Knowledge Management and Decision Support for Sustainable Land Management: The Philippine Experience

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PRESENTATION OUTLINE

• INTRODUCTION – WHY KM AND DECISION SUPPORT ON SLM?
• WHERE ARE THOSE SLM PRACTICES?
• WHAT SLM KM TOOLS?
• FRAMEWORK – THE KM AND DS PROCESS APPLICATION
• DEVELOPMENT OUTPUTS?
• HOW TO COMMUNICATE RESULTS?
• CONCLUSION
WHY KNOWLEDGE & DECISION SUPPORT?

- The Philippines is one of the countries susceptible to extreme climate events and various forms of land degradation.
- Sustainable land management (SLM) is at the heart of land degradation neutrality strategies;
- But, they are not well recognized, adopted and shared despite the wealth of knowledge on SLM.
- There is a knowledge gap; it is not used to make decisions.
- Need to document this SLM knowledge, put in a database, and process into a decision support tool.
Technology Functions within the landscape
(34 SLM Technologies and 9 Approaches)

1. Soil Fertility Management
2. Water Management
3. Runoff Management and Erosion Control (Structural measures)
4. Runoff Management and Erosion Control (Vegetative measures)
5. Enrichment Planting and Protection of Vegetative Cover
6. Fire and Wind Breaks
7. Biological Pest Control
WHAT KM TOOLS?

WORLD OVERVIEW OF CONSERVATION APPROACHES AND TECHNOLOGIES (WOCAT) TOOLS AND METHODS

- Building on existing wealth of knowledge
- Understanding local adaptations and innovations
- Assessing SLM impacts
- Providing options for spreading

A common platform for SLM knowledge management

- Recognized by the UNCCD as “the primary recommended database for reporting SLM Best Practices”
THE KM – DS PROCESS

The WOCAT process and tools

- Questionnaires
  - Technology Approach
- Database
  - Management, retrieval and analysis tools
- Outputs
  - Reports/Books
  - Maps
  - CD-ROM
  - WWW
- R & D and Capacity Development
- Decision Support Tool
  - SLM Web-site
  - Financial/Economic Analysis
- Users at the planning level
- Communicate Results
- Scaling up Entry Points

Identifying SLM Practices as LD Solutions

Experience
Contributors and users

Techno Demo Farms on Sustainable Corn Production and Sloping Areas (SCoPSA); Manila Bay Watershed Project

Inputs to the Integrated Land Management Framework as Menu of SLM practices

Guidelines for Mainstreaming SLM in the Comprehensive Land Use Plan

Basket of Options on SLM for GEF 6 Project Document (Mgmt of Biodiversity Corridors)

PHILCAT SLM plug-in for Knowledge Management Component of another GEF 6 Project (SLM and Forest Restoration)
Establishment input and cost per ha

Establishment Activities: Clearing, staking and laying out; Stripping and excavation; embankment filling; pipe lay out and installation; riprapming: concrete works, embankment sodding; and canal excavation and lining. Establishment inputs and cost per ha of service area: Labor - 105,000 P/ha; Materials - 99,000 P/ha; 96,000 P/ha; Total Cost - 300,000 P/ha. Maintenance/recurrent costs (Embarkment maintenance, appurtenant structures maintenance, canal maintenance); Labor - 12,000 P/ha-year; Minor equipment - 3,000 P/ha-year; Total maintenance cost - 15,000 P/ha-year.

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<thead>
<tr>
<th>Production and socio economic benefits (2.59-4.40)</th>
<th>Socio-cultural benefits (2.52 - 3.97)</th>
<th>Ecological benefits (2.52 - 4.20)</th>
<th>Offsite benefits (2.67 - 4.04)</th>
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</thead>
<tbody>
<tr>
<td>4.26  High</td>
<td>3.62  Medium</td>
<td>4.05  High</td>
<td>4.04  High</td>
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<tr>
<td>Total benefits (11.00 - 16.66)</td>
<td>15.97 High</td>
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Assessment of the technology

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<th>Full details:</th>
<th>3570 hits</th>
<th>1684 hits</th>
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<tr>
<td>DS Tool</td>
<td>(SLM) in</td>
<td>ADDRESS ABIOTIC</td>
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DEVELOPMENT OUTPUTS

Philippine SLM Case Studies......
• IEC Materials produced in English and three major local dialects
HOW TO COMMUNICATE RESULTS?

Presentation of outputs during the Island-wide technical briefing for the Local Government Units (LGUs), Seminars, Fora and Farmers’ Trainings
• The Philippines has a wealth of SLM knowledge – both indigenous or traditional knowledge and science-based knowledge scattered around the country – model farms;

• Application of this knowledge remains low and slow

• The KM – DS Framework which we adopted can provide a catalytic process to reach our planners and local leaders for a more informed decision making on which SLM practices would be more appropriate

• Needs R & D and capacity building for more SLM adaptation

• Inputs to ambitious transformative program in the landscape towards achieving land degradation neutrality (LDN) !!
EVERY SLM PRACTICE ... COUNTS!

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