MINISTRY OF ENVIRONMENT AND TOURISM

REDD+ MONGOLIA

UN-REDD PROGRAMME

Using spatial analysis to explore potential for multiple benefits from REDD+ in Mongolia

REDD+ MULTIPLE BENEFITS AND RISKS

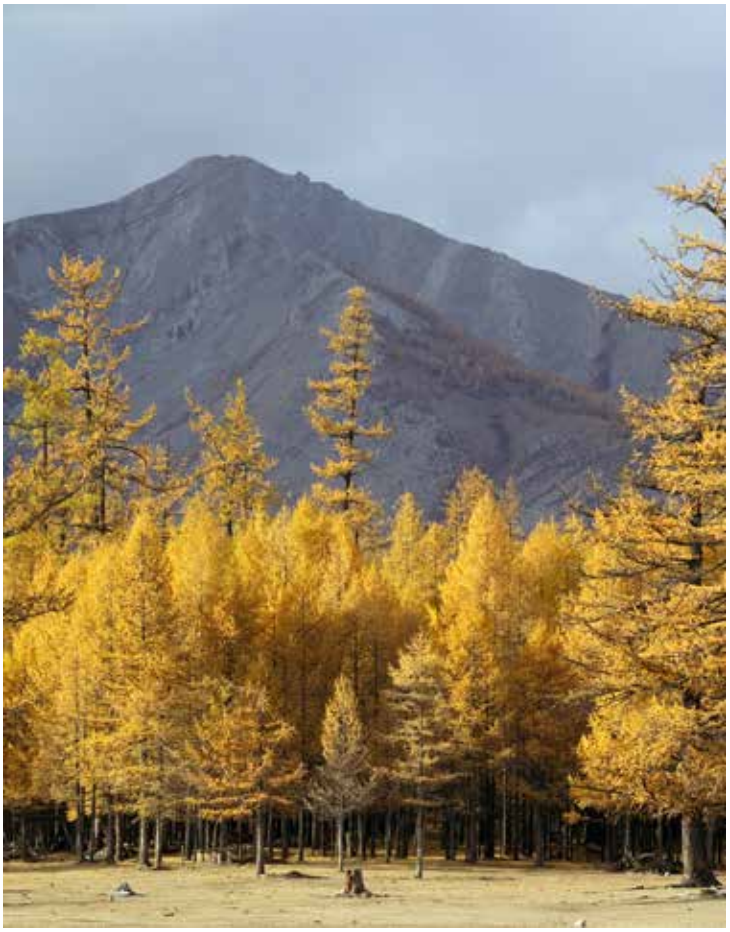
REDD+ has the potential to deliver multiple benefits, including a wide range of social and environmental goods and services in addition to climate change mitigation. Social benefits from REDD+ implementation can include enhanced forest governance and increased participation in local decision-making on land use and, in some cases, financial improvements to livelihoods. Environmental benefits from securing the many ecological functions of forests can include biodiversity conservation and the provision of ecosystem services on which people depend.

Depending on how REDD+ is implemented, it also carries potential risks, such as pressures on forests being displaced from one area to another, or local communities' access rights to forests being reduced. The Cancun safeguards were specifically developed by the UNFCCC to address such potential risks of REDD+ and encourage its benefits. A REDD+ programme that delivers multiple benefits and avoids social and environmental risks can contribute to a range of policy goals beyond climate change mitigation.

FOREST VALUES

Forests have long played an essential role in providing environmental, social and economic goods and services to people in Mongolia. These goods and services are distributed across the landscape, sometimes flowing to people living far from their nearest forest area, but still benefiting from its timber and other products, its contribution to water supplies, or its recreational and other values.

Talking to government, community and private sector representatives at workshops held in Murun (Khovsgol aimag) and Zuunmod (Tov aimag) in late 2015 highlighted a number of the forest values that people in these aimags may consider important.



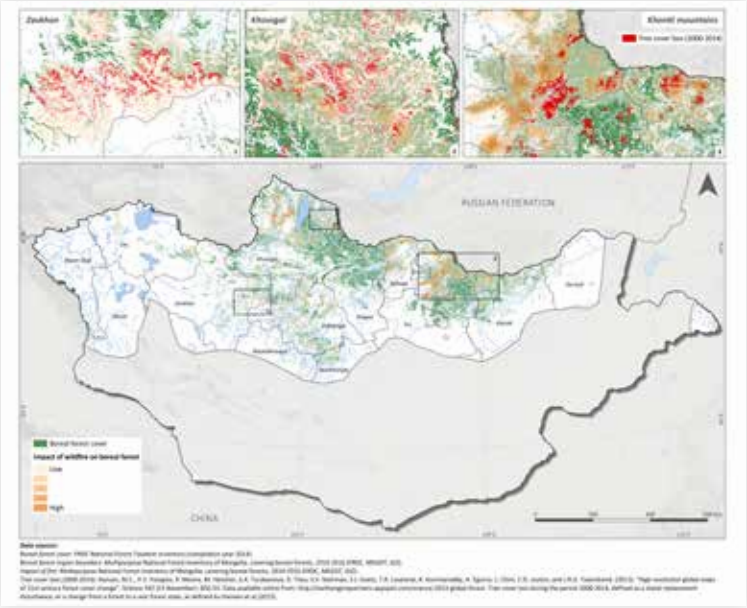
Top 5 values provided by forests for workshop participants in Khovsgol (left) and Tov (right) aimags

THREATS TO FORESTS

Mongolia's forests are a rich national resource. They range from boreal larch and pine forests of the north to the saxaul woodlands of the Gobi and desert steppe, and are estimated to cover almost 18 million hectares (FAO, 2015). Although rates of forest loss have decreased in recent years, Mongolia's forests are under pressure; according to data from the national Forest Research and Resources Development Centre, 47,000 hectares (0.43%) of closed northern boreal forest have been lost or degraded every year since 2004.

The main drivers of forest loss and degradation in Mongolia are forest fires, pests, selective logging and clear felling, and grazing (Badarch et al. 2011; Tsogtbaatar 2004). There are also concerns about climate change impacts on forests. Permafrost is important for forest vegetation and regeneration, and forests, in turn, protect permafrost. Warming temperatures, exacerbated by fire occurrence, threaten this self-regulating system, and the water provisioning services it provides to downstream communities. Observational records indicate an increase in fire activity in Mongolia in the last 50 years. This compromises the capacity of the country to meet REDD+ objectves. Knowing the location and intensity of fires is ueseful for targeting and designing REDD+ policies and measures.

Overlaying the density of National Forest Inventory plots, where clear visual evidence of recent fire damage had been recorded, with the areas affected by tree cover loss according to Hansen et al. (2013), suggests that fire is the most important driver of forest loss in the country.



This map shows the pressure on boreal forests from fires, assessed through the density of areas recently affected by fire.

HOW TO PROTECT FOREST VALUES

In the context of a changing climate, Mongolians are beginning to attribute an even greater role to its forests in the future: that of reducing GHG emissions and thus mitigating global climate change, and in helping Mongolia people adapt to the impacts of climate change.

Mongolia's forests are under pressure – from fires, logging, a changing climate and other factors – and their area and quality have declined in recent decades. The continued provision of essential goods and services will depend on the recognition of forest values in policy and effective action to conserve and enhance Mongolia's forests in the future.

References:
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Tsogtbaatar, J. (2004) Deforestation and reforestation needs in Mongolia. Forest Ecology and Management 201: 57-63.

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