



GOVERNMENT OF
MONGOLIA

MINISTRY OF NATURE,
ENVIRONMENT AND TOURISM

MEETING ON NEW MECHANISMS FOR CLIMATE CHANGE MITIGATION
MOEJ, JAPAN AND MNET, MONGOLIA

January 23, 2012, Tokyo

**NATIONAL POLICY ON CLIMATE
CHANGE IN MONGOLIA**

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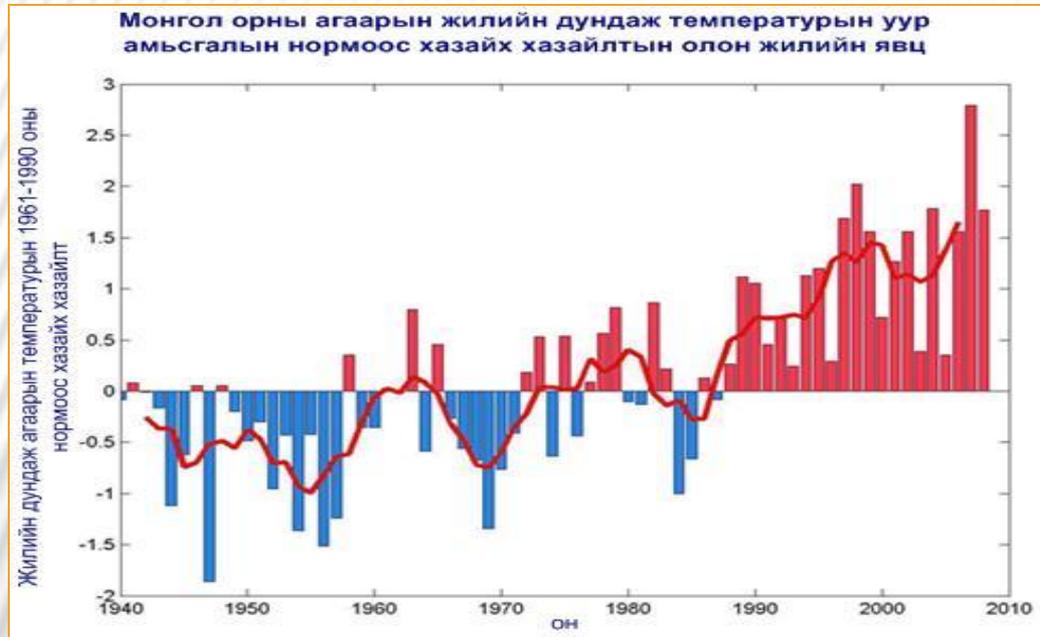
Special Envoy on Climate Change, Mongolia

OUTLINES

- Mongolia Climate Change and Its Projections for 21st Century
- Climate Change Related Legislations and Policy Documents
- National Action Programme on Climate Change

1. Mongolia Climate Change and Its Projections for 21st Century

Current Climate Change in Mongolia

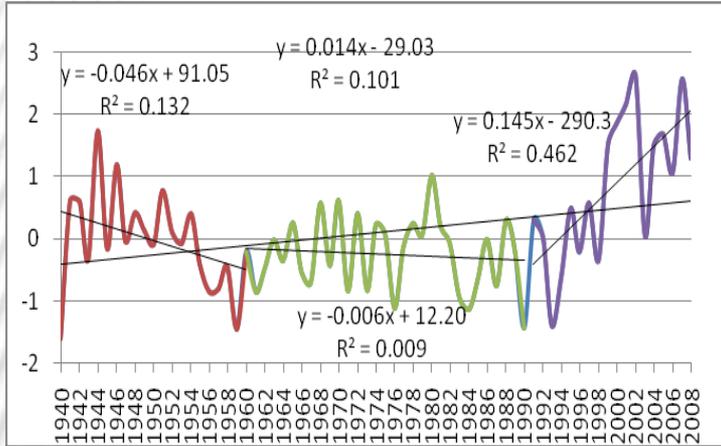


**Annual Mean Air
Temperature Trend between
1940 and 2008**

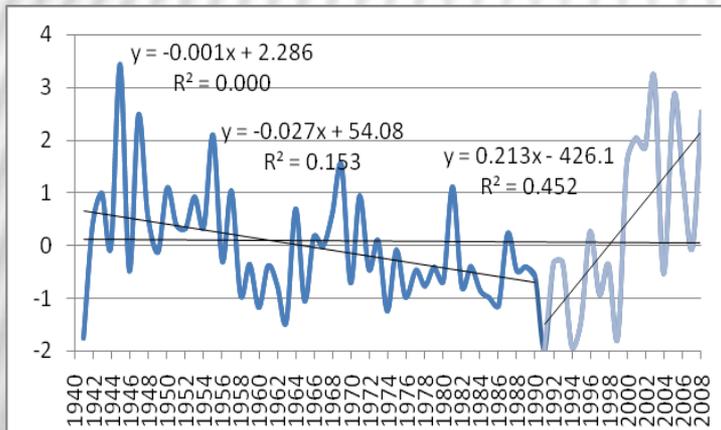
The annual mean air temperature of Mongolia has increased by **2.14°C** between 1940 and 2008.

Source: MARCC, 2009

Current Climate Change Features in Mongolia



Drought Index Change



Zud (harsh winter) Index Change

Air temperature changes features:

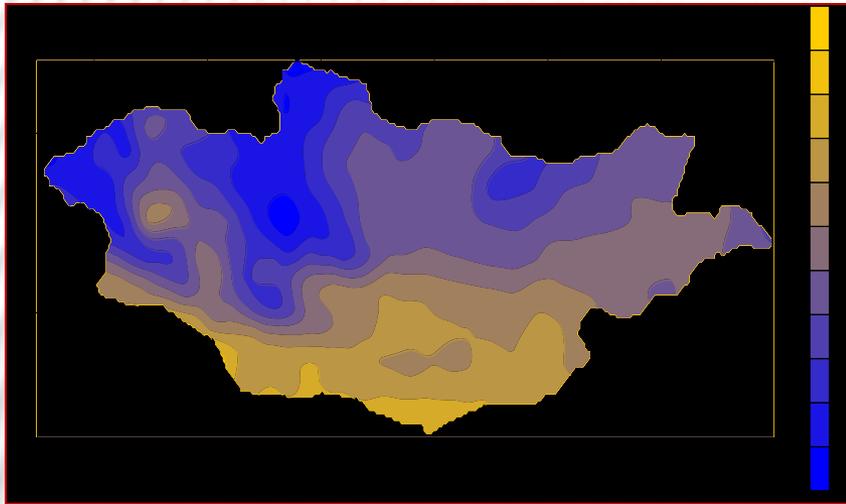
- Annual mean temperature of Mongolia has increased by 2.14° C for the period of 1940-2008.
- Summer temperature increases faster than winter season.
- Temperature increase more significantly in mountain areas than Gobi desert and steppe areas.
- Increases in hot extremes and heat waves

Precipitation and Natural disaster changes:

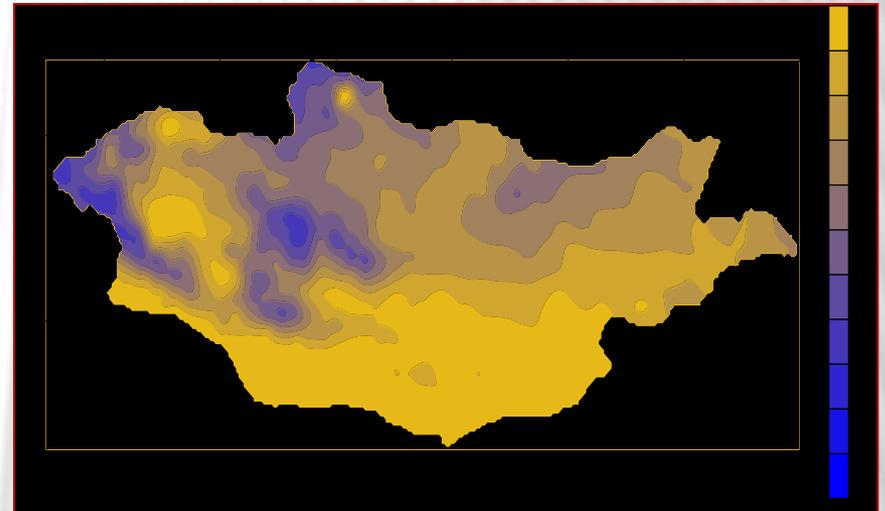
- No significant changes in annual precipitation amount, but precipitation in Gobi and steppe areas has been decreased
- Increases in frequency and magnitude of natural disasters

Climate Change Projections for 21st Century

1961-1990



2071-2100



Mongolia air temperature will be increased by **3.1-5.0°C** by 2099.
Average warming is about **4.0°C**.

Source: IMH, HadCM3 model

Most Vulnerable Biophysical Components and Sectors to Climate Change in Mongolia

1. Pastureland
2. Permafrost and Glaciers.
3. Water resources
4. Forests
5. Soil Degradation and Desertification
6. Livestock sector
7. Agriculture sector
8. Health sector and Livelihood, etc.

2. Climate Change Related Legislations and Policy Documents

Related Legislations and Policy Documents

- Law on Air revised (2010, 1995)
- Law on Environmental Protection, (1995, 2007)
- Law on Disaster Prevention, 2003
- National Security Priorities
- The Mongolia Action Programme for the 21st Century (MAP21)
- The MDG-based Comprehensive National Development Strategy of Mongolia (2008)
- National Action Programme on Climate Change (NAPCC) (2000, 2011)

The MDG-based Comprehensive National Development Strategy of Mongolia

The MDG-based CNDS of Mongolia, which was approved in 2008, formulated key social, economic and environmental targets to achieve the Millennium Development Goals attaching high priority to promoting sustainable development and high technology, environmentally friendly production and services. The development strategy identified **six strategically priority areas of the country's development**. One of these priority areas is directly related to climate change issues.

Create a sustainable environment for development by promoting capacities and measures on adaptation to climate change, halting imbalances in the country's ecosystems and protecting them.

3. National Action Programme on Climate Change (NAPCC)

National Action Programme on Climate Change (NAPCC)

- NAPCC was approved by the State Great Khural (Parliament) in January 2011.
- Its implementation plan for the first period was approved by the Cabinet of the Government in November 2011.
- Goal of the program is to ensure ecological balances, development of socio economic sectors adapted to climate change, reducing of vulnerabilities and risks, mitigating the GHG emissions and promoting economic effectiveness and efficiencies and implementation of Green development goals.
- NAPCC includes Adaptation and Mitigation strategies and measures for key socio-economic sectors of the country.

NAPCC: Strategic objectives

In order to achieve the goals of the programme, the following 5 strategic objectives have been defined:

1. Set legal environment, structure, institutional and management systems that responding climate change issues
2. Ensure environmental sustainability and reduce socio-economic vulnerabilities and risks through strengthening the national climate change adaptive capacity
3. Mitigate GHG emissions and establish low carbon economy through the introduction of environmentally friendly technologies and improvement in energy effectiveness and efficiency.
4. Enhance the national climate observation network, research and monitoring capacities
5. Conduct public awareness campaigns and support citizen and community participation in actions against climate change

NAPCC: Implementation period and phases

National action program on climate change will be implemented in two phases in the period 2011 to 2021.

- **In the first phase (2011-2016)**, national mitigation and adaptation capacities will be strengthened, legal, structural and management systems will be set up and community and public participation will be improved.
- **In the second phase (2017-2021)**, climate change adaptation measures will be implemented and start up greenhouse gas mitigation actions.

NAPCC: Implementation approaches

- Align with the national security strategy, sustainable development and Green economic growth goals.
- Adhere to keeping to environment balance, reduction of pollution, poverty alleviation and assuring human safe and healthy livelihood
- Introduce progressively advanced scientific and environmentally sound techniques and technologies in GHG mitigation and climate change adaptation

NAPCC: Implementation approaches (Cont'd)

- Synchronize traditional practices and culture with modern advanced methods and technologies in implementation of the programme
- Maintain international and regional partnership and cooperation
- Ensure cooperation of government and business, community and individual participation, improve integration of sectors, central and local levels actions
- Ensure justice, transparency, human rights and gender equality in the implementation.

NAPCC: Adaptation strategy

- Development of national adaptation strategy focusing on issues of national concern and most vulnerable sectors to adverse impacts of climate change
- Integration into National and sectoral development policy and programmes and projects
- Evaluation of concrete and practical adaptation measures that could possibly decrease the vulnerability and sensitivity of most vulnerable sectors and areas.
- Improve adaptive capacity at all levels (national, sub-regional, sectoral, communities, etc.)

Policy to Mitigate Greenhouse Gases Emissions

- Mongolia has been developing and vigorously promoting various policies and measures to mitigate greenhouse gases emissions by sources and to enhance greenhouse gases sinks by removals.
- Actions to address climate change challenges must be ultimately linked to the government strategies on sustainable development and economic growth, and fall across a variety of sectors, including energy, industry, transport, agriculture, grassland management and waste management sectors.
- Effective solutions require well coordinated national policies and priorities that are developed with the engagement of a variety of government stakeholders, such as different ministries and agencies as well as other relevant stakeholders, such as the academy, private sector, NGOs and civil society.

Measures on Greenhouse Gases Emissions Mitigation (1)

Energy supply side:

- Increase renewable options
- Improve coal quality
- Improve CHP plants' efficiency
- Improve household stoves and furnaces
- Improve efficiency of heating boilers
- Increase use of electricity for local heating in cities
- Reduce internal fuel consumption of electric and heat power generations
- Increase efficiency of energy transfer and distribution
- Supply renewable energy generators to soum centers and settlement that are not connected to the central electricity network

Measures on Greenhouse Gases Emissions Mitigation (2)

Energy Use side:

- Building Energy efficiency Improvement
- Energy Efficiency Improvement
- Increase hydrogen and hybrid fuel use in vehicles and encourage low fuel consumption cars
- Expand use and production system of wind, solar and other renewable energy
- Develop trolleybuses network in public transportation
- Expand the liquid gas distribution network
- Limit incandescent light bulbs usage

Measures on Greenhouse Gases Emissions Mitigation (3)

In frame of introducing new technology and research side:

- Introduce and disseminate improved technology for coal processing and clean fuel processing in local areas
- Convert Ulaanbaatar Power Plant-3 and Darkhan Power Plant to high efficiency electric power generation technology
- Conduct a pilot study into, and introduce, geothermal power exploration technologies
- Conduct technological research and development into the utilization of methane gas from underground mining
- Develop technologies for dry (lower emission) cement production
- Build solid waste power plants
- Set up integrated gasification combine cycle plants
- Expand research on nuclear power generators

Measures on Greenhouse Gases Emission Mitigation (4)

Non-Energy Sector Measures

- **Transport:** *Electrification of railways, more fuel efficient vehicles use*
- **Agriculture :** *Limit the increase of the total number of livestock by increasing the productivity of each type of animal, especially cattle.*
- **Forestry:** *Improve forest management, Reduce emissions from deforestation and forest degradation, Enhance forest carbon stocks in forests.*
- **Waste:** *Landfill gas for power generation*

THE COPENHAGEN ACCORD AND CANCUN AGREEMENTS: *NAMA AND MRV*

- In accordance to the Copenhagen Accord and Cancun Agreements (Decision of the COP15 and COP16/UNFCCC), Non-Annex I Parties to the Convention will implement **Nationally Appropriate Mitigation Actions (NAMA)**, including those submitted to the UNFCCC secretariat by non-Annex I Parties and in the context of sustainable development.
- Mongolia has associated with the Copenhagen Accord and submitted the list of **NAMAs** to the Climate Change Secretariat according to the Appendix II of Copenhagen Accord.
- NAMA are:
 - consistent with the sustainable development goals,
 - should be supported and enabled by technology, financing and capacity-building.

Good Experience of Coordination

There are two similar projects in the field of climate change in Mongolia.

1. Linking Herders to Carbon Markets: Development of Methods and Approaches for Grassland Carbon Finance in Mongolia. SDC, 2011-2012.

2. Strengthening Carbon Financing for Regional Grassland Management in Northeast Asia, ADB, PRC and Mongolia, 2010-2012.

These two projects have very similar goals, objectives and activities. Therefore, it was necessary to coordinate the activities of projects to avoid any overlaps and duplications.

Coordination Mechanisms

In order to coordinate and integrate the similar activities of two projects, a consultative meeting was organized by MNET in February 2011 inviting representatives of SDC and ADB.

As a results of coordination between two projects, it was decided to:

1. establish a Joint Steering Committee
2. establish Joint National Consultant Teams
3. establish a Joint Project Office
4. review and re-select demonstration sites
5. invite the same international consultants for both projects
6. organize joint workshops and meetings
7. have joint publications and information materials, etc.

NEXT STEPS

In order to promote new market mechanisms, NAMA and MRV in Mongolia, it is necessary to:

- Identify program or policies that could be linked with NAMAs.
- Identify activities and measures within the policy and or program that are reducing GHG emissions.
- Estimate GHG emission reduction targets for business as usual (BAU) and NAMA activities
- Conduct cost and benefit analyses of mitigation activities to support/convince decision makers and stakeholders.

Conclusions

- Many of the actions and measures to remove or palliate barriers require administrative decisions or actions.
- Actions and measures to address climate change challenges must be ultimately linked to the government strategies on sustainable development and economic growth, and fall across a variety of sectors.
- The suggested adaptation and GHG mitigation measures are useful in coping with climate change. However, it may make sense to start with existing experiences that people have already made to deal with climate variability and extreme events, and to use effectively and efficiently the products and natural resources.
- Close cooperation with international organizations and partner countries are essential to implement the actions and measures identified in the NAPCC.



THANK YOU FOR YOUR ATTENTION !

