Expert Group meeting in preparation for HLPF 2018
Session 4: Holistic and Integrated Approaches to achieving SDG 15

Juha Siikamäki, 14 May 2018, UN HQ
IUCN Forest Landscape Restoration Approach

- Landscape approach
  - Address multiple objectives
  - Seek sustained delivery on many SDGs

- Restoring "forward" to meet current and future uses:
  - Thinking long-term over large areas
  - Learning and adapting over time

- Restoring functionality and productivity, not "original" forest

- Balancing local needs with national and global priorities

- Using a package of diverse restoration strategies

### Solutions for a Cultivated Planet

<table>
<thead>
<tr>
<th>Stable Supplies of Clean Water through revegetation along waterways</th>
<th>Carbon Capture &amp; Storage through increasing vegetation and soils</th>
<th>Biological Diversity through ecologically mindful restoration with native species</th>
<th>Food Security &amp; Nutrition through food source diversification</th>
<th>Resilient Landscapes by enhancing adaptive capacity</th>
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</thead>
<tbody>
<tr>
<td>Non-Timber Forest Products fruit, honey, mushrooms and other products from forest richness</td>
<td>Construction Timber through improved plantation management and use of native species</td>
<td>Productive Crops through the use of forest ability to regulate landscapes</td>
<td>Stable &amp; Rich Soils through the revegetation of degraded slopes</td>
<td>Energy for Cooking &amp; Heating by improving the management of woodlots</td>
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For more information, please contact:
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Climate mitigation potential of 20 natural pathways.

Climate mitigation potential in 2030 (PgCO$_2$e yr$^{-1}$)

Forests
- Reforestation
- Avoided Forest Conv.
- Natural Forest Mgmt.
- Improved Plantations
- Avoided Woodfuel
- Fire Mgmt.

Ag. & Grasslands
- Biochar
- Trees in Croplands
- Nutrient Mgmt.
- Grazing - Feed
- Conservation Ag.
- Improved Rice
- Grazing - Animal Mgmt.
- Grazing - Optimal Int.
- Grazing - Legumes
- Avoided Grassland Conv.

Wetlands
- Coastal Restoration
- Peat Restoration
- Avoided Peat Impacts
- Avoided Coastal Impacts

Other benefits
- Air
- Biodiversity
- Water
- Soil

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Nature can provide **37%** of the mitigation needed to remain within a 2 degree C pathway.

Bronson W. Griscom et al. PNAS 2017;114:44:11645-11650
What works at scale?

• Experience building up
  • Bonn Challenge
  • REDD+

• Climate benefits increasingly well understood, though issues remain with
  • implementation
  • leakage and additionality
  • delivery on non-GHG benefits

• Systematic evidence base needed
  • Robust program evaluations to evaluate cost-effectiveness
  • Help improve future programs
  • Enable adaptive program design
  • Vast program scale enable unique learning
Ecosystem Service Valuation

Long history (Faustman 1849, soil conservation 1920s-30s, valuation subfield since 1960s; ecosystem services as conceptual framework since 1990s)

Current information on values comes from idiosyncratic studies using different

- valuation endpoints
- ecological and socioeconomic conditions
- valuation methods
- non-representative approaches
- process models, non-observational methods

Measurement, accounting, and management requirements

- Empirical (observational)
- Representative
- Comprehensive and consistent
- Link ecological and economic processes (biophysical & economic)

Need a concerted effort using a common framework

- UN System of Environmental Economic Accounts (SEEA) and Experimental Ecosystem Account (EEA)
Thank you