Protecting the Land and Feeding the Poor Through the Conservation Farming Villages (CFV) Approach

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The CFV Approach
Conservation Farming Village
Goal of CFV

Implement a comprehensive strategy to promote sustainability and resilience of upland communities through:

- adaptive farming systems and practices
- diversified livelihoods
- enhanced agricultural productivity
- environmental security
Empowers farmers as stewards of sloping land resources

Taps active leadership of LGUs (and other stakeholders)

Technical assistance by state universities or colleges
CFV

Empowers farmers as stewards of sloping land resources

1

Enhancing skills and knowledge

Transforming hearts, mindsets and practices

Building trust, self-confidence and respect

Nurturing care and compassion for others and environment
CFV

1. Empowers farmers as stewards of sloping land resources

2. Taps active leadership of LGUs (and other stakeholders)

3. Technical assistance by state universities or colleges
CFV

2

Taps active leadership of LGUs (and other stakeholders)

Focused policies and programs

Enhancing skills and knowledge on upland development

Transforming hearts, mindsets and practices

Nurturing care and compassion for upland communities
CFV

1. Empowers farmers as stewards of sloping land resources

2. Taps active leadership of LGUs (and other stakeholders)

3. Technical assistance by state universities or colleges
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Training and capacity building
Research and development
Knowledge management
Facilitation of network and alliance building
Implementation Strategy

Organization of Project Team

Identification of Farmer Volunteers

Training and Organization of FVs

Establishment of S&T Based Model Farms

Participatory Knowledge Management

Autonomous Dissemination

Planned Promotion

Mobilization of Support groups

Adoption and Expansion

SUSTAINABLE & RESILIENT UPLANDS
Criteria for choosing CFVs and Farmers
Criteria: CFV

* Is an upland barangay

* Area has problem on soil erosion

* Is within a critical watershed

* Has LGU that is supportive of the proposed technological interventions and is willing to support and assist in the implementation of CFV project

* Few or nonexistent national programs have been implemented in the area
Criteria: Farmers

* has a farm that is generally sloping, accessible, and easy for other farmers to view

* has strong leadership skills

* is willing to have the farm developed using conservation farming technology during and after the project duration

* is eager to learn

* is committed to be trained and thereafter, train other farmers on the farm technology learned

* has good moral character
CFV Sites in the Philippines

Legend:
- Existing CFV sites
- Target Provinces for Scaling up
Outcomes

Conservation Farming Villages
Shift from Monocropping to integrated farming system
<table>
<thead>
<tr>
<th>Sloping Land Management Technologies</th>
<th>IFUGAO Alfonso Lista</th>
<th>QUEZON Gen. Nakar</th>
<th>ALBAY Ligao City</th>
<th>NEGROS ORIENTAL La Libertad</th>
<th>DAVAO DEL NORTE Panabo City</th>
<th>TOTAL</th>
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<tbody>
<tr>
<td><strong>Farmer Volunteers</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
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<tr>
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<tr>
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<td>17</td>
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<tr>
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</table>
Ligao City, Albay

- Mr. Rolando Biñan’s Farm in Brgy. Oma-Oma
Increased Income
Farm productivity (0.5 ha) and net annual income of Veronica Yuson before and after employing Conservation Farming practices

<table>
<thead>
<tr>
<th>Crops</th>
<th>Harvest (kg)</th>
<th>Net income (PHP)</th>
<th>Crops</th>
<th>Harvest (kg)</th>
<th>Net income (PHP)</th>
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</thead>
<tbody>
<tr>
<td>Coconut (copra)</td>
<td>750*</td>
<td>5495</td>
<td>Coconut (copra)</td>
<td>750*</td>
<td>5495</td>
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<tr>
<td>Upland rice</td>
<td>350</td>
<td>8,500</td>
<td></td>
<td></td>
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<tr>
<td>Peanut</td>
<td>288</td>
<td>3,180</td>
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<tr>
<td>Pineapple</td>
<td>110</td>
<td>875</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ginger</td>
<td>150</td>
<td>16,050</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>String beans</td>
<td>160</td>
<td>875</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Root crops</td>
<td>45</td>
<td>-150</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td><strong>5,495</strong> (USD104)</td>
<td></td>
<td><strong>TOTAL</strong></td>
<td><strong>34,825</strong> (USD657)</td>
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</table>

533.76% increase in income
<table>
<thead>
<tr>
<th>Parameters</th>
<th>Albay</th>
<th>Ifugao</th>
<th>Quezon</th>
<th>Negros Oriental</th>
<th>Davao del Norte</th>
<th>TOTAL</th>
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<tbody>
<tr>
<td>Number of respondents</td>
<td>15</td>
<td>17</td>
<td>15</td>
<td>16</td>
<td>20</td>
<td>18</td>
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<tr>
<td>Average net farm income, USD ha⁻¹</td>
<td>702</td>
<td>658</td>
<td>1,157</td>
<td>1,299</td>
<td>813</td>
<td>883</td>
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<tr>
<td>Average other household income, USD yr⁻¹</td>
<td>578</td>
<td>1,000</td>
<td>762</td>
<td>1,939</td>
<td>755</td>
<td>549</td>
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<tr>
<td>Average net income from livestock, USD yr⁻¹</td>
<td>273</td>
<td>145</td>
<td></td>
<td>19</td>
<td>181</td>
<td>345</td>
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<tr>
<td>Average net household income, USD yr⁻¹</td>
<td>1553</td>
<td>1803</td>
<td>1412</td>
<td>2511</td>
<td>1217</td>
<td>1393</td>
</tr>
</tbody>
</table>

Table 2. Income (PhP) of the FVs and FAs from the CFV sites after adoption of CFV.
Table 3. Perceived socio-economic changes before and after CFV

<table>
<thead>
<tr>
<th>Before CFV (%)</th>
<th>CATEGORY</th>
<th>After CFV (%)</th>
<th>Wilcoxon Signed rank test</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>78.6</td>
<td>Income from farm</td>
<td>14.3</td>
<td>78.6</td>
</tr>
<tr>
<td>42.9</td>
<td>Income from off farm sources</td>
<td>42.9</td>
<td>14.3</td>
</tr>
<tr>
<td>28.6</td>
<td>Time spent in farm</td>
<td>42.9</td>
<td>50</td>
</tr>
<tr>
<td>71.4</td>
<td>Crop yield</td>
<td>28.6</td>
<td>57.1</td>
</tr>
<tr>
<td>7.1</td>
<td>Leisure time</td>
<td>7.1</td>
<td>28.6</td>
</tr>
<tr>
<td>57.1</td>
<td>Access to health facilities</td>
<td>50</td>
<td>21.4</td>
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</tbody>
</table>
Figure 3. Review of Outcomes to Impacts of the Conservation Farming Villages Program

**Outputs**
- 32 CFVs
- 126 model farms and farmer volunteers
- 138 trainings
- 5906 farmers trained
- 13 cross visits
- 10 field days
- 13 nurseries
- 10 IEC produced (43 reproduced)
- 9 CFIS
- 4 trading posts
- 11 people's organizations
- 10 related policies
- 12 guidelines
- Partnership between SUCs & LGUs

**Outcomes**
- Empowered farmers, increased farming options, informed decision makers
- Increased level of knowledge/skills & awareness on conservation farming dynamics
- 598 CFV adopters
- 524.25 ha employed with conservation farming technologies
- Planting materials & seeds made available and accessible

**Intermediate States**
- Improved and easy access to market
- Catalyzed entry of development-oriented agencies (local/international)
- Convergence of other development programs
- Institutionalized CFV thru barangay resolutions and inclusions in AIP
- More policy support for conservation farming
- Strong partnership among SUCs, LGUs & communities
- Better access to technical assistance & support services

**Desired Impacts**
- Increased crop yield (variety and quantity) due to crop diversification
- Reduced outsourcing of food crops, planting materials for vegetables, root crops, fruit trees
- Shift from monocropping (e.g. corn) to crop diversification
- Practice of proper waste disposal (reduced/eradicated burning of farm waste)
- Less dependence on commercial fertilizers and pesticides (farmers produce and use organic fertilizers – vermicomposting/rapid composting/naturally fermented solutions)
- Reduced logging of secondary forest (within farm) for charcoal-making
- General additional income from sales of seeds/seedlings
- Increased livelihood opportunities
- Awards & recognitions
- Mainstreaming of conservation farming technologies/practices
- Enhanced local governance – natural resources conservation & management

Improved soil condition/reduced land degradation
Increased agricultural productivity
Increased income
Understanding Diversity in governing the natural resources
DIVERSITY IN GOVERNING THE NATURAL RESOURCES

Capable and Motivated Farmers

New Mindset and Skills
- Expanded World View
- Ability to Organize and Mobilize
- Enhanced Self Image

Fusion of Science and IKSP
- Access to Knowledge and Information
- Adaptive S&T Based Farming Practices

Committed Support
- Support of LGUs
- Support of OGAs, CSOs, NGOs
- Support of Academe

Adequate Livelihoods
- Diverse Livelihoods
- Improve Access to Market
- Higher Income and Improved Cashflow

Conservation of Upland Resources and Ecosystems
Pedro Ochullom’s farm in Alfonso Lista, Ifugao
Corn monocropping to intercropping of corn and vegetables + contour planting
Veronica Yuson’s farm in Brgy. Oma-Oma, Ligao City, Albay

Landuse Type: Cropland

Major land use problem: soil erosion and monocropping

Type of conservation measure:
- combination of agronomic (intercropping, crop rotation – rice and peanut, contour cultivation and composting, mulching) and vegetative (Kakawate hedgerows)
- Alley crops: upland rice, peanut, ginger, bush sitao, sweet pepper, pineapple
- Main causes of observed land degradation problems: natural and human induced

How technology combats degradation problem: slow down runoff, reduce erosion, improve ground cover, increase soil OM, increase productivity through crop diversification
Thank You