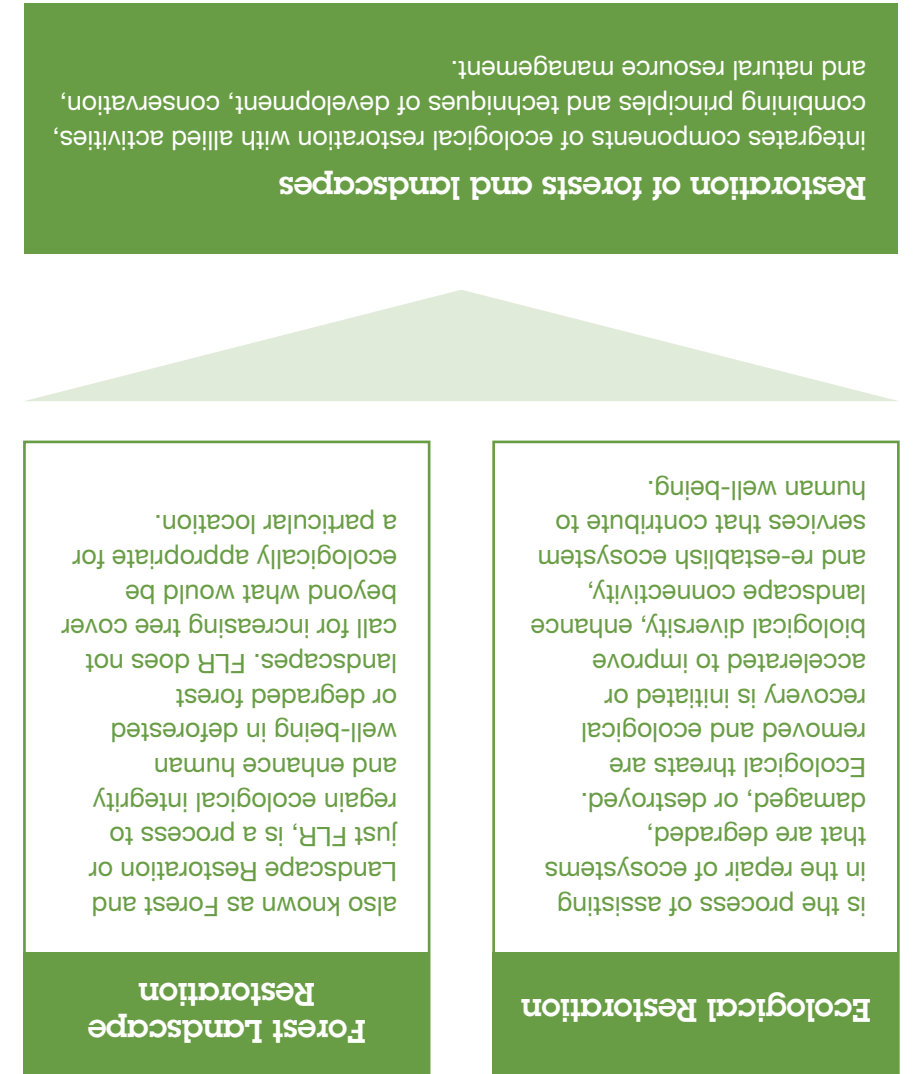




One Strategy with Multiple Benefits



Approaches to Successful Restoration

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Smallholders have restored more than five million hectares of semi-desert into productive agroforestry landscapes by protecting and managing naturally occurring regrowth, a method known as farmer-managed natural regeneration. Crop yields have increased enough to feed an additional 2.5 million people. With 600-700 mm rainfall, this region was originally a transition area between steppe and savanna but had become a semi-desert in the 1970s due to drought and environmental degradation.

The forest area has nearly doubled in the 50 years since the Korean War (to 55 percent in 2007) while the growing stock has increased more than ten-fold (to 126 m³/ha in 2010). Landslides and floods have become less frequent; the production of timber, fuelwood, and clean water has increased. The benefits have been estimated at US\$22.7 billion in water storage enhancement, \$12.2 billion in erosion control, \$12.4 billion for recreation, and \$5.6 billion in landslide prevention.

Major water shortages in Rio de Janeiro due to deforestation made Brazil establish the Tijuca Forest as the country's first conservation area in 1861. Trees were planted and native animals reintroduced. Now one of the world's largest urban parks, the restored Tijuca National Park safeguards the water supply of one of Brazil's largest cities and offers recreational facilities for its booming population of nearly six million people.



One Call to Action for Multiple Commitments

The Bonn Challenge

The Bonn Challenge is a global call launched in 2011 to bring 150 million hectares of the world's deforested and degraded lands into restoration by 2020.

The New York Declaration on Forests builds on the Bonn Challenge and is a call launched in 2014 to bring at least an additional 200 million hectares into restoration by 2030.

Restoration helps countries realize commitments already made, such as the Aichi Biodiversity Targets of the Convention on Biological Diversity, the REDD+ goal of the United Nations Framework Convention on Climate Change, and the Land Degradation Neutrality objective of the United Nations Convention to Combat Desertification. Restoration will also contribute to the United Nations Sustainable Development Goals.

More than 60 million hectares have already been committed (as of July 2015) by Chile, Colombia, Costa Rica, Democratic Republic of Congo, Ecuador, El Salvador, Ethiopia, Guatemala, Mexico, Nicaragua, Peru, Rwanda, Uganda, the United States of America, the American Bird Conservancy, the Argentinian Regional Program of Conservación Patagónica, Bosques Modelo and the Brazilian Mata Atlántica Restoration Pact.

The Global Partnership on Forest Landscape Restoration (GPFLR) is a proactive worldwide network that unites governments, organizations including businesses, communities and individuals. With the International Union for the Conservation of Nature as its Secretariat, the Partnership seeks to increase awareness of the many benefits of restoration, build support among decisionmakers, mobilize expert support, increase capacity, and share knowledge on best practices for restoration success.

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The World Resources Institute (WRI) is a global research organization that spans more than 50 countries, with offices in Brazil, China, Europe, India, Indonesia, and the United States. Our experts and staff work closely with leaders to turn big ideas into action to sustain our natural resources.

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The Society for Ecological Restoration (SER) is an international nongovernmental organization dedicated to promoting ecological restoration as a means of sustaining the diversity of life on Earth and re-establishing an ecologically healthy relationship between nature and culture. With members in more than 70 countries, SER advances the science, policy, and practice of ecological restoration, by publishing journals, books, and best practice guidelines and by creating forums for knowledge sharing including a biennial World Conference.

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The International Union for Conservation of Nature (IUCN) works with governments, NGOs, the UN and companies to develop policy and laws that value and conserve nature, and to ensure effective and equitable governance of their use by deploying nature-based solutions to global challenges in climate, food and development. IUCN is the world's oldest and largest global environmental organisation, comprised of members and staff in some 160 countries.

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For more information, please visit:
forestlandscaperestoration.org
bonnchallenge.org
iucn.org
ser.org
wri.org/restoration

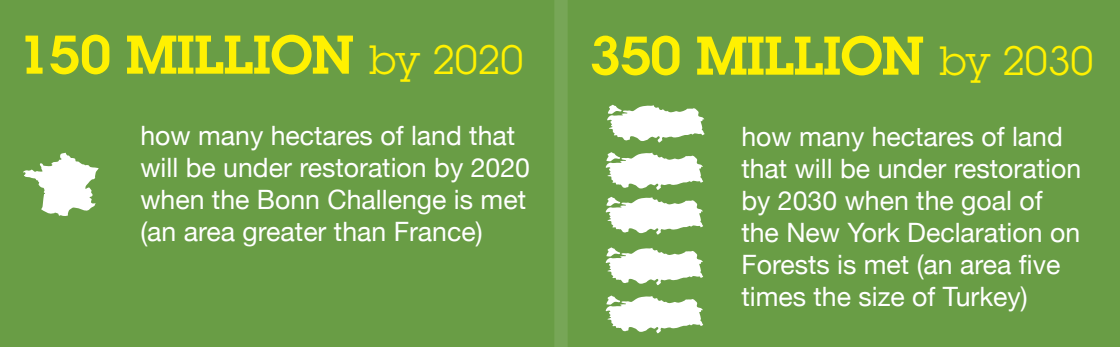
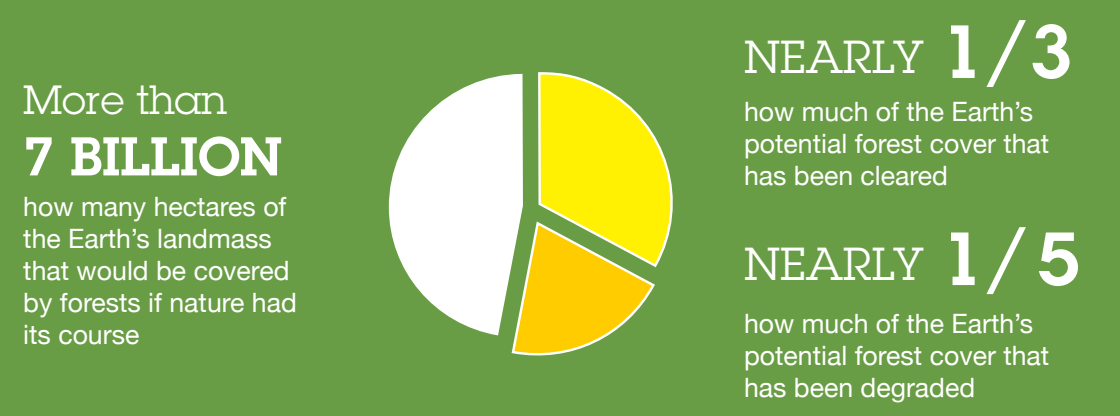
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One Strategy with Multiple Benefits

Forest Landscape Restoration



Countries are invited to register their restoration commitments as contributions to the Bonn Challenge. For an overview of current commitments, please visit: www.bonnchallenge.org

A World of Opportunity

Restoration leaves the landscape in better shape than it was found—one generation's gift to the next.

Forest Landscape Restoration Opportunities

- WIDE-SCALE RESTORATION**
Most likely to be feasible in sparsely populated areas and lands where forest is, or is expected to become, dominant, perhaps as a result of abandonment. 0.5 billion hectares offer opportunities for wide-scale restoration.
- MOSAIC RESTORATION**
Most likely to be feasible where forests and trees must co-exist with and support other land uses, such as small-holder agriculture and animal husbandry. Also in savanna type lands and many of the world's drylands. 1.5 billion hectares offer opportunities for mosaic-type restoration.
- REMOTE RESTORATION**
Restoration of remote, unpopulated areas may not be feasible, even if otherwise suited for wide-scale restoration.
- FOREST WITHOUT RESTORATION NEEDS**
Landscapes where the forest density is not significantly below its natural potential.

The map is intended to inform policy-making at the global level. It does not show individual restoration sites nor prescribe any particular type of restoration intervention. Moreover, it is not suitable for use at national and finer scales without additional investigation.

The map shows areas where restoration opportunities are most likely to be found. These are areas where forests or woodlands can grow naturally but are diminished by human impact, so that the forest is either missing or its density is significantly reduced. The type of restoration opportunity depends on the characteristics of the landscape. **Wide-scale restoration opportunity** occurs where population density is lower than 10 people per km² and there is potential to support closed forest. **Mosaic restoration opportunity** occurs where there is moderate human pressure (between 10 and 100 people per km²) and potential to support open forest or woodland. It involves restoring trees to mixed land uses that may include settlements and crops (e.g. agroforestry, hedgerows, contour planting, and buffers along water courses). **Remote restoration opportunity** is similar to wide-scale restoration opportunity but occurs where the human pressure is very low (i.e., population density of less than 1 person per km² within a 500-km radius).

Some landscapes with diminished forests or woodlands were not considered as having restoration opportunities. These landscapes include areas with open croplands and areas with more than 100 people per km². The spatial resolution of the analysis is 1 km x 1 km. Only pre-existing, globally consistent information was used. No field validation was conducted.

For more information on how this map was created please see
L. Laestadius, et al. 2011. Mapping opportunities for forest landscape restoration. *Unasylva* 238, Vol. 62, 2011/2, p. 47-48.



For more information please visit:
www.forestlandscape restoration.org
www.wri.org/forest- restoration-atlas

