Integrated Landscape Management and the Sustainable Development Goals

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Agriculture & NRM historically in silos

To optimize for sector-specific outputs in transition for last few decades
Most landscapes today are mosaics
Policy moving towards ILM: SDGs, INDCs, Habitat III, IPBES, UNEP GEO, UNCCD GLO, WAVES...
Integrated Landscape Management

1) Agreed landscape management objectives
2) Land use practices contribute to objectives
3) Manage the synergies and trade-offs
4) Markets, policies and programs aligned
5) Collaborative processes for multi-stakeholder governance
ILM as means of implementation for the SDGs

Healthy forests for recreation and water retention

Peri-urban areas are biodiverse, mixed-use food corridors

Fresh, local food sources

Biodiverse and economically active coastal areas

Managed riparian ecosystems

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Rapidly growing investment in ILM

• African Resilient Landscapes Initiative
• Bonn Challenge- Forest Landscape Restoration
• Climate-smart territories in Latin America
• Business and landscape initiatives
• National government programs
• NGO programs
• GEF (> 250 projects)
Integrated agricultural landscape initiatives are emerging around the world.

## Selected features of ILI’s

<table>
<thead>
<tr>
<th>Feature</th>
<th>Africa</th>
<th>Latin America &amp; Caribbean</th>
<th>Asia</th>
<th>Europe</th>
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</thead>
<tbody>
<tr>
<td># initiatives Surveyed</td>
<td>87</td>
<td>104</td>
<td>174</td>
<td>71</td>
</tr>
<tr>
<td>Motivations</td>
<td>Reduce degradation, sustainable land management, conserve biodiversity, improve food security, increase productivity, improve water security, sustain cultural values</td>
<td></td>
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<td></td>
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<tr>
<td>Average # of Objectives</td>
<td>8</td>
<td>7</td>
<td>6</td>
<td>8</td>
</tr>
<tr>
<td>Average # of stakeholder</td>
<td>9</td>
<td>11</td>
<td>11</td>
<td>6</td>
</tr>
<tr>
<td>Participants</td>
<td>Local &amp; state govts, farmer associations, local NGOS, private business, international NGOs, national governments</td>
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<td>Self-reported impacts (many SDGs)</td>
<td>Agriculture: increased yields, profitability; reduced environm. Environment: improved biodiversity, water quality Institutions: women’s empowerment, indigenous knowledge Livelihoods: improved food security, income of the poor</td>
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ILM theory of change

ILM platform activities

Change perception - incentives

Interventions synergistic to achieve multiple SDGs

Outcomes at a landscape scale (SDG targets)

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Integrated landscape management
Landscape Action Agenda: A web of synergistic investments

- **Asset investments** (environment-friendly, socially inclusive)
  - Crop-livestock-forest-fish production
  - Value chain, processing, market dev.
  - Industry, mining, tourism
  - Green infrastructure & natural resource restoration, wildlife mgmt.
  - Greening built & urban infrastructure
  - Health, education, nutrition, safety net

- **Enabling investments**
  - Multi-stakeholder platforms
  - Strategic planning and coordination
  - Integrated spatial assessment & monitoring
  - Capacities for integration strengthened for farmers, NGOs, government agencies, businesses, finance
  - Policy and regulatory innovation
  - Research and innovation systems
Coordinated investment
Need for a shared framework for negotiation & planning

1) What is the state/trends of the landscape?
2) What do agreed vision/ambitions look like?
3) What are the challenges/opportunities?
4) What difference will proposed interventions actually make on SDGs? On the ambitions?
5) Clarify assumptions, metrics of success
Landscape scenario models can support stakeholder process

Model-based scenario analysis

Future development is determined by different factors:
- Beliefs, culture
- Rules, laws, behaviour
- Physical entities

Some of which can be captured well with models, some by storylines.

These can be combined to generate scenarios to explore different possible futures:

- Sustainable
- Unsustainable

[Diagram showing timeline from 2010 to 2050 with 'Unlikely' and 'Alternative future scenarios']
PBL-EcoAg project, 2017-18

- Supported by NL Min. Foreign Affairs
- Goal: Explore how spatial modelling and scenarios can be used by landscape initiatives to advance integrated of the SDGs
- Through partnership of:
  - PBL – spatial modeling expertise linking land use and ecosystem services
  - EcoAgriculture – expertise in ILM, ILI networks
  - Landscape conveners in 3 landscapes

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