depend on a steady stream of aid and climate finance through mechanisms designed for SDG implementation and REDD+. Indeed, many development aid projects and climate REDD+ readiness programmes have strong elements of forest business support. For example, the Forest Investment Programme (FIP) already includes livelihood support through business development grants and revolving loan funds at community
level in several of its large projects in countries such as Lao (eg the Protecting Forests for Sustainable Ecosystem Services project or the Scaling-Up Participatory Sustainable Forest Management (SUFFORD SU) project – both in excess of US$12 million). Many other multilateral and bilateral aid projects are structured in similar ways. The problem appears not so much to be the concept of supporting locally controlled forest and farm businesses – but rather the sustainability, capability and efficiency of the mechanisms through which such support is delivered. Far too many projects leave the business support environment just as they found it – with the result that few build on or replicate or make use of small project-related business successes. Additionally, too much support is given at the micro or household level without due consideration of organisation to achieve market-scale efficiencies. An alternative would be to install and then sustainably finance REDD+ compliant forest business incubation facilities, with a strong understanding of group business development at the heart of each country’s climate action plans.

The second option might be to use the returns from profitable forest business itself to finance forest business incubation. For example, local (first-tier) FFPO businesses who are producing minimally processed commodities join forces to set up some collective (second-tier) FFPO business perhaps to provide aggregation, processing and marketing functions. This is effectively the FEDECOVERA model in Guatemala. FEDECOVERA aggregates, processes and markets a range of products from member cooperatives such as cocoa, coffee, tea, cardamom and timber. The second-tier business is profitable in its own right. Moreover, it has a vested interest in improving the business efficiency and acumen of its member businesses. So, setting up forest business incubation services at that level is both practicable and has a strong commercial motive. In Guatemala, 11 second-tier umbrella cooperatives are also federated within a third-tier organisation known as the ‘Alianza’ which has proved a powerful force in policy advocacy – in part because its members have considerable understanding about how to improve the business environment for their members.

The third option relates to sustainable support through government services. Most countries have some, and often several, departmental authorities at local level governing forest landscapes. For example, there may be forest department staff, agricultural extension workers, wildlife rangers and so on. There are often very different approaches taken by those authorities for example with agricultural departments tending more towards technical support, but with forest and wildlife departments tending more towards law enforcement. These often have overlapping area-based jurisdiction. For example, in Indonesia there are some 600 forest management units spread across the archipelago whose forest department authority extends to some but not all of the land used by rural people (eg much falls under the agriculture department). These forest management units are jointly considering how to develop better forest business incubation for community forest businesses. In China, the Forest Law Reform involved the setting up of almost 1,000 one-stop-shop forest ownership management service centres to deal with land registration, disputed land titles, cooperative establishment, access to credit and insurance with significant investment in capacity development – including for example in traditional agricultural and forest knowledge, understorey crops and ecotourism. Certainly, the Chinese case approximates to government authorities undertaking forest business
incubation in the types of services offered to rural people. And as many reports attest, the impacts on economic income generation, forest restoration, and social cooperation were on a continental scale.

Support for forest business incubation from a combination of development and climate finance – channelled through second-tier FFPO businesses and supported by government services – could potentially be game-changing or transformational. The conceptual beauty of forest business incubation mediated through and for locally controlled forest businesses is that it necessarily aligns many separate agendas under one roof. It must make business work – and so it must secure rights and legality, advance sustainable forest use, develop market access, and deliver social and economic inclusion and benefits. We hope that this book has made some small contribution to understanding why forest business incubation is important, how it is being developed in practice, and how we might advance it for the benefit of both forests and people.
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Forest business incubation is a support process that accelerates the successful development of sustainable businesses in forest landscapes. While more than 7,000 business incubators exist worldwide, few serve forest landscapes. Low densities of educated entrepreneurs, high logistical costs, scarce infrastructure to distant markets, and few capable business mentors present major challenges. Yet there is much to play for. The aggregate gross annual value from smallholder producers within forest landscapes may be as much as US$1.3 trillion. And it is difficult to see how the Paris Climate Agreement and the Sustainable Development Goals will be implemented without better forest business incubation that strengthens economic inclusion for forest and farm producer organisations (FFPOs), increases rural incomes, diversifies those incomes to improve climate resilience, and incentivises forest restoration and sustainable management to mitigate climate change. Forest business incubation is also needed to help meet market demand for vital products in sectors such as green energy, low-carbon construction, nutritious food, medicines, cosmetics and ecosystem services. It can also help pool lower-risk investment opportunities for financiers. But how can forest business incubation deliver a win-win-win for the economy, society and the environment? That is the question that this book seeks to answer – drawing on established literature and 11 forest business incubator case studies from Asia, Africa and Latin America.