Climate-Smart Agriculture Project

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CSA Inception Workshop
Flower Garden Hotel
Hanoi, Viet Nam
December 17-18, 2012
Overview

- Objectives of the CSA Project
- Examples of CSA practices & barriers to adoption
- Project framework
- CSA priority areas for the Northern Mountainous regions of Vietnam
- Planned project outputs
- Expected Outcomes from Workshop
Background and rationale

- Food security and climate change are urgent and inter-related issues in the agriculture sector.

- CSA is about increasing food security with needed adaptation, capturing financial benefits from potential mitigation co-benefits.

- Vietnam has good potential for capturing synergies between agricultural & CC policy priorities (CCP).

- Vietnam has good in-country research capacity and data.
Assessing synergies & tradeoffs of practices

<table>
<thead>
<tr>
<th>Food Security Potential</th>
<th>Mitigation potential</th>
</tr>
</thead>
<tbody>
<tr>
<td>High</td>
<td>Low</td>
</tr>
<tr>
<td>Inefficient use of nitrogen fertilizer</td>
<td></td>
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<tr>
<td>Expanding:</td>
<td></td>
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<tr>
<td>(i) cropping on marginal lands</td>
<td></td>
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<tr>
<td>(ii) energy-intensive irrigation</td>
<td></td>
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<tr>
<td>(iii) energy-intensive mechanized systems</td>
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<table>
<thead>
<tr>
<th>Food Security Potential</th>
<th>Mitigation potential</th>
</tr>
</thead>
<tbody>
<tr>
<td>Low</td>
<td>High</td>
</tr>
<tr>
<td>Bare fallow</td>
<td></td>
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<tr>
<td>Continuous cropping without fertilization</td>
<td></td>
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<tr>
<td>Over-grazing</td>
<td></td>
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<tr>
<td>Restore degraded land</td>
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<tr>
<td>Conservation agriculture with agro-forestry</td>
<td></td>
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<tr>
<td>Low emissions diversification</td>
<td></td>
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<tr>
<td>Increase fertilizer efficiency</td>
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</table>

<table>
<thead>
<tr>
<th>Food Security Potential</th>
<th>Mitigation potential</th>
</tr>
</thead>
<tbody>
<tr>
<td>Low</td>
<td>Low</td>
</tr>
<tr>
<td>Reforestation/afforestation</td>
<td></td>
</tr>
<tr>
<td>Restore/maintain organic soils</td>
<td></td>
</tr>
<tr>
<td>Agro-forestry options that yield limited food or income benefits</td>
<td></td>
</tr>
</tbody>
</table>
What barriers to adoption?

Tenure Security: lack of tenure security and limited property rights, may hinder adoption of SLM

Limited Access to Information, e.g. very low levels of investment for agriculture research and extension

Up-front financing costs can be high, whilst on-farm benefits not realized until medium-long term (credit)

Risk plays an important role

What role for insurance? safety nets?

Payments for mitigation to overcome barriers

High transactions costs, need for collective action
Develop a policy environment & and agricultural investments to improve food security and provide resilience under climate uncertainty

**NEEDS**

**RESEARCH COMPONENT**

- What are the synergies and tradeoffs between food security, adaptation and mitigation from ag. practices?
- What are the barriers to adoption of CSA practices?
- Legal & Institutional Appraisal: mapping institutional relationships and identifying constraints

**POLICY SUPPORT COMPONENT**

- What are the policy levers to facilitate adoption and what will they cost?
- Identifying where policy coordination at the national level is needed and how to do it
- Facilitating national participation/inputs to climate and ag international policy process

**OUTPUTS**

- Evidence Base
- Strategic Framework & Policy Advice
- Investment proposals
- Capacity Building
The Building Blocks of CSA logical chain

1. Assessing the situation
2. Managing Climate Risk
3. Identify barriers and enabling factors
4. Defining coherent policies
5. Guiding Investments

FAO EPIC
ECONOMICS & POLICY INNOVATIONS FOR CLIMATE-SMART AGRICULTURE
The need for a “Narrative”

How to structure the different topics for policy advice and capacity building?

• Create a strong link between research, policy, and investment
• Need input and feedback from stakeholders
• Combine qualitative with quantitative
• Participatory scenario building:
  • Develop a storyline for scenarios
  • Identify key outcomes of interest
  • Quantify scenarios
• Combine narrative scenarios with policy simulations to provide insight
Activities with in-country Partners

1. Develop the narrative (participatory scenario building)
2. Dialogue with policy stakeholders in implementing Climate Change Action Plan for:
   - Food Security and Risk Mgmt
   - Sustainable Agricultural Land and Water Mgmt
3. Collaboration with in-country research Institutions:
   - Supporting master students, a PhD student and mentoring
   - Implement research activities
4. Coordination between climate change and agricultural policy (e.g. CCP, MARD participation in UNFCCC)
Focus on the Northern Mountainous Region
Some descriptive stats (VARHS)

<table>
<thead>
<tr>
<th>Poverty level</th>
<th>Northern</th>
<th>Non-northern</th>
</tr>
</thead>
<tbody>
<tr>
<td>Poor %</td>
<td>25</td>
<td>13</td>
</tr>
</tbody>
</table>

Main crops (% HH)

<table>
<thead>
<tr>
<th>Crops</th>
<th>Northern</th>
<th>Non-northern</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rice</td>
<td>96.5</td>
<td>75.9</td>
</tr>
<tr>
<td>Maize</td>
<td>81.0</td>
<td>24.4</td>
</tr>
<tr>
<td>Peanuts</td>
<td>6.4</td>
<td>7.1</td>
</tr>
<tr>
<td>Fruit</td>
<td>24.1</td>
<td>33.4</td>
</tr>
<tr>
<td>Coffee</td>
<td>0.5</td>
<td>24.9</td>
</tr>
<tr>
<td>Tea</td>
<td>1.5</td>
<td>2.8</td>
</tr>
</tbody>
</table>
## Some descriptive stats (VARHS)

### % of plots that experienced selected problems

<table>
<thead>
<tr>
<th></th>
<th>Northern</th>
<th></th>
<th>Non-northern</th>
<th></th>
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</thead>
<tbody>
<tr>
<td></td>
<td>year 2008</td>
<td>year 2010</td>
<td>year 2008</td>
<td>year 2010</td>
</tr>
<tr>
<td>Dry land</td>
<td>14.4</td>
<td>38.4</td>
<td>21.0</td>
<td>16.8</td>
</tr>
<tr>
<td>Land slide</td>
<td>1.6</td>
<td>6.1</td>
<td>0.0</td>
<td>0.5</td>
</tr>
<tr>
<td>Stony soils</td>
<td>6.0</td>
<td>5.3</td>
<td>1.0</td>
<td>1.5</td>
</tr>
</tbody>
</table>

### HH Affected by climatic shock

<table>
<thead>
<tr>
<th></th>
<th>Northern</th>
<th></th>
<th>Non-northern</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>year 2008</td>
<td>year 2010</td>
<td>year 2008</td>
<td>year 2010</td>
</tr>
<tr>
<td>Flood</td>
<td>1.1</td>
<td>3.1</td>
<td>12.9</td>
<td>17.4</td>
</tr>
<tr>
<td>Drought</td>
<td>2.6</td>
<td>18.8</td>
<td>4.2</td>
<td>8.7</td>
</tr>
<tr>
<td>Landslide</td>
<td>1.5</td>
<td>3.7</td>
<td>0.6</td>
<td>0.5</td>
</tr>
</tbody>
</table>
1. Sustainable land Management on sloping lands

2. Diversification in coffee, tea, and rubber

3. Agroforestry as “reforestation”
Next steps

- Conduct analysis of barriers and enabling factors to adoption and synergies & tradeoffs between various practices
- Cost & Benefit analyses of identified practices
- Risk management analyses
- Capacity building component: Masters and PhD theses on various CSA practices
- Capacity needs assessment
- Collaboration with other on-going projects to provide more evidence
Output 1. Evidence base

1.1 – 1.4 Conceptual framework & Meta-database (HH, Climate and GIS)

1.5 Statistical analyses of policies aimed at all 3 CSA Objectives (i.e. Ag. production increase, adaptation, mitigation)

1.6 Development of a policy simulation model (in tandem with the development of country-owned strategic frameworks)
Output 2: Country owned strategic framework

2.1 - 2.2 Review and Evaluation of programmes, policies and institutional frameworks affecting the development, financing and implementation of CSA

2.3 Identification and costing of priority CSA Options

2.4 Facilitated policy dialogue and preparation of a CSA strategic framework document
Output 3: CSA investment proposal

3.1 Country-specific business model for linking climate finance to smallholder agriculture developed

3.2 Development of investment project proposal

3.3 M&E and impact assessment mechanisms
Output 4: CSA planning and implementing capacity

4.1 Construction of web-based knowledge sharing platform (stakeholders’ interaction)

4.2 Masters and PhD students

4.3 Training for policy-makers

4.4 Support for agricultural policy-makers in attending national and international CC policy processes

4.5 Preparation and dissemination of policy briefs on CSA
Expectations from the workshop 1/2

A platform for a constructive consultation with stakeholders to:

1. Address evidence to be provided,
2. identify constraints and enabling factors
3. tailor the project and its logframe to the specificities of the country
4. start and strengthen collaboration with the country partners throughout the lifetime of the project.
Expectations from the workshop 2/2

Discuss:

1. **Agricultural practices** contributing to productivity/incomes for food security and, where possible, mitigation

2. **Barriers to adoption** of CSA and potential policies needed to overcome them;

3. **Participatory processes** for policy/strategic framework/roadmap development;

4. **Identify enabling mechanisms** (institutional, policy, and financing)
Goals of break-out sessions

1. Contribute to a better understanding of the existing evidence base
2. Identify gaps in evidence base
3. Identify partners that can be instrumental in contributing to each outcome
Thank you!