

Mongolia's unique landscapes support rich natural resources and rural livelihoods. However, economic growth and a growing population, combined with impacts from climate change, are contributing to the decline of its natural resources, including forest and water; and causing air, soil, and water pollution. The Asian Development Bank (ADB), Mongolia's lead international development partner, has been supporting the government, civil society, and communities to address these issues since 1991, when Mongolia became a member. ADB's environment

portfolio in Mongolia is guided by a country partnership strategy (CPS),¹ which is updated and agreed upon between the Government of Mongolia and ADB every 4–5 years. The CPS gives flexibility to the portfolio and enables ADB to respond to new and emerging issues, and to continue supporting existing projects. The current CPS (2017–2020) includes priority areas such as environmental policy reform, natural resource management, pollution reduction, disaster risk management, and adaptation and mitigation to climate change impacts.

ADB's environment portfolio in Mongolia is growing rapidly. Between 2008 and 2016, ADB provided \$26.5 million in grants and technical assistance for the environment sector. During 2017–2019, ADB aims to significantly increase its support for the environment sector through loans, grants, and technical assistance projects, which clearly reflect the government's increasing focus on green development and the need for the sustainable use of natural resources.

## IMPROVING NATURAL RESOURCE MANAGEMENT

The CPS highlights the strong link between poverty alleviation and environmental concerns. It also indicates opportunities for ADB to assist the government in addressing financing for environmental management at the local level, strengthening capacity for water and forest resources, and land use planning and management. An amendment to the Law on Environment Protection (2006) provides the basis for new local institutions, such as nukhurlul (users group) for community-based natural resource management. ADB supports capacity building of communitybased organizations for natural resource

management, piloting communitybased waste management and tourism approaches, and improving community livelihoods living in buffer zones of protected areas through grant projects. ADB's technical assistance projects help in the implementation of government forest policies, strengthen capacity in forest genetic resource management, and support initiatives to develop forest user group and private enterprise engagement in sustainable forest management.





ADB. 2017. Mongolia: Country Partnership Strategy (2017–2020). Manila. https://www.adb.org/documents/mongolia-country-partnership-strategy-2017-2020.



Mongolia is vulnerable to climate change due to its fragile ecosystems and geographic location.2 Climate change impacts are characterized by increased desertification, more frequent droughts and dzuds (harsh winters), water resource scarcity, and biodiversity loss. The frequency of extreme weather events has doubled in the last 2 decades and occurrence is expected to increase by 23%-60% by the middle of the 21st century. The frequency and spatial extent of forest and steppe fires have increased since the 1950s.3 Although the future under changing climate conditions is uncertain, climate models predict a decrease in river water levels, higher

seasonal variations, and a decrease in groundwater levels due to reduced recharge. For example, animal husbandry and the consequent overgrazing since the late 1990s are threatening peatlands in Mongolia.<sup>4</sup> As peatlands maintain wet habitats and pastures, feed rivers, prevent soil erosion, and maintain levels of groundwater, their degradation leads to loss of biodiversity, carbon stores, and water source in the middle-range mountains.

ADB recognizes the urgent need to address these risks, and is working with the government to build capacity in peatland management to improve national water security and address water scarcity. Also, ADB is supporting the government to improve Mongolia's water security in five dimensions: household, economic, urban, environmental, and resilience to water-related disasters. This includes the development of an investment program to improve water security. As extreme weather events potentially result in more loss of lives and assets in Mongolia, ADB finances projects through grants (including emergency grants) to strengthen the capacity of rural residents and national and local institutions to manage risks from dzud as well as forest and steppe fires; and extends support to recover from these disasters.

<sup>&</sup>lt;sup>4</sup> Preliminary research findings indicate that almost 27,000 square kilometers (or almost 2% of Mongolia) are covered by peat.



<sup>&</sup>lt;sup>2</sup> The annual mean air temperature in Mongolia has increased by 2.14°C between 1940 and 2008. D. Dagvadorj, ed. 2010. *Mongolia Second National Communication under the UNFCCC*. Ulaanbaatar.

<sup>&</sup>lt;sup>3</sup> A. Hessl et al. 2012. Reconstructing Fire History in Central Mongolia from Tree-Rings. International Journal of Wildland Fire. 21. pp. 86–92.

## EMERGING THREATS AND NEW PRIORITIES

In 2014, through its Green Development Policy, the government formally adopted a green economy concept as a vehicle to attain sustainable development and reduce poverty. Specific environmental economic challenges for Mongolia include poverty, unequal income distribution, natural resource-based economic structure, inefficient use of energy and resources, wasteful consumption, technical and technological obsolescence, and vulnerability to climate change. ADB is working with authorities to strengthen capacity in monitoring the implementation of the green growth policy to establish selected key indicators related to material flow,5 energy, and environmental tax accounts under the country's System of Environmental Economic Accounting.

Ulaanbaatar, Mongolia's capital, suffers from an acute air pollution problem, which has a detrimental health impact for the population.<sup>6</sup> The largest sources of air pollution are raw coal burning (or waste) by the poorest for heat and cooking in households and in small, heat-only boilers in ger (traditional round-shaped dwelling) areas; private vehicles; and highly polluting public transport. ADB, through grant and technical assistance, supported the development and promotion of more efficient stoves to replace heat-only boilers, piloted a mechanism for replacing ger stoves, and provided highly insulated ger blankets to poor households in Ulaanbaatar to reduce fuel consumption for heating. Currently, ADB is working with the government to develop urgent policy actions through a policy-

based loan to reduce air pollution and greenhouse gas emissions in Ulaanbaatar.

Residents living in ger areas have limited or no access to basic urban infrastructure; and are severely affected by improper disposal of human fecal waste, sanitationrelated diseases, and increasing risks of soil and water contamination. ADB pilots support to local residents through improved household sanitation and by strengthening the life cycle for on-site (decentralized) fecal waste management, including the collection, transport, and composting of waste, in collaboration with communities, the private sector, and civil society organizations. The pilots will serve as a model to scale up on-site sanitation in Mongolia and complement infrastructure development in core urban areas.

## DONOR COORDINATION AND PARTNERSHIPS



Through its interventions, ADB collaborates with a range of multilateral and bilateral donor organizations working in Mongolia, including the Government of Japan, the Japan International Cooperation Agency, United Nations agencies, World Bank, GIZ, and World Wildlife Fund, to improve environmental governance and natural resource management. The Government of Japan has provided comprehensive support to poverty alleviation and environmental management through the Japan Fund for Poverty Reduction. The Japan Fund for Poverty Reduction has been a key funding source for almost all environment-related grants and technical assistance projects implemented by ADB in the country.



<sup>&</sup>lt;sup>5</sup> Material flow accounting includes the recording of physical flows of products, air emissions, solid waste, and other residual flows. United Nations. 2012. System of Environmental-Economic Accounting. New York.

<sup>&</sup>lt;sup>6</sup> In December 2016, the monthly average concentration of PM<sub>2.5</sub> in Ulaanbaatar was 211 μ g/m3 (4.2 times higher than the daily average, per the Mongolian National Standard MNS.4585:2016). Source: http://www.agaar.mn/index?lang=en.

## **Mongolia: ADB Operations in the Environment Sector**

(as of 31 August 2017)

No.	Project Approval No.	Project Name	Net Amount (\$ million)	Milestone Dates (dd/mm/yy)	
				Approved	Closed
Grants					
1	9125	Poverty Reduction through Community-Based Natural Resources Management	2.00	5 Aug 08	31 May 13
2	9127	Energy Conservation and Emissions Reduction from Poor Households	2.00	23 Sept 08	2 Apr 12
3	0200	Dzud Disaster Response	2.50	12 Apr 10	30 Jun 14
4	9164	Establishment of Climate-Resilient Rural Livelihoods	2.50	8 Jun 12	30 Aug 16
5	9183	Integrated Livelihoods Improvement and Sustainable Tourism in Khuvsgul Lake National Park	3.00	7 Dec 15	30 Jun 20
6	0475	Dzud Disaster Response	2.00	6 Apr 16	11 Oct 16
7	9187	Strengthening Community Resilience to Dzud and Forest/Steppe Fires	3.00	14 Sept 16	30 Apr 20
8	9189	Managing Soil Pollution in Ger Areas through Improved On-site Sanitation	2.80	11 Nov 16	30 Jun 21
		Subtotal	19.80		
Taskai	al Assistanc	_			
1	7462	Ulaanbaatar Clean Air	0.50	14 Dec 09	1 Jun 12
2	8560	Tuul River Improvement	1.00	13 Dec 13	31 Dec 16
3	8802	Strategic Planning for Peatlands	0.40	12 Dec 14	30 Jun 17
4	8855	Country Water Security Assessment	0.50	19 Dec 14	15 Jun 17
5	8874	Sustainable Forest Management to Improve Livelihood of Local Communities	2.00	13 Jan 15	18 Oct 17
6	9043	Strengthening Capacity for Environmental-Economic Accounting	0.70	11 Dec 15	31 Mar 18
7	9230	Sustainable Tourism Development	1.10	14 Nov 16	31 May 18
8	9233	Conservation of Forest Genetic Resources	0.50	18 Nov 16	30 Nov 18
		Subtotal	6.70		
		Grand Total	26.50		

 $Source: ADB. \textit{ Projects and Tenders.} \ https://www.adb.org/projects/country/mon/type/sovereign-public-1069/sector/anr.$