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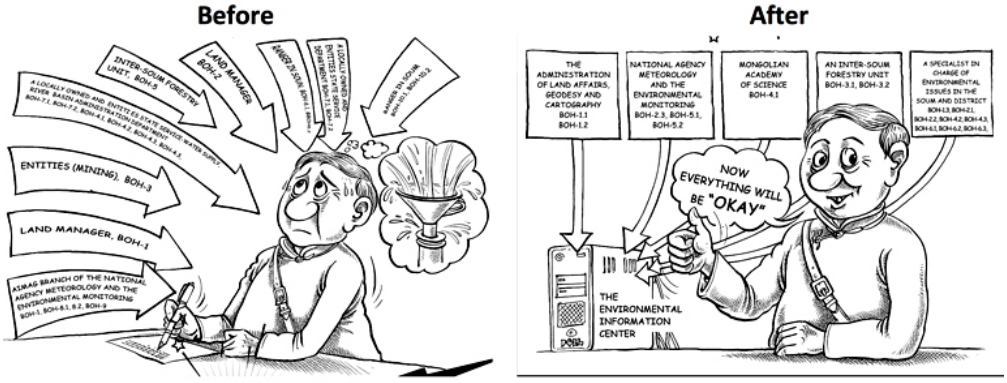
CASE STUDY

Improving Environmental Data Collection and Reporting in Mongolia



Collection of environmental data and statistics is expected to improve with revised environmental data collection forms and reporting flow in place. Infographic: Tsogtbayar Samadari, Honorary Artist of Mongolia.

Good quality environmental data and statistics are critical to monitoring and evaluating progress toward the SDGs in Mongolia, and developing policies to achieve these goals.

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Overview

An Asian Development Bank stocktake found that good quality environmental data and statistics are critical for monitoring and evaluating progress towards the Sustainable Development Goals (SDGs), and identifying interlinkages between achievement of the different goals and targets. Decision and policy makers also need to have good quality environmental data and statistics available as a basis for forward planning so they can better understand how existing policies positively or negatively impact the environment and vice versa.

To improve the quality of environmental data and statistics in Mongolia, the Ministry of Environment and Tourism (MET) and the National Statistics Office (NSO) of Mongolia, from March 2019 to February 2020, worked together and supported by an Asian Development Bank technical assistance:

- Improved their environmental data collection and reporting management system, including improving the existing environmental data collection forms and reporting flow in place; and
- Started to use the System of Environmental-Economic Accounting (SEEA) to pilot accounts for water, solid waste, and emissions to air.

Challenges

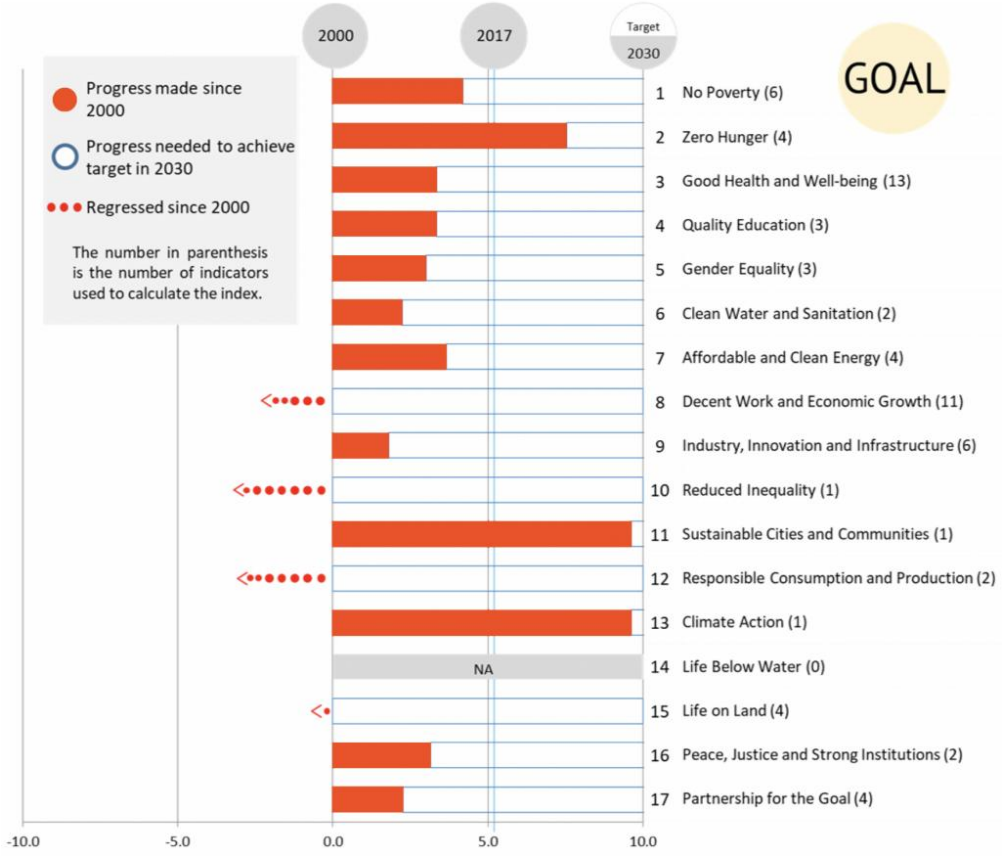
There is rising public concern in Mongolia over the environmental problems associated with economic development and rural-urban migration. These include significant levels of air pollution in cities, destruction of land as a result of mining operations, and, overexploitation of natural resources. In response to the current state of the environment, Mongolia has implemented a number of national policies and programs and participated in 18 multinational environmental agreements to help preserve and protect nature and the environment. There is a need for good quality environmental data to monitor and evaluate the success of these policies, programs and agreements, but the data sets required differed depending on their scope and objectives.

Obtaining good quality environmental data from the local level, especially remote areas, is also a challenge in Mongolia. Many of those charged with the responsibility to collect environmental data lack both the time and resources to cover the large parts of the country they are responsible for. Data collectors were overloaded because they collected, assured and submitted the environmental data, mostly on their own. There is a lack of follow up and monitoring of the functioning of the data collection system, the environmental data that is collected lacks insufficient quality assurance and sources of data are unclear. The effective distribution of data collection tasks is necessary to improve the quality of environmental data collated, with relevant professional organizations being made responsible for the quality of the environmental data gathered and reported, and an integrated environmental database that can be used by decision and policy makers to inform the policy planning process.

Context

In 2017, of the 244 global SDG indicators, national data and statistics were only available to monitor and evaluate 134 indicators (57.5%) while relevant data was not available for 99 indicators (42.5%) with 11 indicators not applicable to Mongolia. Based on this information, the NSO developed a Roadmap to implement Mongolia’s Monitoring and Reporting System for the Sustainable Development Goals (SDGs) and its Sustainable Development Vision 2030. This Roadmap included an action plan to create a set of indicators necessary for monitoring and evaluating achievement of the SDGs at national level, and build the overall statistical capacity of Mongolia. At the same time, existing data can be used as the basis for determining progress toward the SDGs (Figure 1) so decision and policy makers can identify additional actions to accelerate the pace of progress or reverse negative trends against the SDGs.

Figure 1. SDG Baseline Status: Where Did Mongolia Stand in 2017?



Source: MET, et. al. 2017. Sustainability Outlook of Mongolia.

Note: Assessment is based on a subset of 67 (out of 232 applicable) SDGs indicators for which sufficient data for Mongolia were available from the database available at the ESCAP-ADB-UNDP SDG data portal, but as more data becomes available, the progress and gap measures may change.

Solutions

To improve the quality of environmental data and statistics of Mongolia, in order to be able to provide good quality data for national decision and policy makers, the following activities were implemented:

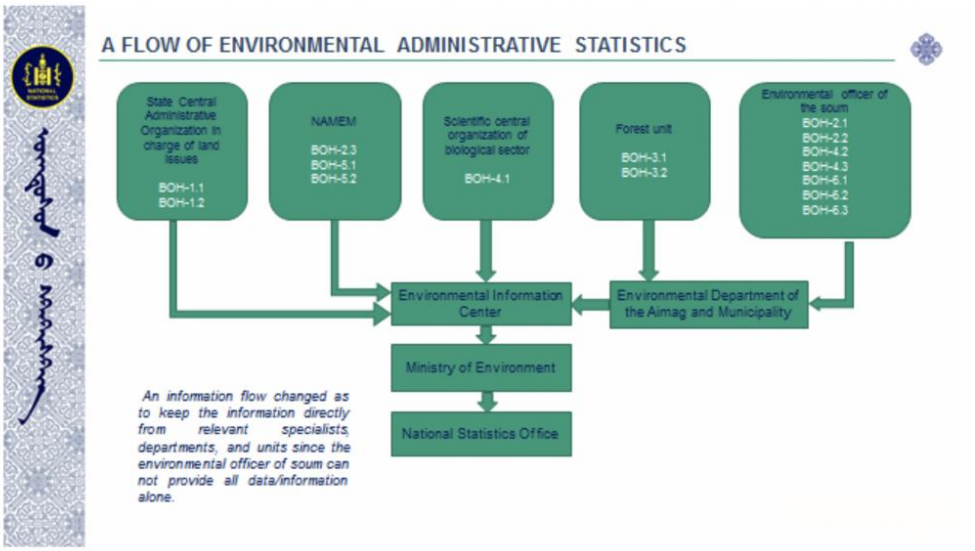
- Desk review of existing environmental data and statistics collected by the MET and its data suppliers through existing data collection forms using tools from the ADB tool compendium;
- Updating of existing environmental data collection forms (called BOH forms in Mongolia) to reflect indicators from the environmental dimensions of the SDGs, Framework for Development Environment Statistics, SEEA, Sendai Framework for Disaster Risk Reduction, Multilateral Environmental Agreements, and relevant national policies and programs including the Green Development Policy;
- Capacity development via national scale training for data collectors and managers, including those from different ministries and agencies and the 330 soums of 21 provinces of Mongolia and Ulaanbaatar, using a newly developed User Manual on Environmental Statistics;
- Translation of the Framework for Development Environment Statistics and SEEA manuals into

Mongolian; and

- Support for the establishment of the pilot environmental-economic accounts on water, solid waste and emissions to air.

The updated environmental data collection forms, packaged with revised methodologies, guidance and training for the data collectors is a starting point for the long-term process of improving data quality and assurance. The improved environmental data reporting flow (Figure 2) as an integrated and single source for decision and policy makers will help improve accountability for data, enabling data to be more easily transferred between users.

Figure 2. Updated Environmental Data Reporting Flow as an Integrated and Single Source for Decision and Policy Makers



Source: NSO of Mongolia.

Results

The activities generated the following results:

1) Revised environmental data collection forms, including 21 indicators for monitoring and evaluating progress on the environmental dimensions of the SDGs; and

2) User Manual on Environmental Statistics for data collectors and managers, including updated data collection forms, guidance on completing the forms, and revised methodologies for calculating basic environmental statistics.

Perceptions that environmental data collection was only the responsibility of MET were broken. Fruitful collaboration between MET and NSO enabled the forms to be updated through equal participation of both sides, involvement of all relevant organizations to environmental data collection, and nationwide training for data collectors and managers at the ground level. While MET leads environmental data collection, the involvement of NSO was key to the process since they are accountable for providing

quality assured and reliable data and statistics to decision policy makers. The capacity of relevant officers at the MET and NSO for environment data and statistics has been improved as a result of the process.

Indicators reflected in the updated environmental data collection forms will feed into a national monitoring and reporting system for the SDGs to enable decision and policy makers to review trends in achievement of the environmental dimensions of the SDGs. Indicators included will also help with monitoring and reporting on international commitments under the Sendai Framework for Disaster Risk Reduction and 18 Multilateral Environmental Agreements, which Mongolia has joined.

The integrated environmental database that will be established based on the above-mentioned efforts will be applicable not only to decision and policy makers from MET, but also to policy planners in different sectors. This will help improve their understanding of the interlinkages across the different dimensions of sustainable development. The improved environmental data collection forms and reporting flow will also be the main source of information for preparing environmental-economic accounts on water, solid waste and emissions to air.

Lessons

Key factors of success

- Clearly defined demand from environmental data users;
- Good understanding of the existing problems with environmental data and statistics; and
- Clearly defined ways to improve the situation based on the identified demand and problems; and
- The involvement of both MET and NSO.

Key challenges during implementation

- Identifying the many different laws of Mongolia to determine what is being regulated, as well as the terminology used, so these could be correctly reflected in the data collection forms;
- Identifying all the multilateral environmental agreements for which data is being collected and reported, as well as the terminology used, so these could be correctly reflected in the data collection forms;
- Involving all the different areas of expertise required since the environmental data forms cover a range of topics;
- Developing questions and methodologies for the complex topic of waste collection and treatment as well as hazardous waste—to avoid double counting of information as waste data had not previously been collected and international guidelines are not yet established; and
- Need for thematic survey on potentially relevant SDGs indicators, which at this point could not be reflected in the data collection forms, such as qualitative indicators like water stress etc.

Key challenges moving forward

- Ensuring the capacity of data collectors and managers at ground level;

- Follow up and monitoring to ensure adequate functioning of the new data collection system; and
- No use for collected and assured environmental data in national policy planning process.

Thus, moving forward, there remains an urgent need to create an understanding among decision and policy makers on how to use environmental data and statistics in the national planning process. Not only the MET, but other relevant institutions also need to have an official unit of statistics with professional employees to help in this regard.

Resources

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Emma Marsden
Senior Environment Specialist, Sustainable Development and Climate Change Department, Asian Development Bank

Emma has over 20 years experience in the fields of environmental and sustainability assessment. Her current responsibilities include undertaking environmental safeguard compliance reviews for ADB projects, and managing preparation of the ADB Sustainability Report. Prior to ADB she worked in environmental consultancy, where she managed and coordinated environmental impact assessments, strategic environmental assessments and sustainability appraisals of policies, plans, and projects in the energy, water and urban sectors.

Oyunbileg Khaltar
Senior Officer, M&E and Internal Auditing Department, Ministry of Environment and Tourism

Oyunbileg Khaltar's primary working areas include monitoring and evaluating achievements of Mongolian policy programs and documents, and the results of legal acts and government resolutions related to environment.

Uyangaa Burenduuren
Environmental Statistician, Economic Statistics Department, National Statistics Office of Mongolia

Uyangaa Burenduuren's primary focus areas include synthesizing and analyzing environmental data and statistics, and disseminating the results to the Mongolian government and other users.

Banzragch Tsesed
Consultant, Asian Development Bank

Banzragch Tsesed is a State Merited Environmentalist of Mongolia. Educated in the Russia Federation, he holds an MSc and a PhD in Engineering Science in the Forestry Sector. He is an expert on the development of policy documents and legislation, and has spent 38 years in state organizations in Mongolia, particularly the Ministry of Environment and Tourism.

Baasanjav Radnaabazar
Consultant, Asian Development Bank

Baasanjav Radnaabazar has over 30 years of experience in the areas of statistics and economy. She obtained an MSc in Economic Science from the Moscow State University of Economics, Statistics and Informatics in the Russia Federation. She is an expert in the development of SDG indicators in Mongolia.

Julie L. Hass
Consultant, Asian Development Bank

Julie L. Hass is an environmental-economic accounts expert with more than 20 years of experience in official statistics at Statistics Norway and Eurostat, including the development of statistics and more recently, SDG indicators. She holds a BA in Molecular Biology, an MSc in Chemistry, an MBA, and a PhD in Business Management. She helped develop and contribute to numerous environmental statistics compilation guides and manuals, SDG indicators, and energy accounts at Eurostat, UNSD, UNECE, and the OECD.

Asian Development Bank (ADB)

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