



COUNTRY BRIEF: MONGOLIA

**MOVING FORWARD WITH REDD+ IN MONGOLIA:
COMBATting CLIMATE CHANGE TO ACHIEVE
SUSTAINABLE DEVELOPMENT**



Introduction to Mongolia

Mongolia is a landlocked country located in the center of the Eurasian continent. The climate is characterized by high fluctuation and extremes in temperature and precipitation. The annual mean temperature ranges from -8°C to 6°C across regions and the annual precipitation varies from 50 mm in the Gobi desert to 400mm in the northern mountainous areas. It is an immense area of 1.5 million km², largely consisting of grasslands which have supported nomadic herding lifestyles for thousands of years.

Following an economic boom in the 1990's primarily linked to the country's mineral resources, a process of urbanisation happened with 50% of the country's 3.1 million population living in urban centers, with most living in the capital city Ulaanbaatar. The forest sector accounts for only approximately 3% of the country's GDPs though this figure is related to direct income and taxation revenues alone, considering ecosystem services adds considerably to the value supporting local communities, enterprises and has been valued conservatively at over 300 million USD per year. The country has recently been hit by economic destabilisation and weakening of the currency.

The country includes two major forest biomes, boreal forests in the north accounting for 13.1 million hectares¹, dominated by pine, larch, and birch; and 3.6 million of saxaul forests¹, a dryland ecosystem in the southern arid regions. Mongolia's forests are threatened primarily by forest fire, forest pests and drought. Dense forest stands which compete for limited resources, such as water, results in weakened trees and makes them more susceptible to pests, and resulting deadwood means more fire risk. Initial assessments show that approximately 137,000 ha of forests are degraded each year². This is exacerbated by the impacts of climate change, with increased fire risk during dry periods, uncertain growth and less water. Precipitation changes and permafrost melting reduce water availability, affect pest life cycles and has little known impacts on germination, phenology and growth. Drier conditions increase the frequency of forest fire and forest insect pest outbreaks.

It is widely acknowledged that the country needs to diversify its economy. The forest sector has potential for direct and indirect contribution to supporting this diversification of the economy through support for local livelihoods and developing a modern wood processing sector.

Mongolia's large forest estate has the ecological capacity and economic potential for supporting enterprises, community groups and socio-economic development. However, climate change assessments undertaken in Mongolia in 2014³, demonstrated that its fragile ecosystems, a reliance on pastoral animal husbandry and rain-fed agriculture, and the growing urban population all combine to make Mongolia's socio-economic development threatened climate change.

1 FRDC (2016). Forests of Mongolia: Annual Update. Ministry of Environment & Tourism, Mongolia.
 2 UN-REDD (In Prep). Forest Reference Level. Ministry of Environment and Tourism, Mongolia.
 3 MARCC (2014). Climate Change Assessment. Ministry of Environment and Tourism, Mongolia.



Mongolia's Approach to Climate Change

Mongolia's Intended Nationally Determined Contribution (INDC) has its conceptual roots in the Green Development Policy of Mongolia⁴, and the Sustainable Development Vision⁵. Key indicators for measuring progress in the implementation of the Green Development Policy include, among others, efficient use of energy, GHG emissions and ecological footprint per unit of GDP. The National Action Programme on Climate Change (NAPCC) endorsed by the Parliament 2011 includes measures covering all principal sectors of the economy. These and other relevant national level policy documents served as a basis for the development of Mongolia's INDC, which was shaped and finalized through comprehensive consultation exercises with a broad range of stakeholders.

Mongolia's REDD+ strategy aims to contribute to Green Development and Sustainable Development through policies and measures aimed at both mitigation and adaptation, and building resilience for livelihoods and forests to withstand climate change.

Mitigation

The boreal forest biome is the world's largest terrestrial carbon sink, but highly threatened by climate change. Mongolia's current emissions are relatively small only being a net emission country in recent years⁶. Mongolia is a net removal country meaning that it sequesters more carbon than emissions, these removals are key to maintaining Mongolia's low carbon pathway. Reducing emissions from fire and pests through improved forest management will contribute further to increased mitigation, and provide ecosystem services and enterprise opportunities from an increased sustainable supply of timber products.

The expected mitigation impact of these policies and measures will be a 14% reduction in total national GHG emissions, a REDD+ strategy can reduce this further. This aim is contingent upon gaining access to new technologies and sources of finance through internationally agreed mechanisms and instruments under the auspices of the UNFCCC, in particular, through REDD+, private sector and climate finance.

INDC Targets:

- Increasing boreal forest area up to 9.0% by 2030 and reducing forest fire affected area by 30% would conserve ecosystems and enhance Mongolia's carbon sequestration potential.
- Improved restoration and sustainable forest management strategies will reduce forest degradation and desertification and enhance carbon stocks.

Adaptation

The melting of permafrost and glaciers, reduces available water supplies, combined with soil and pasture degradation these have been identified as particular climate change challenges faced by Mongolia. Due to its high vulnerability, adaptation measures are particularly important for Mongolia, and a distinct adaptation component is therefore included in the country's policies. The selection of priorities for the adaptation component is based on a detailed analysis of the expected impacts, potential solutions and challenges, and of synergies between adaptation and mitigation.

Adaptation and Mitigation

Carbon sequestration: through increases in forest areas:

- Expanded tree planting
- Increased tree cover in rural, cities and roads
- Enhancement through sustainable forest management

Forest Management and Conservation through reduction of deforestation and degradation:

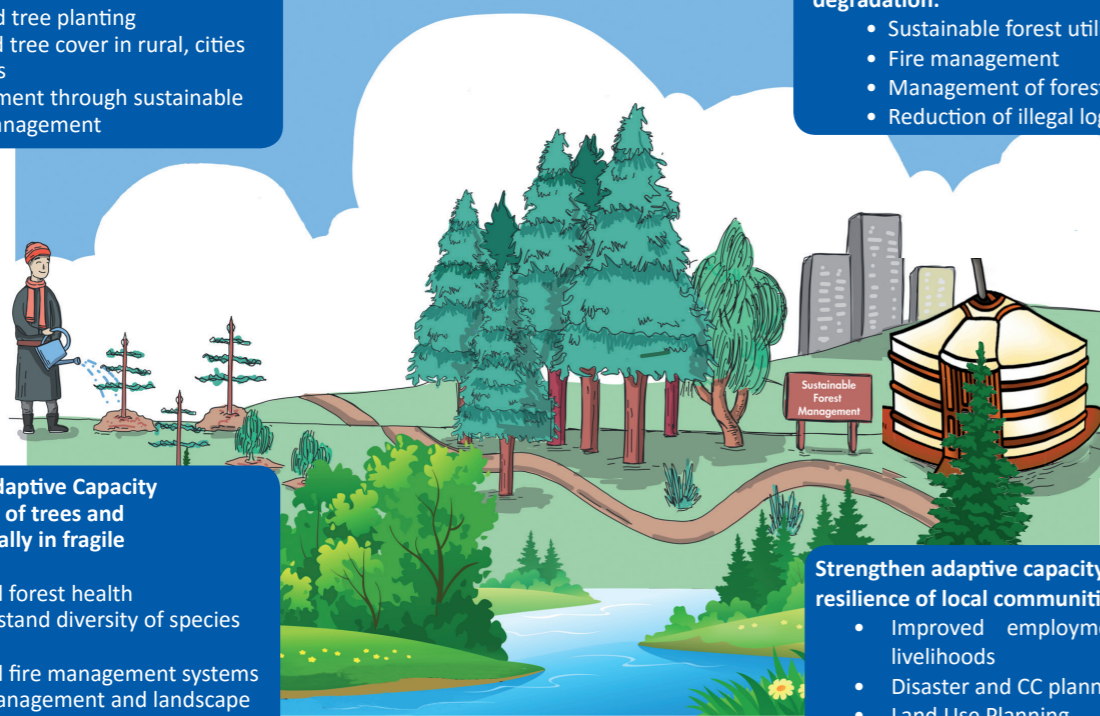
- Sustainable forest utilization
- Fire management
- Management of forest health
- Reduction of illegal logging

Strengthen Adaptive Capacity and resilience of trees and forests especially in fragile ecosystems:

- Improved forest health
- Increase stand diversity of species and ages
- Improved fire management systems
- Forest management and landscape planning

Strengthen adaptive capacity and resilience of local communities:

- Improved employment and livelihoods
- Disaster and CC planning
- Land Use Planning



4 Mongolia (2014). Green Development Policy. Mongolia.

5 Mongolia (2015). Sustainable Development Vision. Mongolia.

6 MET (2017). Mongolia's Initial Biennial Update Report. Ministry of Environment, Mongolia.

Moving Forward with REDD+ for Sustainable Development

Status of REDD+ Readiness/Implementation in Mongolia

- The REDD+ Readiness process commenced in June 2011 when Mongolia became a partner country of UN-REDD Programme, and the development and implementation of its REDD+ Readiness Roadmap.
- The National Program started in 2016 and will result in development of a REDD+ Strategy to tackle both adaptation and mitigation aspects of climate change, Safeguard Information System, National Forests Monitoring System and Forest Reference Level.
- The Forest Reference Level is being developed and will be submitted to the UNFCCC in January 2018.
- The first Biennial Update Report⁶ on Mongolia's emissions shows that forests are an enormous carbon sink with net removals which helps to offset Mongolia's increasing greenhouse gas emissions from other sectors. Initial assessments show that deforestation, resulting in permanent land use change is low in Mongolia, but with considerable degradation that may eventually lead to deforestation.
- Reducing emissions and enhancing removals are significant in Mongolia, addressing the increased threats of climate change which result in tree mortality, frequent and more severe forest fires, and increased pest infestation is extremely important.

Moving Forward with REDD+: Building Resilient Ecosystems, Livelihoods and a Sustainable Economy for a Greener Future

REDD+ has the potential to contribute towards Mongolia's sustainable development by protecting forests carbon stocks and biodiversity, helping to reverse land degradation and desertification, promoting rural livelihoods and enterprises, and increasing resilience to climate change through adaptation approaches and sustainable forest management.

Lessons Learned: How REDD+ is Contributing to INDC Goals and Progress on SDGs

- The boreal forest biome is the **world's largest terrestrial carbon sink**, a fact that is often overlooked in most international negotiations. The boreal forest biome is the world's largest terrestrial carbon sink, a fact that is often overlooked in most international negotiations. Its forests, soils and peatlands, and communities who depend on them for livelihoods, are threatened because of climate change.
- Mongolia is the **only country with significant boreal forests** that is putting efforts into developing a REDD+ program.
- Mongolia provides a unique perspective for developing a **new REDD+ paradigm** in boreal forests and protect the forests from anthropogenic climate change, of which Mongolia is only a low emission country.
- Mongolia has committed to tackling climate change and the **forest and land use sector is an important component** for successful sustainable development.
- The REDD+ strategy will aim to **build resilience through adaptation and mitigation strategies**, create livelihood opportunities and develop enterprises through promotion of responsible harvesting, all of which lead to meeting Sustainable Development Goals.
- Mongolia is committed towards developing the four elements of REDD+, and linking national reporting systems to greenhouse gas reporting and reporting progress towards own **Sustainable Development Goals**.
- Mongolia is a low emission country, **highly threatened by climate change**, and need of financial support to address impacts.
- Mongolia has potential for **further investment in the forest sector** and it is anticipated that the National REDD+ strategy will provide a framework for galvanizing financial support from international donors and private sector.



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