# **Country presentation of Mongolia**

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## **1. GENERAL INFORMATION**



- Location: Mongolia is located in central Asia and it is a landlocked country bordered by the Russian in the north and China in the south.
- Landscape: The Mongolian heartland consists of relatively flat steppes. The southern portion of the country is taken up by the Gobi Desert, while the northern and western portions are mountainous
- Area: 1564.1 thousand square kilometers /7th largest country in the Asia/

Weather: Extremely continental climate.

There are four seasons: winter, spring, summer and autumn.

The highest winds occur in April and May. January is the coldest and July is the hottest.

January and February averages of -20 °C (-4 °F) are common, with winter nights of -40 °C (-40 °F) occurring most years. Summer extremes reach as hi hg as 38 °C (100.4 °F) in the southern Gobi region and 33 °C (91.4 °F) in Ulaanbaatar.

**Population:** Mongolia's population is 3,409,939, of which 45 percent live in Ulaanbaatar, the capital city.

The rest of the population lives in the centers of 21 aimags /provinces/ and in rural areas, engaged in livestock.

Life style: Mongolia's population is 66% settled and 34% nomadic.

Type of state: Parliamentary Democratic Republic

- Administrative units, territory: Mongolia was administratively divided into 21 aimags and the capital city;
- Capital city: Ulaanbaatar (Coldest capital city (-36-40°C) in the world)
- Economic activity: Based on livestock, agriculture and mining.
- Natural resources: Mineral-coal, copper, fluorite, gold, silver, iron, lead, molybdenum and oil
- Livestock: In our country, the main producers of animal husbandry are herdsmen's family farms. They live by herding horse, camel, cow, sheep, and goat.
- Agriculture: In Mongolia, crops, potatoes, vegetables and fodder plants are grown, harvested and used for food.

Traditional house: Ger







## 2. OVERVIEW OF DISASTERS AND ACCIDENTS IN MONGOLIA



## DZUD

The dzud is a weather-related phenomenon unique to Mongolia due to the country's unusual environment that is landlocked, semi-arid, and given to swings in temperature and precipitation.

In Mongolia, the following types of dzud are recognized:

- White dzud results from high snowfall that prevents livestock from reaching the grass. It is a frequent and serious disaster that has caused a great number of deaths.
- *Black dzud* results from a lack of snowfall in grazing areas, leading to both livestock and humans lacking water. this type of dzud does not occur every year, nor does it affect large areas. it mostly happens in the Gobi desert region.
- *Iron dzud* results from a short wintertime warming, followed by a return to subfreezing temperatures. the snow melts and then freezes again, producing an impenetrable ice-cover that prevents livestock from grazing.
- Cold dzud occurs when the temperature drops to very low levels for several days. the cold temperature and the strong winds prevent livestock from grazing; the animals have to use most of their energy to keep warm.
- Combined dzud is a combination of at least two of the above types of dzud.









Dzud is caused by multiple factors — some climate related and others human made. In the 2000s, ten million livestock died and with the most severe mortality occurring in the 2000-2002 and 2009-2010 winters.

# FLOOD

Mongolia's exposure to risk of flooding is considered high. The majority of Mongolia's floods stem from rainfall

The country typically sees three types of floods:

- Spring or snow melt flood wherein river levels slowly rise and overflow their banks over a relatively longer period of time;
- Rainfall flood wherein a quick rise of water levels from heavy rainfall leads to overflowing banks;
- Flash flood wherein heavy rainfall over steep riverbeds causes turbulent flows of water along with rocks, sediment, and other surface materials.

Flooding affects both rural and urban areas, and in the capital old bridges, roads, and avenues built without sewage systems have been severely affected. In June and July 2021, flash flooding negatively impacted six districts in Ulaanbaatar and affected over 234 households.



#### **STRONG SNOW AND DUST STORMS**

Due to global climate change, strong wind storms have occurred in Mongolia in recent years. As a result of strong winds and storms, herding families living in rural areas suffer a lot. They get lost from their homes and their houses collapse and their animals disappear. If the strong winds and storms last for several days, it is impossible for herders to reach for help and communication is lost.

As an example of the most recent storm, in 2021, severe snow and dust storms occurred in the whole territory of Mongolia. A total of 706 people went missing in 12 aimags due to the weather related hazards, of which 696 people were rescued. Unfortunately, a total of 10 people were killed due to storms including 2 children and 9 adults.

In addition, 531 gers and 2244 fences collapsed, 140,347 livestock died and electricity was temporarily cut in 10 aimags.



## FOREST AND STEPPE FIRE

In Mongolia, forest and steppe fires usually occur in spring and autumn.

Forest and steppe fires occur due to dry weather and the accidental actions of people traveling in the countryside.

In 2020, fires accounted for 79.3% of all disasters.

Mongolian winters are usually very cold and dry. Typically, the majority of wildfires in Mongolia occur in the grasslands or grass understory of the steppe and mountain steppe zones.

Forest and steppe fires cause a lot of damage to the environment, animals and plants.



### **ANIMAL DISEASES**

3.4 million Mongolians have 71 million livestock. Livestock includes cow, sheep, horse, camel, and goat. About 200,000 families raise livestock in Mongolia. So, there are about 300-1000 animals in 1 herding family. Because there are so many animals in one place, there are many infectious diseases in animals.

Mongolian people consume the meat, milk, and skin of their livestock, so animal infectious diseases are very damaging to Mongolian people's life and Mongolia's economy.



## EARTHQUAKE

Mongolia has a high risk of earthquake hazard and experienced four magnitude 8 earthquakes during the last century. Smaller magnitude earthquakes occur very frequently, with more than 200 earthquakes of magnitude above 3.5 in every years.

Mongolia has suffered no catastrophic damages so far, partially due to earthquakes heretofore striking sparsely populated areas outside the capital where the rural population live in gers, whose flexible construction make them less prone to damage.



## **MAN-MADE ACCIDENT - BUILDING FIRE**

Among the disasters and accidents that occur in Mongolia, building fire amount for a large percentage.

According to a study of the causes of building fires:

- Due to fault electrical installation;
- Due to wrong use of electrical appliances;
- Due to wrong use of traditional stoves;
- Welding and soldering;
- Due to poor quality electrical equipment.







# **3. DISASTER MANAGEMENT SYSTEM**

Disaster management in Mongolia is led by the National Emergency Management Agency (NEMA). The Law on Disaster Protection was approved by the Parliament of Mongolia on 20 June, 2003.

According to the Law on Disaster Protection, NEMA is responsible for implementation of the State disaster protection policy and legislation, as well as for the professional organization of nation wide activities.

**VISION:** The vision of Emergency Management Organization of Mongolia will be a leading organization that is trustworthy and capable at region national and international level.

**DUTY:** Our duty is to implement laws, regulations and state policies on disaster protection, to organize and manage disaster protection activities both at national and local level and to provide professional management.

During a disaster response, NEMA is responsible for coordinating the activities of different stakeholders who are involved in disaster response including non-governmental and governmental organizations, the private sector, community groups, and international organizations. In addition, all 21 provinces and the capital city have a NEMA emergency management division and department.

## THE STRUCTURE OF EMERGENCY MANAGEMENT ORGANIZATION OF MONGOLIA



## DISASTER MANAGEMENT PARTNERS

A number of partners and stakeholders have played an important role in protecting Mongolia's people from disasters and supporting the government after large-scale disasters.

## **Bilateral and multilateral cooperation organizations:**

- The Ministry of the Russian Federation for Affairs for Civil Defense, Emergencies and Elimination of Consequences of Natural Disasters

- Federal Agency for State Reserve, Russian Federation
- Ministry of Emergency Management, People's Republic of China
- China Earthquake Administration
- State Forestry Administration, People's Republic of China
- United States Army Pacific
- Alaska National Guard, United States
- United States Indo-Pacific Command
- United States Forestry Service
- Ministry of Interior and Safety, Republic of Korea
- National Fire Agency, Republic of Korea
- State Committee of Emergency and Disaster Management of Democratic People's Republic of Korea
- General Directorate for Civil Defense and Crises Management, French Republic
- Directorate for Disaster Management, Republic of Hungary
- Ministry of Emergency Situation, Republic of Kyrgyzstan
- Ministry of Internal Affairs of the Republic of Kazakhstan

# International organizations

- UN Agencies
- International Civil Defense Organization (ICDO)
- Asian Disaster Reduction Center (ADRC)
- Asian Disaster Preparedness Center (ADPC)
- International Atomic Energy Agency (IAEA)
- International Fire Chiefs' Association of Asia (IFCAA)
- World Bank (WB)
- Asian Development Bank (ADB)
- International Federation of Red Cross and Red Crescent Societies (IFRC)
- Mongolian Red Cross (MRC)
- Mercy Corps
- World Vision (WV)
- Save the Children
- Japan International Cooperation Agency (JICA)
- Korea International Cooperation Agency (KOICA)
- Turkish International Cooperation Agency (TICA)
- Swiss Agency for Development and Cooperation (SDC)
- United States Agency for International Development (USAID)

## 4. Disaster Risk Reduction Efforts

- Amendments are made to relevant legal documents for the mobilization and evacuation of disaster protection forces and the regulation of improving the social security of emergency service personnel in order to prevent disasters, eliminate the consequences of disasters, and promptly respond to disasters.

- Trainings:



- Joint training and exercises "Khangai", "Desert wolf"....., ;
- Training and practice on radiation accident preparedness and response;
- First aid training;
- Training for technicians of firefighter's selfcontained breathing apparatus;
- Disaster risk assessment trainings;
- Training for fire and rescue trucks drivers
- Water rescue training;
- Training on high mountain search and rescue .....

The following activities were organized in order to prevent potential emergencies and accidents, enhance citizens' participation and contribution to disaster risk reduction, and increase their duties, responsibilities, knowledge and information.



- Press conferences; Posters of "Throw away-cause fire" and "Don't forget".
- Promo videos of "Let's overcome the pandemic together" and "Let's under-stand and love"
- Facebook page; Content emergency Time through MNB channel .....

### **5. IMPLEMENTATION OF THE SENDAI FRAMEWORK FOR DISASTER RISK REDUCTION**

In 2017, Mongolia's Prime Minister pledged that his country was ready to support greater implementation of the Sendai Framework for Disaster Risk Reduction across Asia by sharing its experience of managing extreme hazards.

Mongolia subsequently hosted the 2018 Asian Ministerial Conference on Disaster Risk Reduction in UB. In 2020, Mongolia was praised for its effort toward fulfillment of the Sendai Framework.

<u>The Strategy for the Implementation of the Sendai Framework for Disaster Risk Reduction in</u> <u>Mongolia was approved and is being implemented in three phases.</u>

- <u>I phase: 2017-2020;</u> - <u>II phase: 2021-2025;</u> - <u>III phase: 2026-2030.</u>

In the first phase, it was successfully implemented based on the cooperation and partnership of public and local organizations, science, civil society organizations, the private sector, citizens, the public and international organizations.

The second phase action plan, disaster risk reduction activities will be intensified at the national level, the capacity of disaster protection forces will be enhanced, a disaster risk database will be established, and public awareness on disaster prevention and risk reduction will be increased.

The action plan of the Phase II of the "Med-Term Strategy for the Implementation of the Sendai Framework for Disaster Risk Reduction in Mongolia" plans to implement 56 measures under the 4 priority areas and the 7 targets, and includes disaster risk reduction issues for women, children, people with disabilities and gender.

## 6. RESEARCH PLAN/THEME

## **Topic:** Innovative Emergency/temperary shelter for disaster

## Aims and objectives of the research work:

The purpose of this research work is to determine the basic requirements for temporary shelters for citizens during disasters.

Within the scope of the above objectives of the research work, the following objectives have been put forward. It includes:

- 1. To analyze the basic requirements for the organization of temporary shelter for citizens during disasters
- 2. Study the norms and standards in place in Japan regarding temporary shelter for citizens in times of disaster and compare them with the standard rules in place in Mongolia.
- 3. Determine the general requirements for temporary shelter for citizens in times of disaster in accordance with the characteristics of their country, and develop suggestions and recommendations

## Importance of research work:

It is believed to be important in forming the scientific basis for the work "drafting a legal document defining the basic requirements for temporary shelters and evacuation centers in times of disaster." It is also believed that it will make a certain contribution to the issue of the terminology of the place where citizens will be relocated.

Thank you for your attention Arigato gozaimasu