Ecoagriculture Partners: Progress towards linking conservation, production and rural livelihoods

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Presentation Outline

• The need for ecoagriculture

• What do we mean by ecoagriculture?

• The role and workplan of Ecoagriculture Partners
Importance of Agricultural Landscapes for Biodiversity and Ecosystems

Overlay of Agricultural Lands and Protected Areas
Pressures on agricultural landscapes

- Increased population
- Further pressure for increased production from urbanization and rising incomes
- Climate change
- Biofuels boom

Emerging scientific tools

- Scientific advances (e.g., in agroecology, landscape ecology, wildlife biology, molecular biology, genetics)
- New techniques to study movement of resources and species (e.g., remote sensing, systems modeling, biochemical markers)
- New tools for ecosystem and landscape analysis and planning tools (being coalated in LMRC)
- New methods for on-farm and landscape-scale action research
From ‘sites’ to landscapes

- Integrating the management of:
  - Protected Areas
  - Watersheds
  - Degraded forests
  - Farms and Plantations

- To accommodate:
  - Livelihood options
  - Species & habitat conservation needs
  - Ecological processes
  - Opportunities to recognize and reward land use innovations (e.g. payments for environmental services)

What is ecoagriculture?

Agricultural landscapes managed to enhance rural livelihoods and sustainable agricultural production (of crops, livestock, fish and forest), while conserving or restoring ecosystem services and biodiversity.
Vision and mission of Ecoagriculture Partners

**Vision:**
Farmers around the world produce enough food while protecting the biological diversity of plant and animal life

**Mission:**
To mobilize scaling up of successful ecoagriculture approaches, by catalyzing strategic connections, dialogue and joint action among key actors, at local, national and international levels

Three legs of the stool
### Ecoagriculture strategies

<table>
<thead>
<tr>
<th>Enhancing natural areas</th>
<th>Enhancing production areas</th>
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<tbody>
<tr>
<td>• Create conservation reserves that benefit local farming communities</td>
<td>• Minimize agricultural pollution</td>
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<td>• Develop habitat networks in non-farmed areas</td>
<td>• Modify management of soil, water, and vegetation resources</td>
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<td>• Reduce land conversion by increasing farm productivity (within landscapes)</td>
<td>• Modify farming systems to mimic natural ecosystems</td>
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### Understanding ecoagriculture

![Puzzle pieces forming a landscape]
Mobilizing research and research funding for ecoagriculture

- Agrobiodiversity Research Platform
- CGIAR linkages
- IAASTD
- Scientific Symposia (NAS, AAAS, China Eco-Summit, ESA, DIVERSITAS et al)
- Identifying research gaps
- Synthesis of research

Landscape measures initiative

- Methods for multi-stakeholder analysis, planning and monitoring of ecoagriculture landscapes
- LM Resource Center: EP, Cornell + 17 partners
- Application of framework to biofuels development
Linking and learning among innovators

1st and 3rd Leadership Course for Ecoagriculture in East Africa (November 2006, April 2008)

2nd Leadership Course in Mesoamerica (November 2007) – with IICA, IUCN, TNC
Community Knowledge Service for biodiversity and livelihoods

- With UNDP Equator initiative
- Learning landscapes in East Africa and Mesoamerica

Promoting policies and markets that support ecoagriculture landscapes
Expanding markets for ecoagriculture products and services

- Landscape-scale market assessment tools
- Support market development:
  - Eco-certification
  - New products
  - Supply chains
- Network on PES in ecoag landscapes (w/ KG)
- IFC/GEF Biodiversity & Ag’l Commodities M&E

Integrating policies for agriculture, biodiversity and rural development

- Policy Indicator Toolkit
- International
  - CBD
  - UNFCCC
  - WCC
  - Donor strategies
- Regional
  - East Africa (with Packard, TerrAfrica, IIED)
  - Mesoamerica
- National
  - MDG’s, MEAs
- District
Evidence of biodiversity-friendly agriculture systems

• Buck, et al: 82 examples of 18 agricultural practices (hedgerows, windbreaks, woodlots)
• Organic agriculture (some cases)
• Shaded crops (cocoa, coffee)
• Holistic range management
• Low/No tillage
Gaps in understanding and promoting ecoagriculture: What still needs to be done

- Understand relation of agricultural diversity - ecosystem services
- Relation of below- & above-ground biodiversity
- Methods to determine biodiversity impacts on ag.
- Linking farm & landscape analysis
- Lack of $ for ecoag research
- Innovators not connected
- Supportive markets and policy

Interdependence of agriculture, ecosystems, and livelihoods
Why aren't we moving faster?

- Trapped in GMO debate
- Agriculture and environment practitioners are not engaged in each other's core issues
- Weak metrics at landscape/national scale
- Crisis mentality
- Let's discuss

Donor investment in agriculture

- Gates Foundation, $600 million and growing quickly
- Alliance for a Green Revolution in Africa (AGRA)
- World Bank's 2007 World Development Report: Agriculture for Development
- The New Partnership for Africa's Development (NEPAD)
- MDG on Hunger
Managing production systems for ecoagriculture landscapes

- Increase input efficiency, minimize pollution
- Improve spatial organization of land use
- Manage wild species to benefit farming
- Economies of scale through collective action
- Design agricultural systems to mimic natural ones

Landscape management for biodiversity conservation and ecosystem services

1. Maintain large areas of protected native vegetation within the region
2. Maintain (or reestablish) connectivity between native habitats within agricultural landscape
3. Conserve areas of native habitat within the agricultural landscape, giving priority to large, intact and ecologically important patches
4. Implement conservation plans for species and ecological communities of high value
5. Convert marginal productive lands to natural vegetation
6. Protect watersheds with spatial configuration of perennial natural, planted vegetation
7. Maintain continuous year-round soil cover to enhance rainfall infiltration
Supporting multistakeholder platforms for landscape planning and action