



Asia



## The Bonn Challenge in Asia: Driving leadership on forest landscape restoration

Asia is home to more than half of the world's population, and the pressure is on forests to provide incomes, food and water, as well as deliver solutions to climate risks and land-use needs. Countries in Asia are looking to the restoration of their degraded and deforested lands to generate these important benefits, with a focus on poverty alleviation, climate-smart agriculture and reversing deforestation.

The tremendous potential of forest landscape restoration (FLR) has already led 40 governments, companies and private associations – including three jurisdictions from Asia – to commit to the Bonn Challenge, a global effort to bring 150 million hectares of deforested and degraded land into restoration by 2020 and 350 million hectares by 2030.



To date, total commitments to the Bonn Challenge exceed **148 million hectares**. Three pledges from Asia total **22.384 million hectares** and include the first private sector pledge and the first sub-national pledge, as well as the largest to date.

## Asia commitments to the Bonn Challenge

(as of April 2017, in hectares)

Asia Pulp & Paper (Indonesia)	1 million
India	21 million
Pakistan, Khyber Pakhtunkhwa Province	0.384 million

## One approach, multiple benefits

The Bonn Challenge is underpinned by the FLR approach, which focuses on regaining ecological functionality and enhancing human well-being across deforested or degraded lands. FLR is more than just planting trees – it is restoring a whole landscape “forward” to meet present and future needs and to offer multiple benefits and land uses over time.

FLR initiatives involve different activities, such as: new tree plantings, assisted natural regeneration, agroforestry, or improved land management to accommodate a mosaic of land uses, including agriculture, protected wildlife reserves, managed plantations, riverside plantings and more.

The restoration of 150 million hectares of degraded and deforested lands in biomes around the world will create approximately US\$ 84 billion per year in net benefits that could bring direct additional income opportunities for rural communities. Achieving the 350 million hectare goal will generate about US\$ 170 billion per year in net benefits from watershed protection, improved crop yields and forest products, and could sequester up to 1.7 gigatonnes of carbon dioxide equivalent annually.

The Bonn Challenge is an implementation vehicle for domestic priorities such as water and food security and rural development, while simultaneously helping jurisdictions contribute to the achievement of international climate change, biodiversity and land degradation neutrality





commitments as well as the Sustainable Development Goals. For example, action on FLR is reflected in over 100 Nationally Determined Contributions (NDCs) submitted to the UNFCCC with cumulative restoration, reforestation, and afforestation pledges of 161.6 million hectares (as of November 2016).

## Regional drive for restoration

A growing suite of “home grown” high-level processes is emerging in support of the Bonn Challenge, driven by the political will of countries and regional institutions.

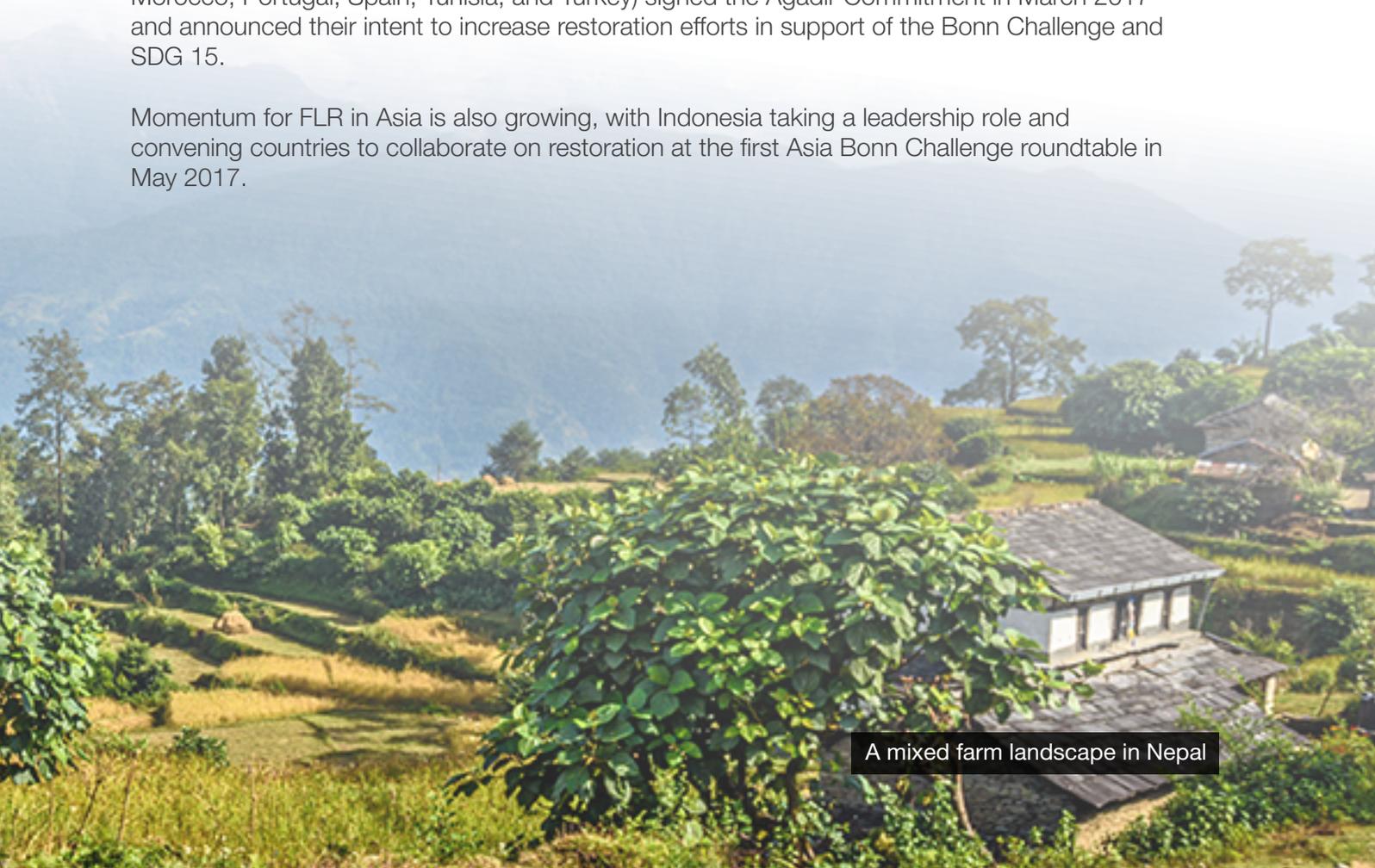
In Latin America, this started with a regional Bonn Challenge ministerial meeting in El Salvador in August 2015, and continued in Panama in August 2016. Honduras will be the host for the 2017 ministerial meeting, Guatemala in 2018, and Cuba in 2019. This strong evidence of regional support for the restoration movement is mirrored by similar processes in Africa and the Mediterranean.

In July 2016, a high-level Bonn Challenge roundtable was convened by the Government of Rwanda, the East African Community and IUCN. A key outcome of the meeting was the *Kigali Declaration on Forest Landscape Restoration in Africa* signed by 13 countries and later endorsed by the Central African Forests Commission (COMIFAC). The Kigali Declaration is a reflection of and catalyst for pan-African leadership on restoration action.

Regional collaboration platforms such as AFR100 in Africa, Initiative 20x20 in Latin America, and international initiatives such as the Food and Agriculture Organization of the United Nations (FAO) FLR Mechanism and Convention on Biological Diversity Forest Ecosystem Restoration Initiative also contribute to and support the Bonn Challenge.

Under the umbrella of *Silva Mediterranea*, nine countries (Algeria, France, Iran, Lebanon, Morocco, Portugal, Spain, Tunisia, and Turkey) signed the Agadir Commitment in March 2017 and announced their intent to increase restoration efforts in support of the Bonn Challenge and SDG 15.

Momentum for FLR in Asia is also growing, with Indonesia taking a leadership role and convening countries to collaborate on restoration at the first Asia Bonn Challenge roundtable in May 2017.



A mixed farm landscape in Nepal

## How can countries identify restoration potential?

The Restoration Opportunities Assessment Methodology (ROAM), developed by IUCN and the World Resources Institute (WRI), provides a flexible and affordable framework for countries to pinpoint areas that are primed for FLR and to determine which should be prioritised at the national or sub-national level – with the close involvement of relevant stakeholders including indigenous people and local communities. It also helps identify a suite of restoration interventions tailored to a country's unique socio-economic conditions and FLR objectives.

IUCN is facilitating ROAM assessments in 26 countries. In Malawi, for example, ROAM is helping the government operationalise its 4.5 million hectare Bonn Challenge pledge with an emphasis on enhancing food security, addressing gender inequality and conserving biodiversity. Eighty percent of Malawi's population is smallholder farmers living in extreme poverty. The situation has been exacerbated by a prolonged *El Nino* drought, and women have been disproportionately impacted. Currently, Malawi ranks 173 out of 188 on the UN's Gender Inequality Index (GII).

To address these pressing issues, Malawi's ROAM assessment included a biophysical and socio-economic spatial analysis to understand where, why and what proportion of the population was food insecure, and to determine how FLR interventions could help mitigate this. Estimates of the benefits of FLR on food security were provided so decision-makers could prioritise these landscapes. The assessment also resulted in a Gender Action Plan for gender-responsive FLR interventions, factoring in the unique needs of women and girls to ensure that they benefit equitably from interventions. Additionally, the assessment yielded valuable data on how Malawi's Bonn Challenge commitment could facilitate the achievement of its Aichi Targets, with projections showing that Malawi could meet its biodiversity targets if it fulfilled 10% of its restoration commitment.



Indonesia - A restoration opportunity to reintroduce mangroves to a degraded aquaculture system

Photo: Li Jia / IUCN



## FLR in Asia – enhancing water security and increasing livelihoods

In **China**, the Miyun Watershed Forest Landscape Restoration project led by IUCN and the Beijing Forestry Society, with the support of the State Forestry Administration of China (SFA), is improving the quality and availability of water in Beijing and developing payment for ecosystem services (PES) mechanisms through multi-stakeholder dialogues. FLR is also being used as the main approach in a new Global Environment Facility (GEF) China project piloted in the Miyun watershed that is aimed at building climate-resilient green infrastructure, improving forest quality and restoring ecosystem functions at the landscape level.

In **Viet Nam and Thailand**, where mangroves are routinely cleared for shrimp ponds, IUCN and the Netherlands Development Organisation (SNV) are working to restore these degraded areas while simultaneously helping farmers transition to organic shrimp farming practices.

In **Viet Nam**, the project was piloted in the 12,000-hectare Nhung Mien Forest Management Unit in Ca Mau Province, and resulted in 4,103 shrimp farmers being trained in organic shrimp production. Of these, 1,150 farmers, covering 6,972 hectares, signed contracts to maintain 50% mangrove cover in their farms and 553 farmers were certified in using the Naturland Standards that are globally accepted for shrimp production. The project enabled 402 farmers to replant 80 hectares of mangroves in their shrimp ponds to bring them up to the 40% threshold that allowed them to join the certification programme.

In exchange for meeting 50% mangrove cover, Minh Phu, Viet Nam's largest shrimp exporter, pays farmers VND 500,000 per hectare of mangroves in their farm plus VND 3,000 per kilogram of certified organic shrimp sold – equivalent to an income increase of about 7%. More importantly, the rights and responsibilities for processors and farmers were defined in a provincial decision issued in January 2016, which recognises organic shrimp farmers as sellers of environmental goods and services as part of a global PES system linking farmers and global consumers. Satellite analysis shows that mangrove cover increased from 39% to 44% between 2013 and 2015. The project results and lessons learned were integrated into a US\$ 310 million World Bank loan that was approved in June 2016 and will support the replication of organic shrimp farming in Ca Mau, Ben Tre, and Tra Vin, three provinces that are home to 70% of Viet Nam's mangroves.

In **Thailand**, the project focussed on improving pond management and the passage of the Marine and Coastal Resources Management Act in January 2016, which allows for joint community–government efforts for the conservation and sustainable management of marine and coastal resources, including mangrove forests. This approach is being piloted in the western Gulf of Thailand where the government is supporting organic shrimp production in a legally protected mangrove forest.

In **Indonesia**, the Blue Forests Foundation (Yayasan Hutan Biru, formerly the Mangrove Action Project Indonesia) and the Kelola Foundation (Yayasan Kelola) have been supporting communities through the restoration of deserted aquaculture ponds and educating them on the nursery and carbon sequestration benefits of mangroves. This pilot project has led to the successful rehabilitation of over 2,000 hectares of mangroves in other parts of Indonesia, and serves as an example of collaboration and adaptive management that is changing the way Indonesian practitioners address mangrove restoration.

## Financing restoration

The demand for restoration is growing, matched by a marked increase in financial and technical support for the Bonn Challenge.

In 2016, IUCN, together with the United Nations Environment Programme (UNEP) and FAO, launched The Restoration Initiative (TRI), a project to support 10 countries in Asia and Africa in achieving their restoration objectives. TRI is supported by a US\$ 54 million grant from the GEF, with over US\$ 200 million in co-financing. Myanmar, Pakistan and China are part of TRI and will benefit immensely from the technical expertise it offers.

The GEF intends to continue and expand its support for restoration in the coming GEF-7 restoration cycle. A recent analysis by the GEF Secretariat found restoration and reforestation to be the most frequently occurring theme among GEF country NDCs, National Biodiversity Strategies and Action Plans (NBSAPs), and National Action Plans (NAPs) – present in 98% of GEF-eligible countries' policy frameworks.

By integrating FLR into ongoing environment and development programmes, countries can maximise the impact of their investment. This has been seen in India where the Green India Mission has leveraged US\$ 6 billion by aligning afforestation programmes with its National Agroforestry Policy, REDD+ Policy, and Joint Forest Management, and National Afforestation programmes.

## Monitoring the impact of restoration interventions

As countries act on their Bonn Challenge pledges, the mechanisms to monitor the impact of FLR interventions are being refined. With the support of the German Government, IUCN is designing the Bonn Challenge Barometer of Progress – a protocol that will profile leadership and quantifiable progress on FLR in support of the Bonn Challenge and equip pledgers and partners with information to accelerate action and address implementation bottlenecks.

IUCN's online restoration hub – [InfoFLR.org](http://InfoFLR.org) – contains valuable information and analysis on how countries can align their commitments to various international goals, for example, embedding restoration in their NDCs to the UNFCCC and pre-2020 actions, as well as in their NBSAPs.



Restoration can include forestry practices that meet the needs of local communities.

Photo: Li Jia / IUCN



Terrace farming landscape in the Philippines

## How you can make a commitment to the Bonn Challenge

Start a conversation on forest landscape restoration in Asia by reaching out to one of our focal points:

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- **Carole Saint-Laurent**, Deputy Director, IUCN Global Forest and Climate Change Programme, and Coordinator, Global Partnership on Forest Landscape Restoration:  
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### References

**Bonn Challenge:**

[bonnchallenge.org](http://bonnchallenge.org)

**InfoFLR:**

[infoflr.org](http://infoflr.org)

**IUCN FLR:**

[iucn.org/flr](http://iucn.org/flr)

**ROAM:**

[iucn.org/roam](http://iucn.org/roam)

**Kigali Declaration:**

[bit.ly/2ajsH4b](http://bit.ly/2ajsH4b)

**Agadir Commitment:**

[bit.ly/2oEhmUd](http://bit.ly/2oEhmUd)

**Bonn Challenge Barometer of Progress:**

[bit.ly/2e496tb](http://bit.ly/2e496tb)

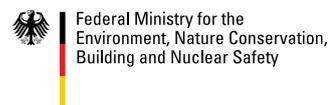
**The Restoration Initiative (TRI):**

[bit.ly/2ifPEtm](http://bit.ly/2ifPEtm)

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