Mongolia: External Partners – GoM Technical Meeting

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"POLICY AND CHALLENGES ON ENVIRONMENT IN MONGOLIA"

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Ministry of Nature and Environment

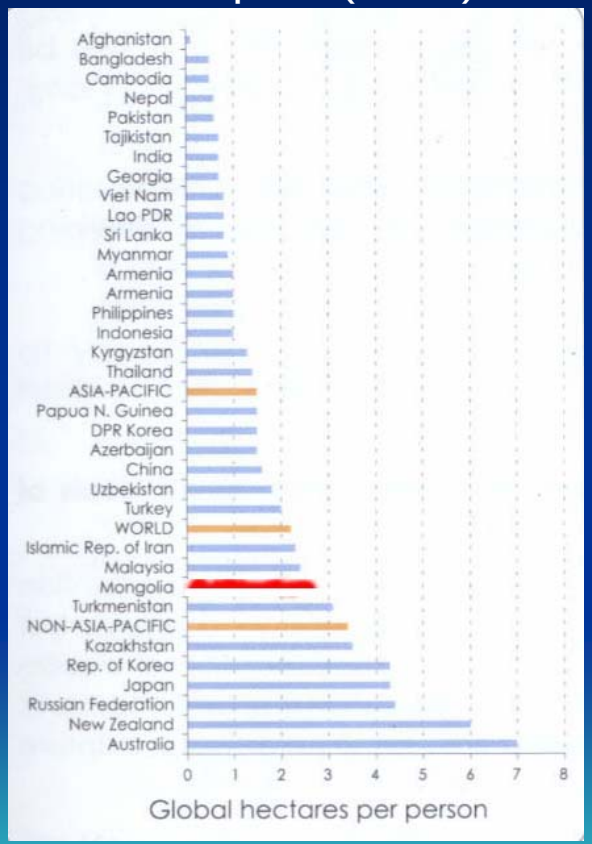
Ecological Features of Mongolia

- Mongolia has a unique and reach natural ecosystems in its size, diversity and health.
- As Mongolia undergoes a massive socio-economic transformation, threats to these natural areas, flora, and fauna are rapidly mounting.
- In Mongolia, all natural zones such as high mountains, valleys between the mountain ranges, wide steppe, Gobi desert and semi-desert zones are combined.
- Ecologically, Mongolia occupies a critical and fragile transition zone in Central Asia: here the great Siberian taiga forest, the Central Asian steppe, the high Altai mountains and the Gobi desert converge.
- Socio-economic development of the country is very dependent on natural resources

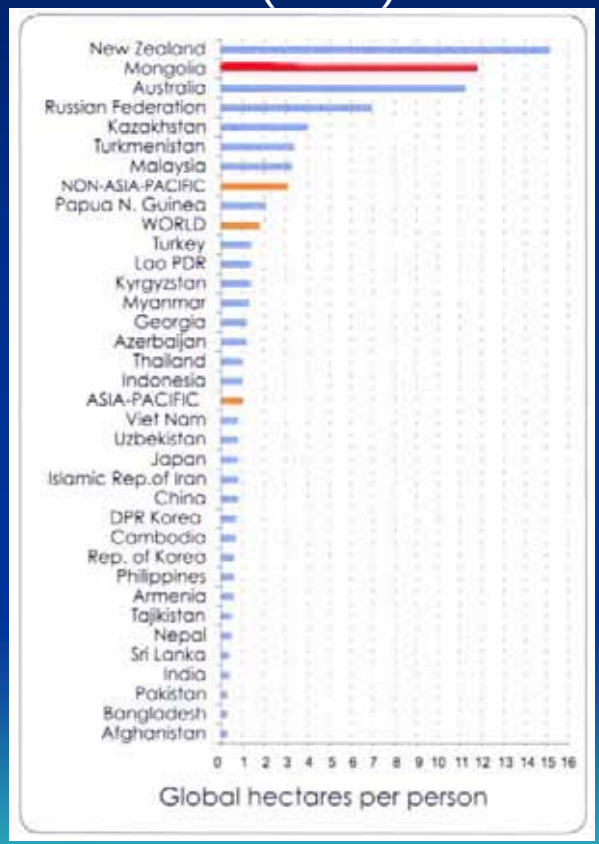
State of the Environment

(Source: State of the Environment in Asia and the Pacific, 2005, UNESCAP)

Per capita ecological footprint (2002)



Per capita biocapacity (2002)

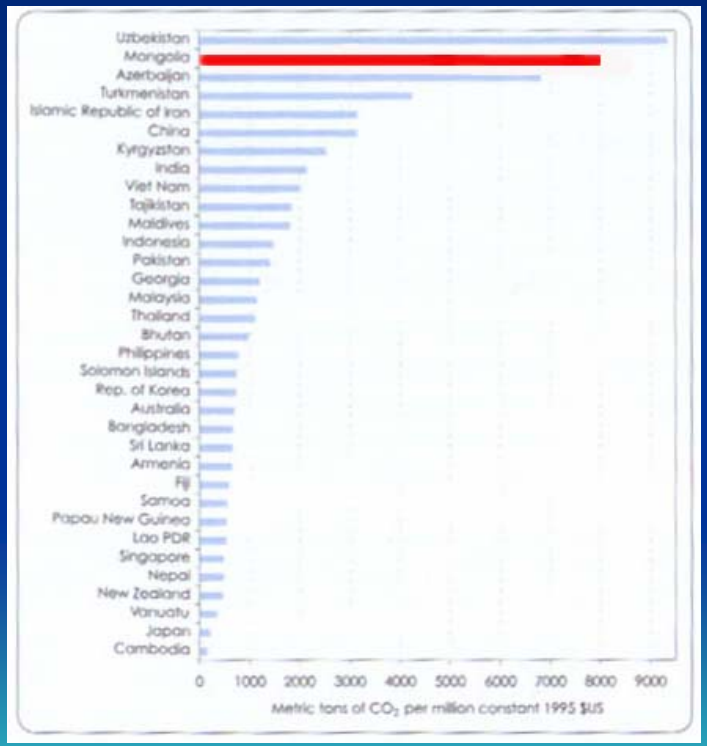


Per capita ecological deficit and surpluses (2002)

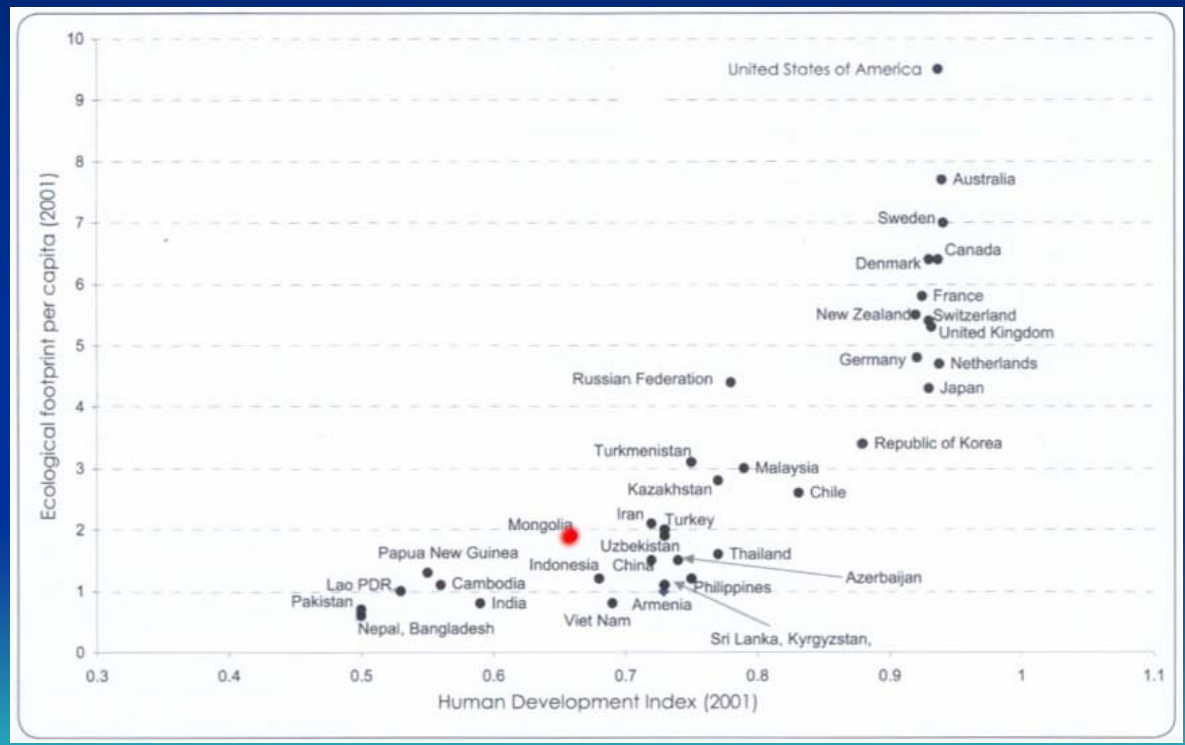
State of the Environment

(Source: State of the Environment in Asia and the Pacific, 2005, UNESCAP)

CO_2 emissions per unit of GDP (2002)



Ecological footprint per capita vs. Human Development index



Environmental problems in Mongolia

By the standards of many other countries, Mongolia's environment is relatively unspoilt. However, the transition has accelerated the risks of damage and many areas of concern are emerging including:

- *Land Degradation*
- *Desertification (Climate Change, Dust and Sand Storms)*
- *Deforestation*
- *Decline of Water Resources*
- *Loss of Biodiversity*
- *Urban Air Pollution*
- *Solid Waste*
- *Frequent Natural Disaster*

Land Degradation

- A degradation of ecosystem in Mongolia is still being obstacle for its socio-economic development and economic stabilization.
- A total area of the damaged or depleted land is estimated to be 121.7 million hectares, of which:
  - *91.7 million hectares are by the combination of wind and water;*
  - *21.1 million hectares by water;*
  - *7.9 million hectares are covered by sand*

Main human causes of land degradation are:

- Mining is one of the rapidly growing and leading industry branches in Mongolia causing substantial soil destruction. No proper rehabilitation measures during and after mining.
- Overgrazing specially around settlement areas and water points, etc.
- Nearly half of the total farmland is out of use and abandoned.

Desertification

Mongolia is a country, which experiences serious drought and desertification.

- *More than 40% of the territory is composed of arid and desert areas*
- *70% degraded at certain rate*
- *90 % of the total territory a subject to desertification*.

Current desertification has three main directions:

1. Desertification of vegetation cover,
2. Desiccation of wetland ecosystems and
3. Increase of sand area.

Deforestation

Mongolia is one of the low forest cover countries. Total forested area in Mongolia is 13 million hectares equal to 8 percent of the total land.

Management of the forest resources of Mongolia suffers from several weaknesses such as:

- Illegal Timber harvesting
- Inadequate Forest management
- Adverse human impact

In total 1.6 million ha. of forest have been lost between 1974 and 2002 due to fire, overgrazing, mining activities, improper as well as illegal logging.

Water Resources

- Mongolia has a limited water resource.
- Industry water consumption is increasing.
- Mining has harmful health impacts where mercury and other chemicals are used, leading also to downstream water pollution impact
- Content of water, used for drinking and household of 38.5% of total population settled in towns and villages, do not meet sanitary requirements.

Loss of Biodiversity

- Human pressures on Mongolia biodiversity continue to grow.
- Mongolia harbors the last remaining populations of a number of species internationally recognized as threatened or endangered, including: Snow leopard, Argali sheep, Wild ass, Saiga, Bactrian camel, Gobi Bear.

  Main causes are:

  – Habitat loss

  – Overuse

  – Illegal Hunting

Urban Air Pollution

Air quality is a significant environmental problem in urban areas of Mongolia, particularly in Ulaanbaatar. Primary sources of air emissions in Ulaanbaatar are:

- *3 thermal power plants*
- *200 small and medium sized heating boilers*
- *80 000 traditional Gers and wooden houses*
- *Over 70 000 vehicles.*

Solid Waste

- Solid Waste is another significant Environmental problem in urban areas of Mongolia particularly in Ulaanbaatar.
- 10730 thou. cubic meters of solid waste are disposed in 487 open waste dumps each year in Mongolia (2004), causing severe health and environmental pollution.

Environmental Policy, Institutional and Legislative Framework

Sustainable Development Policy

Legislative Framework

Basic law is *"Law on Environmental Protection"* that includes 3 main principles:

- prevention of adverse impacts
- creation of favourable environmental conditions for human life, labour and recreation
- ensuring the development of sustainable economy

In total, over the 30 laws on environmental regulations

Sustainable Development Policy

Over the 30 Environmental Programmes and Policy Documents have been issued in Mongolia.

1. National Environmental Action Plan - updated 2000
2. State Ecological Policy \1997\
3. National Plan of Action to Combat Desertification
4. Biodiversity Action Plan
5. National Action Programme on Climate Change
6. National Plan of Action for Protected Areas
7. Mongolian Action Plan for 21st century \MAP-21\
8. National Water Programme \WATER RENEWAL-21\
9. Good Governance for Human Security Programme – 2001
10. Economic Growth and Poverty Reduction Strategy - 2003
11. Millennium Development Goals, etc.

International Cooperation on Environment

12 International Conventions and Protocols joined

8 Agreements Between Governments and Ministries of Environment

26 Bilateral Agreements between Ministries of Environment

Mid-term Environmental Priorities

1. Land Degradation *(Mining, Desertification, Overgrazing, Deforestation)*

2. Environmental Pollution *(Air, Water, Soil pollution, Dust and Sand Storm)*

3. Biodiversity Loss

Major objectives

- Land Restoration of Mining Sites
- Reforestation and Desertification Prevention
- Reduction of Environmental Pollution
- Water Use Management
- Protected Areas Network Expansion and Biodiversity Conservation

General Guidelines for Socio-Economic Development matrix

Objective: Ensure healthy and ecologically-friendly living conditions, prevent from environmental deterioration

Targets and measures	Criteria	2006	2007	2008
Ensure healthy and ecologically-friendly living conditions, reduce the air pollution of cities	Amount of CO_2 exhausted from production of 1 kcal thermal energy, grams	0.5	0.49	0.48
Prevent from environmental deterioration, improve recovery and protection of natural resources	1. Number of springs that meets requirements	200	250	300
	2. Recovery rate of land damaged by mining prospecting	45	47	49
	3. Share of preserved area	13.6	13.9	14.2
	4. Share of forests	8.22	8.23	8.24
	5. Total forestation, ha	5400	10000	12000
Improve the weather and natural disasters prevention system	Warning accuracy of weather and disasters forecasts	89.5	89.8	90.0

Current Financial Resources

(in million Tugrigs)

Budget categories	2006	2007	2008	2009	2010
Operational	4,688	5,317	5,848	6,141	6,448
Investment	2,836	2,455	2,156	2,264	2,377
Total	**7,525**	**7,772**	**8,006**	**8,405**	**8,826**
Percentage of GDP	0.53	0.53	0.52	0.52	0.52
Financing gap	**3,070**	**4,869**	**5,900**	**6,891**	**8,000**

Lessons Learnt

- Strong commitment of local communities in conservation
- Wider understanding on ecological changes
- New thinking on consumption pattern
- Cross sectoral coordination

Further steps

- Environmental Master Plan
- Environmental Good Governance
- Desertification Prevention
- Mining Land Restoration
- Biodiversity Conservation
- Environmental Pollution Reduction
- Water Resources
- Energy Efficiency and Energy Saving


Thank you for your attention