FOREST LANDSCAPE RESTORATION

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This Presentation Will Cover

- Global restoration opportunity
- The forest landscape restoration approach
- Partnerships and initiatives that are driving the restoration movement
- Social and economic benefits of forest landscape restoration
Global Restoration Opportunity
A World of Opportunity for Forest and Landscape Restoration
But “more trees” will not necessarily bring society the full range of benefits needed
Diversity delivers a broader range of forest goods and services

Across different land uses

For different social groups

But only if we work to restore at a sufficient “landscape” level
The Forest (and) **Landscape** Restoration Approach
What it is and is not

- Not just “forests” but all types of landscapes
- Not just “trees” but all woody plants
- Not sites but entire landscapes containing mosaics

Principles:
- Stakeholder engagement & negotiation
- Tailor to local contexts
- Restore functionality, not original vegetation
- Multiple benefits through mix of ecosystem goods and services
- Avoid further reduction of natural forest cover
- Leverage diverse restoration strategies
Not just planting trees (A/R) ....

- Agroforestry to enhance soils, meet energy needs and improve food security, as in Rwanda, Ethiopia and China.
- Regeneration of native woodlands by pastoralist communities for increased dry season livestock fodder in Northern Tanzania.
- Directing oil palm development to improved productivity of degraded lands as an alternative to further land clearance in Indonesia.
- Managing natural regeneration to secure urban water supply, as in the watersheds of Beijing and Rio de Janeiro.
- Nationwide reforestation of highly degraded landscapes, as in Korea.
- Regeneration and planting to aid recovery from catastrophic wildfire in the South Platte watershed in the US.
- Ecological restoration for improved connectivity and restoration of grasslands using woody plants in Brazil.
- Active restoration of coastal mangroves to improve livelihoods from fisheries and ecotourism, as in Costa Rica or Vietnam.
A restored forest landscape incorporates many diverse land uses based on the context of the land and the needs of the communities.
Partnerships and Initiatives that are driving change
Global Partnership on Forest Landscape Restoration

A worldwide network of more than 30 partners from governments (including US, Germany, Netherlands, Norway, China, etc.) and international organizations (including WRI, FAO, World Bank, Tropenbos, IUFRO, UNFF, etc.) that works to:

• Build support for forest landscape restoration with key decision makers, at the local and international level; and

• Provide information and tools to strengthen restoration efforts around the world.
From Bonn Challenge to New York Declaration on Forests

• Restore 150 million hectares of deforested and degraded lands by 2020

• Restore at least an additional 200 million hectares by 2030
<table>
<thead>
<tr>
<th>Country/Region</th>
<th>Area (hectares)</th>
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<tr>
<td>Atlantic Forest Restoration Pact</td>
<td>1 million</td>
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<tr>
<td>Chile</td>
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<tr>
<td>Colombia</td>
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<td>Peru</td>
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<tr>
<td>Uganda</td>
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<tr>
<td>United States FS</td>
<td>15 million</td>
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</tbody>
</table>
What do we count toward the target?

- Governments, private enterprises, communities, NGOs or others who own, control or have rights to manage land
  - New forest landscape restoration initiatives over specified number of hectares
  - Existing national or sub-national initiatives (from January 1, 2011) covering specified numbers of hectares if these are aligned with the forest landscape restoration principles
  - Contributions from other initiatives, e.g. 20x20, where aligned
Implementation vehicle for existing global commitments and national priorities
Social and Economic Benefits of Forest Landscape Restoration
Economic Benefits

Estimated benefits of achieving the 150 million hectare Bonn Challenge 2020 target include:

- More than US 85 billion per year to local and national economies
- USD 6 billion in additional crop yields
- (IUCN, 2012)
Estimated benefits of achieving the 350 million hectares by 2030 extended Bonn Challenge target include:

– US$170 billion/year in net benefits from watershed protection, improved crop yields, and forest products

– Plus, restoring just 12% of degraded agricultural land could boost smallholders’ incomes by US$35–40 billion per year, feed 200 million people annually within 15 years

– (New Climate Economy Report, 2014)
And global mitigation benefits

Achieving the 350 mil ha 2030 Bonn Challenge target would:

• Sequester **0.6 – 1.7 Gt CO2** per year
• Reaching 1.6 – 3.4 Gt per year in 2030
• Totalling 11.8 – 33.5 Gt over the period 2011-2030
• Reducing the “emissions reduction gap” by 11-17%

• Low end 0.6 GtCO₂e was until this year approx equal to annual global increase in emissions from all fossil fuel combustion
• Upper end 1.7 GtCO₂e is equivalent to the total of Russia’s annual greenhouse gas emissions
Republic of Korea

1953-2010: Economy grew by 300%, population doubled
forest stock increased 20 fold

Benefits
- Public benefits: 70.0 bil
- Reduced medical costs: 2.4 bil
- Forest products: 4.7 bil
- Landscaping & carbon: NA
Total: 77.1 bil

Investment (in 2011 equiv)
- KFS: USD 1.4 bil
- Local govt’s: USD 0.6 bil
Total: USD 2.0 bil
• USD $40 million/year Collaborative Forest Landscape Restoration Program (CFLRP) formed in 2009

• Results:
  – 8,000 jobs generating $290 million in labor income
  – Created and maintained an estimated 3,375 part and full-time jobs during 2011 and 4,574 part and full-time jobs during FY 2012
  – Habitat improvement, water resource security, reduced risk of wildfire, etc.
Kelka Forest, Mali

- Introduction of agro-forestry and reforestation with native species on degraded lands in Mali = significant increases in farmer incomes at local level
- Net present value of benefits to smallholder farmers in the form of improved agricultural yields and fuelwood production:
  - More than USD 65 million over 25 years
- Net of costs, the annual benefit accruing directly to farmers who adopted agro-forestry practices:
  - USD 1,168 per hectare
  - Value estimated based on increased revenue from fuelwood and agricultural productivity (in terms of soil moisture retention, water infiltration and nitrogen fixation)
1. Spatial analysis / mapping

2. Rapid enabling conditions diagnostic

3. Costs and benefits appraisal

4. Carbon abatement cost curve (Carbon ACCRUAL)

5. Identification of restoration and investment options
Issues and Challenges

- Governance issues including tenure recognized as an important factor for forest landscape restoration
- Clarity on land tenure is essential for many reasons – including because otherwise there is no incentive for restoring
- Also needed to unlock finance

- Some opportunities:
  - Greater documentation of evidence of the role of tenure and governance models in FLR context
  - Integration into ROAM
  - Landscape level analysis of benefits of restoration for indigenous peoples and local communities
Thank you!

www.iucn.org
www.bonnchallenge.org
www.forestlandscaperestoration.org

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