



### Progress Towards Environmental Sustainability

Some of the most pressing environmental problems in Mongolia include land degradation, air pollution, low energy efficiency, deforestation, and decreasing biodiversity. According to the Ministry of Nature and Environment, 78% of Mongolia's pasture land is degraded and another 20% is under threat of degradation. Several factors have led to such vast land degradation, including overgrazing in areas close to markets and water points due to failure to manage and maintain deep-water wells; mining operations, especially gold mining, coupled with lack of land rehabilitation; and infestations with grasshoppers and Brandt's Voles.

Air pollution is an increasingly serious problem, especially in Ulaanbaatar and several other urban centers. There is a high concentration of noxious pollutants that has increased since 1994 and exceeds safety standards. Main sources of air pollution include inefficient stoves, motor vehicles, and thermo-power plants. The Ger communities are not connected to central or district heating systems, leading them to use burning wood and coal and waste to generate heat, which in effect leads to high levels of natural resource consumption.

Mongolia has one of the highest carbon dioxide emission rates per capita in Asia. Consumption of low-grade coal, low-efficiency heating systems, lack of proper insulation in buildings, and overall lack of incentives to conserve energy use are among significant factors contributing to air pollution in Mongolia.

## QUICK FACTS

### CURRENT PORTFOLIO BUDGET

<b>Total UNDP-GEF and Co-Finance:</b>	\$31,239,572
<b>Total UNDP and Co-Finance:</b>	\$7,816,449
<b>Total MPU and Bilateral:</b>	\$108,600
<b>Total:</b>	\$39,164,621

**Cumulative Total ODS Phased-Out:** 5.6 ODP tonnes

Important steps have been taken in order to integrate environmental considerations into Mongolia's national development policies and plans. The National Council on Sustainable Development was established in 1997. Parliament has passed over 20 laws on conservation, and several environmental conventions have been signed and ratified. While this has allowed for the establishment of a solid legal basis for environmental protection in the country, implementation has been weak, due to competing interests in the society and the economy and lack of environmental awareness.<sup>1</sup>

## SPOTLIGHT

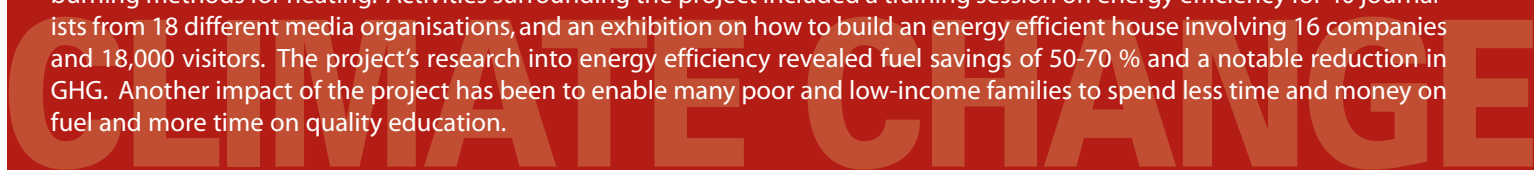


### Innovative Housing Construction Cuts GHG<sup>2</sup>

Located on mountains and plateaux, Mongolia is one of the world's highest countries with an average elevation of 1,580 metres. At this elevation, northern Mongolia suffers from harsh winters and cool autumn and spring seasons. Heating costs alone can sap 50% of the state's annual budget and a significant portion of household income. Even worse, the heavy reliance on wood and brown coals cause increased air and land pollution that significantly impacts public health.

Innovative, yet often regarded with scepticism at its first inception in the early 1990s, straw bale house (SBH) technology soon became an environmentally-friendly alternative that is being readily adopted by many households. Begun in March 2002, a UNDP demonstration project, co-funded with US\$ 750,000 from GEF and US\$ 1.08 million from the Norwegian Government in co-financing, provided technical and financial support for building super-insulated SBHs, or to improve existing homes. This practical and effective solution relies on recycled straw remnants from crop harvesting in autumn. In the past, demonstrating positive uses of SBH was crucial in dispelling previous negative images portraying them as fire- and rodent-prone and humidity-friendly. Showing that properly constructed SBHs can be energy efficient, comfortable, durable and warm helped ensure the project's success.

Significant savings, public awareness campaigns, and demonstration activities showed SBH to be a viable alternative to wood-burning methods for heating. Activities surrounding the project included a training session on energy efficiency for 40 journalists from 18 different media organisations, and an exhibition on how to build an energy efficient house involving 16 companies and 18,000 visitors. The project's research into energy efficiency revealed fuel savings of 50-70 % and a notable reduction in GHG. Another impact of the project has been to enable many poor and low-income families to spend less time and money on fuel and more time on quality education.



Mongolia's arid climate allows for slow environmental regeneration. Also, a lack of strong environmental governance provides challenges towards compliance with international agreements.<sup>3</sup> UNDP Mongolia promotes a balance between environmental protection and development.<sup>4</sup> As the demand for water by a growing population increases, ensuring a "win-win" solution for reducing poverty while increasing access to safe water and basic sanitation, pose certain challenges. In order to aid the decision-makers with the policy reference material for planning, UNDP undertook the joint study together with WHO and UNICEF. The study conducted a multi-sectoral, rapid assessment on the access to water and sanitation services by low income, vulnerable and marginalized communities.



**Pratibha Mehta, Resident Representative**

## PORTFOLIO

**FSSD\*** The Mongolian Action Programme for the 21st century is Mongolia's response to Agenda 21. This programme will strengthen the national capacity to incorporate sustainable development concepts, particularly environmental concerns into national economic planning and development. The Television Trust for the Environment project, funded in partnerships with the Netherlands and Norway, aims at promoting public awareness to change people's attitude and behaviour toward sustainable natural resources management and environmental protection by broadcasting social, economic and environmental issues with real learning experiences from around the world.

**ENERGY** UNDP's assistance in partnership with Norway and Canada, focus on reducing GHG emissions that result from burning coal and wood for heating in Mongolia, by removing technical and financial barriers and promoting the widespread adoption of energy-efficient technologies in the housing sector. An example is a project with the objective of enhancing the well-being of women, children, and the unemployed by supporting the introduction of energy-efficient buildings and renewable energy as the entry point for the provision of cost-effective social service infrastructure.

**LAND** Addressing sustainable land management is a priority in Mongolia. The Netherlands and UNDP are supporting a programme to increase the welfare of herding families through the sustainable management of Mongolian grasslands. The main mechanism to achieve this goal is to strengthen and formalize existing customary herder community institutions, and to strengthen linkages between them and formal governance structures and the private sector.

**BIODIVERSITY** Six ongoing projects in Mongolia focus on promoting and ensuring long-term conservation and sustainable use of unique biodiversity in protected areas and buffer zones such as the Eastern Steppe grasslands, Altai-Sayan region, and the Great Gobi ecosystem. They aim to achieve this by integrating biodiversity conservation objectives into sustainable natural resource use policy, programs and practices and linking traditional protected area management to the landscape around each area, including cross-border cooperation.

**CHEMICALS** By implementing a recovery and recycling project as part of the refrigerant management plan, UNDP is assisting Mongolia under its Montreal Protocol compliance framework. The project provides equipment, training, technical assistance and the means by which to establish an effective national monitoring and enforcement system.

### CONTACTS

Ms. Melaia Vatucawaqa – Melaia.vatucawaqa@undp.org  
 Ms. Tungalag Ulambayar – Tungalag.ulambayar@undp.org  
 Tel.: 976-11-327585  
 Fax: 976-11-326221  
<http://www.undp.mn/modules.php?name=Content&pa=showpage&pid=34>

### PARTNERS

**Some of our Partners working with UNDP and the Government in Mongolia**

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<sup>1</sup>MDGR 2004 [http://mirror.undp.org/mongolia/publications/NMDGR\\_Mongolia\\_eng.pdf](http://mirror.undp.org/mongolia/publications/NMDGR_Mongolia_eng.pdf); <sup>2</sup>UNDP Mongolia homepage: <http://www.undp.mn/index.php?name=News&file=article&sid=48>; UNDP Mongolia Brief, 'Good Practice: Straw Bales Make Houses Warmer in Mongolia' and GEF Online database: <http://www.gefonline.org/projectDetails.cfm?projID=22>; <sup>3</sup>[http://www.undg.org/documents/3633-Mongolia\\_UNDAF\\_\\_2002-2006\\_.pdf](http://www.undg.org/documents/3633-Mongolia_UNDAF__2002-2006_.pdf) from UNDAF pg. 28; <sup>4</sup><http://www.undp.mn/modules.php?name=Content&pa=showpage&pid=34#1>; \*Frameworks and Strategies for Sustainable Development