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
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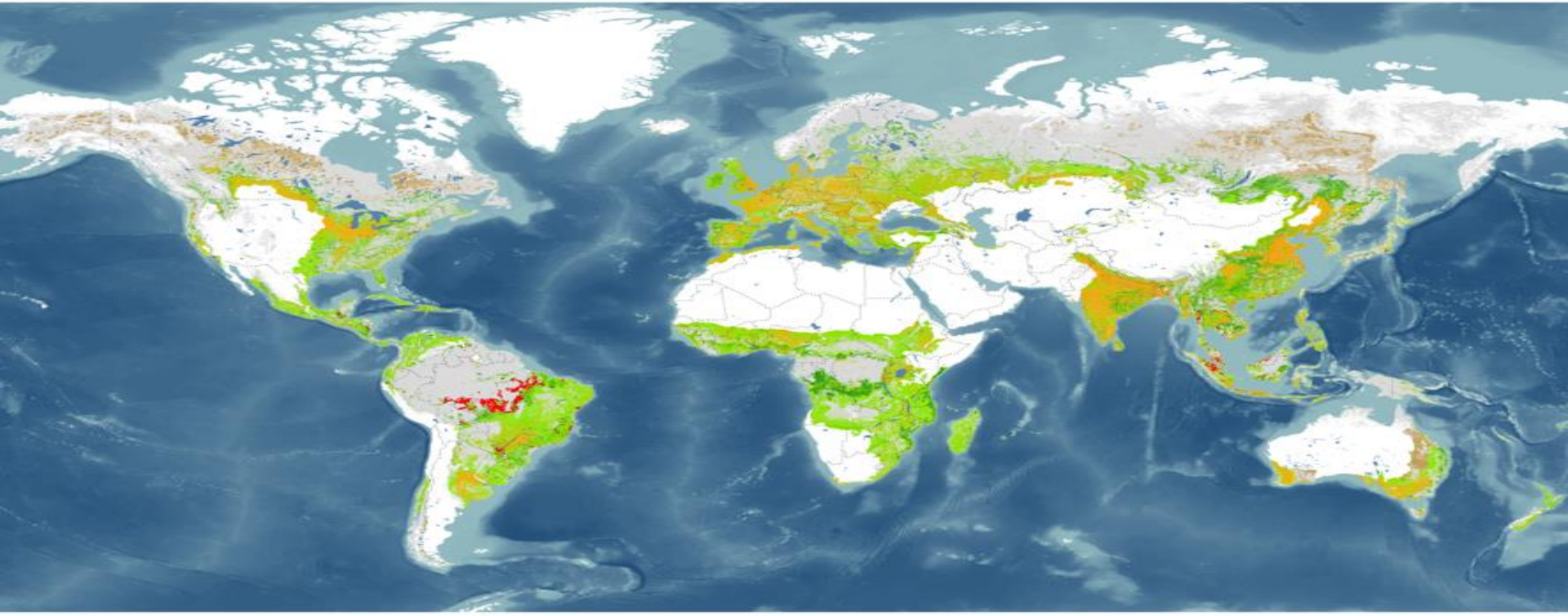
Global Restoration Opportunity

BONN CHALLENGE
on forests, climate change and biodiversity 2011

A World of Opportunity
for Forest and Landscape Restoration



FOREST AND LANDSCAPE RESTORATION OPPORTUNITIES
- Wide-scale restoration
- Mosaic restoration
- Remote restoration

OTHER AREAS
- Agricultural lands
- Recent tropical deforestation
- Urban areas
- Forest without restoration needs

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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

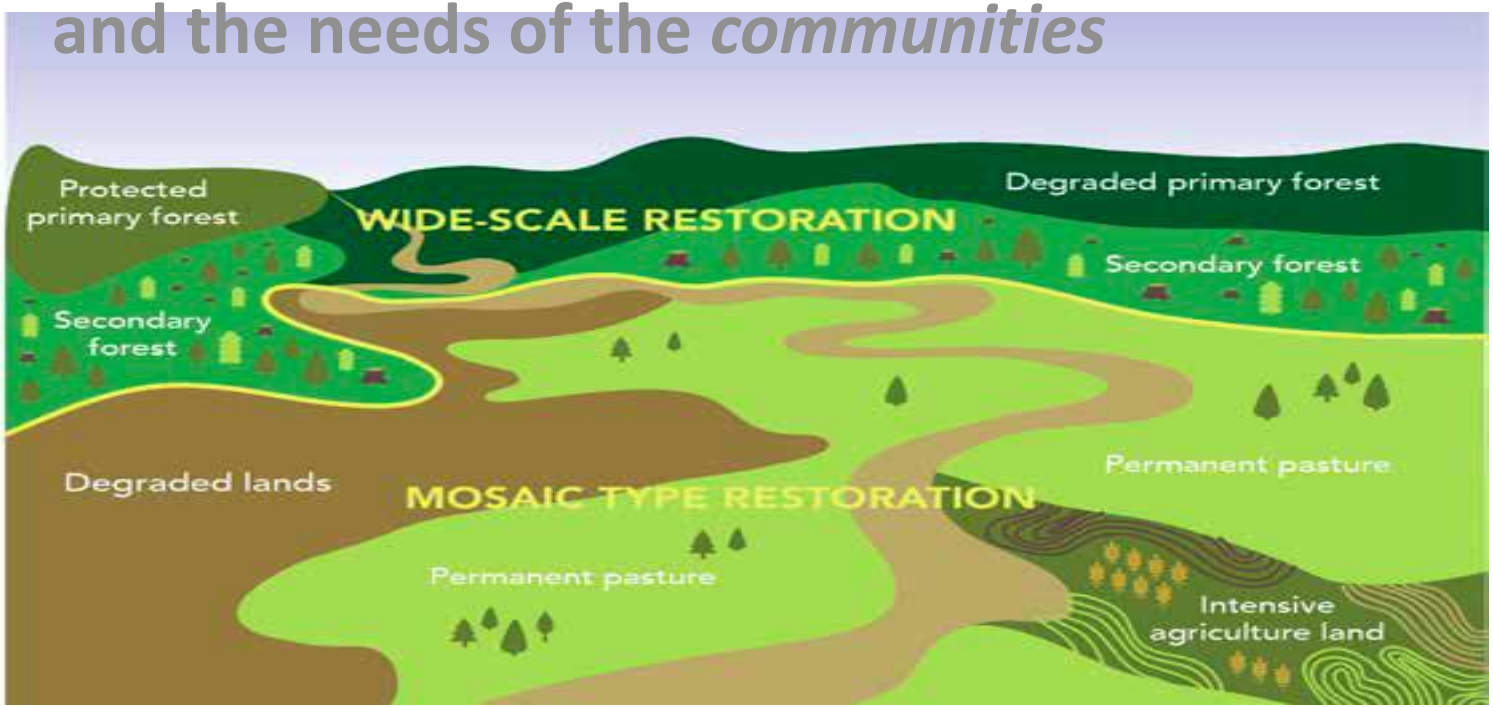
Principles:

- 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

Atlantic Forest Restoration Pact	1 million hectares
Chile	0.5 million hectares
Colombia	1 million hectares
Costa Rica	1 million hectares
Democratic Republic of Congo	8 million hectares
Ecuador	0.5 million hectares
El Salvador	1 million hectares
Ethiopia	15 million hectares
Guatemala	1.2 million hectares
Mexico	7.5 million hectares
Khyber Pakhtunkhwa, Pakistan	0.38 million hectares
Peru	3 million hectares
Rwanda	2 million hectares
Uganda	2.5 million hectares
United States FS	15 million hectares

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

United Nations
Framework Convention on Climate Change

UNCCD
United Nations Convention to Combat Desertification

WE CAN END POVERTY 2015 MILLENNIUM DEVELOPMENT GOALS

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)

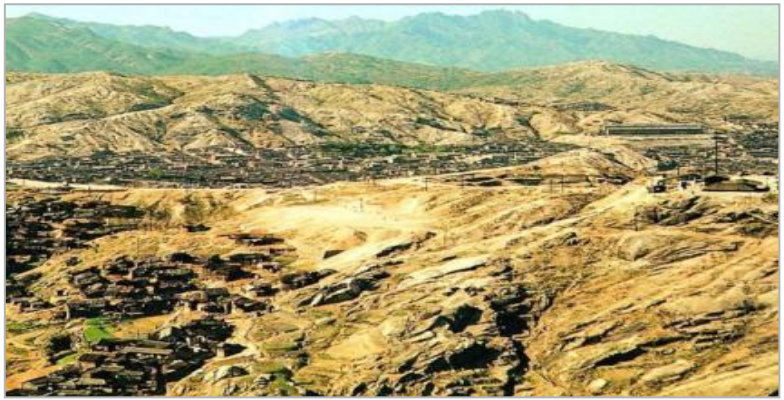
And global mitigation benefits

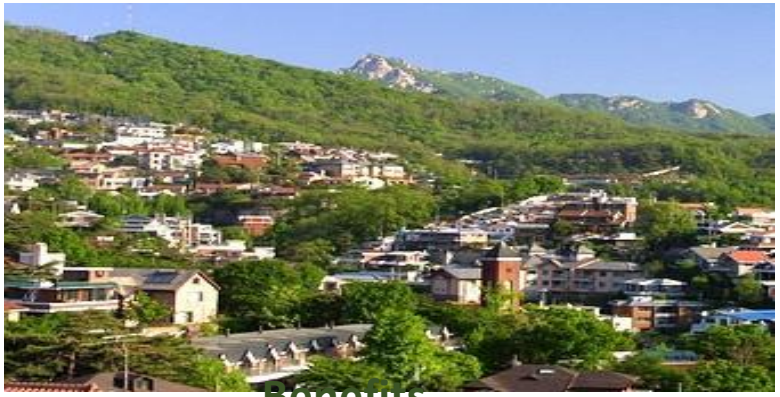
Achieving the 350 mil ha 2030 Bonn Challenge target would:

- 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 $GtCO_2e$ was until this year approx equal to annual global increase in emissions from all fossil fuel combustion
- Upper end 1.7 $GtCO_2e$ is equivalent to the total of Russia’s annual greenhouse gas emissions

Republic of Korea





Investment (in 2011 equiv)

KFS	USD 1.4 bil
Local govt's	USD 0.6 bil
Total	USD 2.0 bil

Benefits

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

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

United States

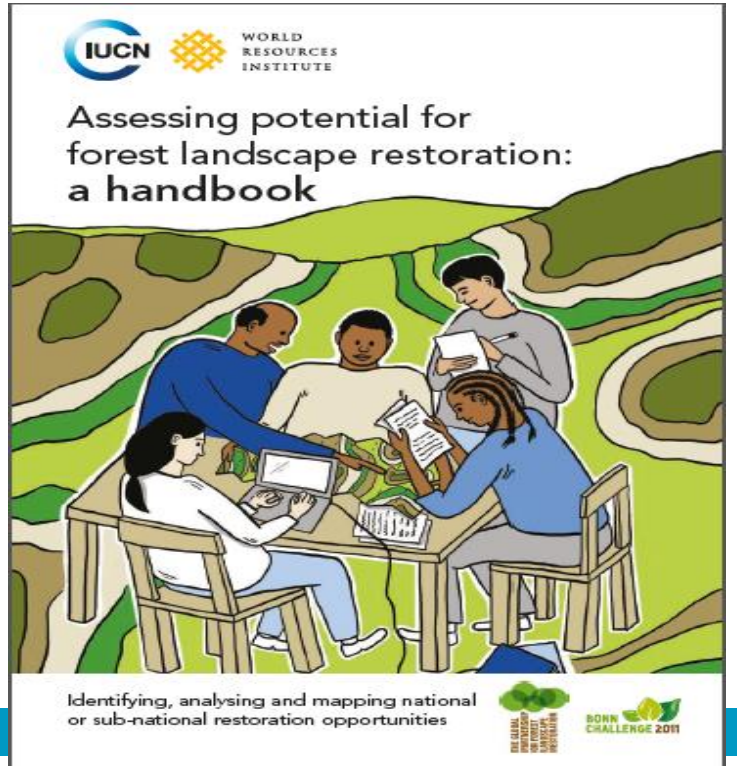
- USD $40 million/year Collaborative Forest Landscape Restoration Program (CFLRP) formed in 2009
- Results:
  - 8,000 jobs generating $290 million in labor incon
  - Created and maintained an estimated 3,375 part and full-time jobs during 2011 and 4,574 part and full-time jobs during FY 2012
  - Habitat 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)

Restoration Opportunities Assessment Methodology (ROAM)

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