

# MONGOLIA

## Disaster Management Reference Handbook

2014



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# Welcome - Note from the Director



**CENTER FOR EXCELLENCE**  
IN DISASTER MANAGEMENT & HUMANITARIAN ASSISTANCE

Dear Reader,

The Center for Excellence in Disaster Management and Humanitarian Assistance (CFE-DMHA) has a mandate to provide and facilitate education, training, and research in civil-military operations, particularly operations that require international disaster management and humanitarian assistance and operations that require coordination between the Department of Defense and other agencies. In line with that mandate, CFE has conducted research to create reference books on disaster management roles, processes, capabilities and vulnerabilities.

This Disaster Management Reference Handbook Series is designed to provide decision makers, planners and responders a comprehensive understanding of in-country disaster management plans and structures, including information on key domestic disaster response entities, basic country background, and local and international humanitarian organizations present in the country. CFE produces country reference books to provide a commonly available baseline of information regarding disaster management environments. Many places in the Pacific Basin are subject to a variety of disasters including floods, droughts, and landslides, and these handbooks provide a context for country-specific factors that influence disaster management.

This reference book has been compiled by CFE from publicly available sources. It is a working document and will be periodically updated to reflect changes in information. We request your feedback to improve this document and help fill any gaps to enhance its future utility. Please send any feedback or questions to [cfe-dmha.fct@pacom.mil](mailto:cfe-dmha.fct@pacom.mil).

Sincerely,

A handwritten signature in black ink, appearing to read "Joseph D. Martin".

Col Joseph D. Martin  
Director



**CENTER FOR EXCELLENCE**  
IN DISASTER MANAGEMENT & HUMANITARIAN ASSISTANCE

## Information about the Center for Excellence in Disaster Management and Humanitarian Assistance

### Overview

The Center for Excellence in Disaster Management and Humanitarian Assistance is a U.S. Department of Defense organization that was established by U.S. Congress in 1994 and is a direct reporting unit to U.S. Pacific Command. The Center is located on Ford Island, Joint Base Pearl Harbor-Hickam, Hawaii. The Asia-Pacific region is our priority of effort and collaboration is the cornerstone of our operational practice.

CFE-DMHA was founded because of a worldwide need based on lessons learned in complex humanitarian emergencies that took place in the Balkans, the African Great Lakes Region, Somalia and the Middle East since the beginning to mid-1980s. The need was for integrated education, training, certification, operational research, and interagency cooperation and coordination among many agencies and organizations, both civilian and military, to provide relief and regional stability.

### Our Mission

Facilitate collaborative partnerships, conduct applied research, and develop education, training, and information sharing programs in order to enhance U.S. and international civil-military preparedness, knowledge, and performance in disaster management and humanitarian assistance.

### Vision

Promote excellence in disaster management by connecting people, improving coordination, and building capability.

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## Disaster Management Reference Handbook Series Overview

The Disaster Management Reference Handbook Series is intended to provide decision makers, planners, responders and disaster management practitioners with an overview of the disaster management structure, policies, laws, and plans for each country covered in the series. Overviews of natural and man-made threats most likely to affect the country are discussed. The handbooks also provide basic country background information, including cultural, demographic, geographic, infrastructure and other basic country data. Endemic conditions such as poverty, water and sanitation, food security and other humanitarian issues are included. A basic overview of the health situation in the country and disease surveillance is also covered.

The handbooks include information on key national entities involved in disaster management, disaster response and preparation, and the military's role in disaster relief is discussed. Information on UN agencies, international Non-Governmental Organizations (NGOs), major

local NGOs, and key U.S. agencies and programs in the country, are also provided. The overall aim is to provide a guide that brings together important information about disaster management and response for each country in an effort to provide a basic understanding for the reader.

Information in the handbooks are compiled and based primarily on trusted, reliable, publicly-available sources. Much of the information used is from U.S. or other government sources, UN sources, NGO websites, scholarly references, foreign government websites, and various media sources.

Whenever further information available may be relevant, a link to the original internet source is provided. Each handbook is a working document and will be updated periodically as new, significant information becomes available. Constructive feedback is requested to further refine this document.

We hope that you find these handbooks informative, reliable and useful in understanding disaster management and response for this country. For comments, questions or to request additional printed copies of our Disaster Management Reference Handbooks please contact the Center for Excellence at: (808) 472-0518.

Please visit our website (<http://www.cfe-dmha.org>) to view the latest electronic versions available.





# Executive Summary

This country book focusing on Mongolia is intended to be a reference for individuals deploying to conduct disaster preparedness engagements or disaster response operations in Mongolia, but it is not meant to be a checklist or manual for all disaster response operations. The research team conducted extensive research and analysis on existing Mongolian plans, policies, and capabilities related to disaster management and risk reduction. The team also reached out to United States Government (USG) stakeholders and open source research to compile this book.

Mongolia is exposed to a range of intersecting and complementary natural disasters that have dramatic impacts on the nomadic lifestyle and livelihoods of a large segment of the population. Mongolia's disaster hazards are forcing changes on people who have relied on traditional forms of animal husbandry for food, income, and stability. As these changes exert influence on more of the population and cause people to move from rural areas to urban and peri-urban locations in search of work and support, Mongolia will see secondary effects from population migrations, economic hardship, sanitation and hygiene problems, and infrastructure demands.

Mongolia has well-established assessments and plans to identify disaster hazards and to organize responses to disasters. However, resource constraints continue to be a problem in implementing disaster risk reduction programs in support of those plans and mechanisms. As a result, Mongolia remains largely dependent on external assistance for funding to promote advances in disaster risk reduction and response capabilities. Additionally, the complex nature of the natural hazards in Mongolia creates challenges in identifying which risk factor or hazard to address first.

Mongolia faces development challenges as the population and economy struggle to adapt from traditional nomadic culture for food and livelihoods. The quality and availability of infrastructure, utilities, and services drop off outside of urban areas. As herders contend with slowly but persistently shrinking grazing areas, more prevalent drought conditions, and growing deserts, the urbanization trend of recent years will continue and possibly grow, meaning that Mongolia will have to integrate a large population of nomads into urban environments. The conditions of population migrations, cultural shifts, and economic growth will pose challenges that make development gains vulnerable to disaster and humanitarian hazards.



# MONGOLIA

## Country Overview

Mongolia Disaster Management Reference Handbook | 2014

# Country Overview

Mongolia's culture is still entrenched in nomadic or semi-pastoral traditions. The estimated population in Mongolia is about 3.2 million and is one of the most sparsely populated countries in the world.<sup>1</sup> Over the past few decades, the country has become increasingly urbanized, to the point that now about 60 percent of the population lives in urban areas, mainly in the capital city of Ulaanbaatar (Ulan Bator). In 1990, Mongolia transitioned from socialism to a market economy and democracy, through successful economic and political reforms.<sup>2</sup> The country's economy is growing due to its vast mineral resources, including copper, gold and coal. In the next few years, Mongolia's economy is anticipated to grow at a fast pace, which, if managed well, could reduce poverty and raise Mongolia to a middle-income country.<sup>3</sup>

## Culture

The culture in Mongolia is strongly influenced by the Mongol nomadic way of life along with Shamanism and Tibetan Buddhism. Cultural traditions on which Mongolian society is based are affected by rapid urbanization, social changes, and globalization. Mongolia struggles to attain a balance between rapid economic growth and preserving its cultural heritage and identity. Community awareness about the significance of cultural heritage for national identity is lacking and there is weak harmonization between international and national stakeholders regarding effective protection of cultural heritage.<sup>4</sup>

The Mongolian culture is known for its hospitality. Mongolians are very easy going and generally will not take offense when a foreigner is unfamiliar with local customs. Mongolians are happy and appreciative when foreigners take the time to learn some of their customs.<sup>5</sup> Families divide daily responsibilities among all members and no one person's work is considered more important than another's. The men usually tend to the horses and the herds along with hunting. Women are responsible for cooking, making clothing, taking care of the children, and milking the animals.<sup>6</sup> Over the past decade, a series of climatic disasters have led to death and lost livelihoods, forcing half a million nomads to abandon their nomadic lifestyle and look for a new life in urban cities.<sup>7</sup>

The nomadic way of life is disappearing but



Figure 1: Mongolian Ger<sup>8</sup>

the horse remains a national symbol.<sup>9</sup> A nomad moves from one place to another with or without livestock. Nomadism is a lifestyle adapted to fertile regions where mobility is the most efficient approach for using scarce resources. Mongolia is one of the last horse-based cultures in the world and the people value their horses.<sup>10</sup> The horse holds the highest position in Mongolian tales and legends.<sup>11</sup>

The ger is traditional housing in the form of a portable, felt-wrapped, round tent. These homes are part of the national identity and have been an iconic part and tradition of Mongolian nomadic culture for centuries. They provide housing for almost half of the country and also serve as urban housing in Ulaanbaatar's neglected districts.<sup>12</sup>

Mongolia embraces its Buddhist heritage. The Dalai Lama is a very popular figure and has visited many times. Mongolians practice Buddhism with hints of Shamanism. Mongolia has a small Muslim community at just around 6 percent of the total population. These are mostly ethnic Kazakhs living in the west. There are also a large number of Christian missionaries coming in country, and their proselytization activities have caused some tension among Mongolians.<sup>13</sup>

Corruption in Mongolia is present everywhere, but they are ranked 83 out of the 177 countries on Transparency International's Corruption Perception Index (CPI) for 2013 with a score of 38 out of 100.<sup>14</sup> Corruption is endemic amongst government officials and judges, and weak institutions do not efficiently enforce anti-corruption processes. Mongolia lacks the capacity to enforce intellectual property rights law.<sup>15</sup> While corruption is a part of life in Mongolia, there are no indications that corruption has a significant influence on the provision and distribution of resources for emergency preparedness response.

## Demographics

Understanding the demographic context of Mongolia provides insight into socio-cultural factors that will affect disaster management effectiveness, disaster vulnerabilities, and resident capabilities. It is important to reflect gender, ethnicity, economics, and vulnerable groups in the planning and implementation of disaster preparedness, mitigation, and response activities to address gaps and risks.

## Ethnic Makeup

Ethnic minorities in Mongolia make up about 18 percent of the population and include the Barga, Bayad, Buryat, Chantuu, Durbet, Kazakhs and Tsaatan.<sup>16</sup> There are over 20 different groups of Mongols of which 19 live in Mongolia. The Halh (Khalka) is the largest group of Mongols and are the core of all Mongol people across North Asia. The Halh consider themselves the direct descendants of Genghis Khan. The Kazakh are the largest non-Mongolian ethnic group residing in Mongolia. The Kazakh are of Turkish descent and are the second largest Muslim group in central Asia. Presently, their number is decreasing as many migrate back to their homeland of Kazakhstan.<sup>17</sup>

Ethnic Group	Percentage of Total Population
Halh (Xanx)	81.5
Kazakh	4.3
Dorvod	2.8
Bayad	2.1
Buriad	1.7
Dariganga	1.3
Zachin	1.3
Urianhai	1.1
Others	3.6
Foreigners	0.3
Total	100

In 2010, ethnic minorities in Mongolia faced numerous challenges including structural inequalities, environmental crisis, poverty and development divides between urban and rural areas. These challenges tested the Mongolian governments' capacity and readiness of a govern-

ment already struggling to address the needs of their population living in poverty. Mongolian herders were faced with severe drought and a harsh winter that forced thousands of them to leave behind their nomadic life.<sup>18</sup>

Civil society groups play an important role in undertaking social issues and helping to strengthen political institutions. In April 2010, protests in the capital called for the dissolution of the parliament and a just distribution of Mongolia's natural wealth. Later that year, the Mongolian parliament agreed to discuss the new Constitutional Amendment Procedures of the 1992 Constitution of Mongolia. It is still unclear if any of the public review process took place and if so, to what extent minorities will participate.<sup>19</sup>

Women's rights activists play a key role in promoting human rights and public participation, fostering social change and a more gender-balanced society through increased efforts in tackling domestic violence and child trafficking, and promoting minority rights protection. The Law on Fighting against Domestic Violence (2004) and the National Programme on Fighting against Domestic Violence (2008) are efforts to help reduce violence against women. Domestic violence is a serious issue in Mongolia. Young women from rural areas are the most vulnerable to trafficking and abduction for commercial sexual mistreatment.<sup>20</sup>

### Urban Population

68.5% of total population (2011)

### Rate of Urbanization

2.81% annual rate of change (2010-2015 est.)

## Key Population Centers

The population density in Mongolia is low with only 2 people per square kilometer.<sup>21</sup> Most of the country's population is concentrated in the north-central region, which has the best transportation infrastructure, industrial establishments, and pasturelands.<sup>22</sup> The country's population living in cities is expected to increase to 75 percent by 2030. The population growth in Ulaanbaatar and Erdenet is about 4 percent annually. Due to the migration of people from rural to urban areas, the demand for water and sanitation services in these population centers is expected to rise.<sup>23</sup>

Mongolia is broken into 22 administrative divisions: 21 provinces (aimags) and one municipality (hot) of the capital of Ulaanbaatar. At the next level of administration, there are 9 districts

(sum) and 152 subdistricts (khoros). The capital is divided into 9 districts. Districts are divided into khoros and provinces are divided into counties, and counties are further subdivided into baghs.<sup>24</sup>

Ulaanbaatar is the capital of Mongolia and the largest city with a population of over one million people which accounts for almost half of the country's population.<sup>25</sup> The city is an independent municipality, meaning it is not part of any province. The symbol of Ulaanbaatar is a mythical garuda, which is a large mythical bird-like creature symbolizing stability and power. Ulaanbaatar is located in the central north in a valley on the Tuul River and is elevated 1,300 meters above sea level, making it the geographic center of Mongolia in addition to the cultural, industrial, and financial hub of the country. Ulaanbaatar is also the home to the country's road and rail network and connects to both the Trans-Siberian Railway in Russia and the Chinese rail.

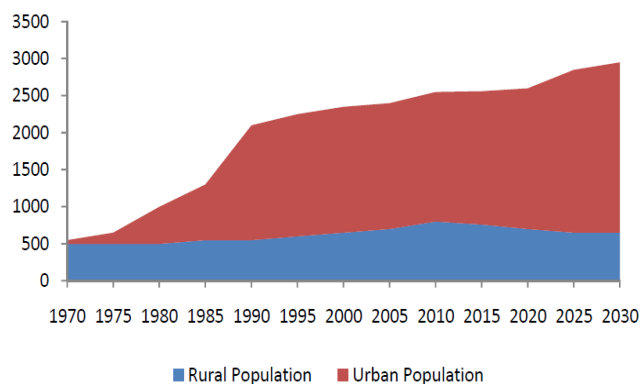
A majority of the population live in outlying districts of the capital, many without water supply or sanitation facilities and some without electricity. Many of these people live in ger areas which are peri-urban informal settlements that surround the capital city. The ger or semi-permanent structure population in Ulaanbaatar presently totals around 746,766 according to figures from a community mapping project developed by the city municipality along with the Asia Foundation and Australian Aid.<sup>26</sup> Ger residents live in felt tents or yurts and have simple unimproved pit lanterns used for sanitation.<sup>27</sup> This population does not have sufficient access to public services like piped water, sewage, schools, hospitals and public transportation. The city budget is mapping and integrating gers for the first time. In February 2013, a plan was approved by parliament to upgrade ger districts by building sub-centers with essential infrastructure to provide residents access to basic services like schools, water and sewage networks, paved roads and local heating plants.<sup>28</sup>

The cities of Darkhan and Erdenet are cases of planned urbanization. Erdenet is the second largest city in Mongolia with a population of approximately 83,379 and is located north between the Selenge and Orkhon rivers. Erdenet was founded in 1974 making it one of the youngest population centers in Mongolia. The area around Erdenet has large deposits of copper and is home to world's fourth largest copper mine the "Erdenet Mining Corporation", which is a joint Mongolian-Russian venture and accounts

for the good portion of Mongolia's income. This corporation alone accounts for over 10 percent of the country's GDP and employs almost 10,000 people. The city is linked to the capital, Darkhan, and Bulgan by a paved road and there is a train connecting Erdenet to the capital.<sup>29</sup>

Darkhan is a minor city on the Trans-Mongolian Railway and has the look and feel of Ulaanbaatar. It is located between Ulaanbaatar and northern border and had a population of 94,108 in 2012.<sup>30</sup> The city was founded in 1961 and within 20 years the population exceeded 50,000 and has continued to grow. A large industrial complex was built in the late 1960's with Soviet and eastern European aid making it one of the country's largest industrial centers. A power station fueled by coal brought from Sharyn Gol (42 miles north) is located in the city and supplies power to the local industry along with Ulaanbaatar and Suhbaatar.<sup>31</sup> Darkhan is the second largest educational center in Mongolia making the education level of city's population high. Hundreds of students travel to the city from other parts of the country to study. There are 10 higher education institutions, 25 secondary schools, 14 kindergartens, the Institute of Management and Development, a Regional Business Development Center and the Plant Science and Agricultural Training Research Institute.<sup>32</sup>

Mongolia's Urban and Rural Populations



Source: United Nations, 2006

## Vulnerable Groups

According to the United Nations Development Programme (UNDP), the poverty index is 23.4 percent in Ulaanbaatar. A fifth of children under the age of five years old are stunted. Global climate change is affecting Mongolia and is putting poor and vulnerable children along with their

families at risk of losing their lives and livelihoods in the short term and becoming vulnerable to more dramatic changes in the long term. Climate will affect access to nutritious food, clean water and their livelihoods in a safe environment. A large amount of the Mongolian population, mostly children, is vulnerable to extreme weather events which are forecast to become more frequent and severe as a result of climate change. Reducing the vulnerability in children and strengthening disaster risk reduction policies in the country are seen as key elements of adaption to climate change in Mongolia.<sup>33</sup>

In rural populations, water stress is a vulnerability for people living a nomadic life and it decreases their resilience on which their livelihoods depend. Mongolia's poor water quality is linked to health issues such as diarrheal diseases like dysentery, typhoid, and Hepatitis A. There are also increases risks to chronic diseases like kidney and urinary tract problems due to the hardness of the water.<sup>34</sup>

The female unemployment rate remains around 30 percent. More women than men are unemployed because private companies are hesitant to hire younger women saying they take more leave or resign after becoming pregnant. The women who are in the workforce also have responsibilities at home and spend hours on chores outside of work. There are many female-headed households due to male unemployment, which results in higher numbers in alcoholism, crime, and domestic abuse. Female-headed households are vulnerable and make up a portion of the population living below the poverty line. Government cutbacks have also affected women by reducing aid for food, energy, and housing. Health facilities have also declined with decreased funding for equipment, medicine, and supplies. These issues have led to higher rates in prostitution, trafficking of women, and children living on the streets.<sup>35</sup>

## Economics

Mongolia is a growing economy with large untapped natural resource deposits and long history of herding livestock as an economic base. Mongolia's economy and market base have been expanding every year, helping Mongolia become a middle-income country.<sup>36</sup> However, the infla-

tion rate has risen, leaving low-income families in the capital city on the edge.<sup>37</sup> Mongolia has experienced rapid economic growth nearly doubling its GDP in 2011 due to the developing mining sector. In 2013, the economy grew in the first half by almost 12 percent. Agriculture played a big role in this growth, increasing 20 percent. Foreign direct investment dropped almost 50 percent due to uncertainties arising from changes to legislation governing it, slower growth in China and the completion of the first phase of the Oyu Tolgi copper and gold mine.<sup>38</sup> China accounts for 50 percent of foreign direct investment in the country.<sup>39</sup> Despite Mongolia's economic growth over the past few years, over a quarter of the population remains under the poverty line and the unemployment rate is around 10 percent.<sup>40</sup>

Economic Overview	
GDP (2011)	US\$8.5B
GDP Purchasing Power Parity	US\$ 13.4B
Human Development Index Rank	108
Economic Growth (2013)	11.7%
Unemployment Rate	11%
Human Development Index	0,675 (HDR 2013)
Poverty Rate (estimate)	27,4% (NSO 2013)
GNI per capita	\$4,245 (2012, HDR 2013)
GDP per capita	\$3,342
Inflation rate	12.5% (NSO 2013)
Sources: Human Development Report 2013, National Statistical Office, Mongol Bank	

Mongolia's economic freedom score is 58.9 making it number 97 in the 2014 index. The country is 19<sup>th</sup> out of 42 countries in the Asia-Pacific region, which put its overall score above the regional average. Over the past two decades, Mongolia has improved its score due to progression in economic freedoms such as: monetary freedom, fiscal freedom, and trade freedom.<sup>41</sup> Despite these advances, institutional reform is still slow to progress.<sup>42</sup>

Mongolia has experienced a quick economic transition, mainly driven by growth in mining. The country appeals to many foreign investors due to its wealth of natural resources. The GDP is expected to double by 2015 due to large mining projects. Social and living conditions have improved due to the expanding economy. According to the World Bank, in 2010 an estimated 39.2% of the population lived below the poverty line. Human development is one of the top priorities for the government, particularly education,

health, and social protection. The Human Development Index (HDI) for Mongolia has improved over the past few decades and is now considered a medium-human development country.<sup>43</sup>

Only one percent of Mongolia's land is used towards crop production. Production is mainly in the northern parts of the country where more precipitation and soil moisture make favorable conditions for agriculture. Because of Mongolia's long cold winters, there is only one annual crop, mainly spring wheat, barley, or oats and the rest are a few vegetables. Mongolians primarily rely on livestock for their food just like their ancestors who were mainly nomadic herders.<sup>44</sup> Agriculture in Mongolia is broken down into four areas:<sup>45</sup>

- Extensive Livestock – Traditional semi-nomadic pastoral system where camels, horses, cattle, sheep and goats graze together
- Mechanized large area crop production of cereals and fodder crops
- Intensive Farming – Producing potatoes and other vegetables with both mechanized and simple production methods
- Intensive Livestock – Household dairy cattle, pigs, and poultry. Livestock contributes around 80 percent of total agriculture production.

Mongolia is expected to have rapid growth due to the launching of new large-scale mining projects. Mineral commodities account for roughly 80 percent of Mongolia's exports and mining contributes about 40 percent of total government revenue. The manufacturing sector contributes around 10 percent to the GDP. Products include: foods; clothing made from cashmere, wool, skins, furs; wood products such as frames and furniture; rolled copper sheeting; copper wire; and zinc concentrates.<sup>46</sup>

Dependence on mining profits exposes the economy to global price fluctuations. China remains Mongolia's main trading partner and accounts for 90% of exports in 2012.<sup>47</sup> Besides mining and agriculture, dominant industries in the composition of GDP are wholesale and retail trade and service, transportation and storage, and real estate activities. Mongolia's economy continues to be heavily influenced by its neighbors.<sup>48</sup>

## Environment

Environmental considerations influence disaster management in profound ways, from the types of risks that are prevalent to natural protections that mitigate disasters. This section outlines some of the key environmental factors that contribute to Mongolia's disaster hazards and affect potential response operations.

## Borders

Mongolia is landlocked between China and Russia, with its borders along the two countries totaling 8,158 kilometers. Mongolia's borders with Russia and borders with China can be geographically divided into eastern and western border areas rather than northern and southern boundaries. To the west, the borders are mostly mountainous and rugged, while to the East, they consist of deserts and grasslands. The Gobi desert lies along the southernmost portion of the border with China and contains little infrastructure.<sup>49</sup> Britain's Foreign and Commonwealth Office (FCO) caution travelers against visiting border regions as roadways are often unrecognizable by non-residents, the border security force can detain people within 100 kilometers of a border, and many border crossings are open only to Mongolians, Russians, and Chinese.<sup>50</sup> There are roughly 20 official border crossing points along the Mongolia-Russia border. The main issues along the northwest border are cattle rustling and meat smuggling. The majority of tourists enter Mongolia through three entry points:

- Ulaanbaatar – by flight
- China (Zamin-Uud crossing) – by train or car
- Russia (Sukhbaatar/Altanbulag) – by train or car

## Geography

Mongolia has a land area of 1,566,500 square kilometers and is filled with a very diverse geography. It has the greatest global mass in the world and is the sixth largest country in Asia. The country is mountainous with an average altitude of 1,580 meters above sea level. The main mountains are located in the west with most of the area being above 2,000 meters making the highest peaks always snow-capped with glaciers.



The highest peak is Huiten Peak at 4,374 meters located in the Mongolian Altai mountain range. Mongolia is also filled with hundreds of lakes withUvs-Nuur being the largest at 3,350 kilometers. In the north and central regions, mountains and dense forests cover the land. In the east, vast grasslands of the Asian steppe exist. The steppe slowly disappears into the Gobi Desert which extends into southern Mongolia from the east to west. The Gobi Desert is mainly rocky dirt and silt with gravel, there are also sand dunes in the drier parts near the southern border.<sup>51</sup>

The Major Topographic Regions in Mongolia:<sup>52</sup>

- **High Mountain Zone** – The high mountain zone has winds, extreme cold, and a short growing season. The zone is above tree line and is characterized by tundra and alpine.
- **Taiga Forest Zone** – Northern Mongolia comprises the southern rim of Siberia’s vast Taiga Forest, the largest forest in the world and is a boreal coniferous forest.
- **Mountain Forest Zone** – In the south, about 25% of the country is a mixture of forest and grassland which is a transition zone between the Taiga Forest and steppe. The northern slopes are covered in trees and the southern slopes are covered in grassland. The landscape has biological diversity and home to roe, elk, deer and wolves.
- **Steppe Zone** – The steppe zone is sea grass covering about 20 percent of the country and is located in the far south. This is vital for livestock of the semi-nomadic herder families.
- **Desert Steppe Zone** – The grasslands of the steppe are a transition to the desert steppe zone on the northern rim of the Gobi Desert. This transition zone covers 20 percent of Mongolia and is mainly dry grasslands with strong winds and dust storms.
- **Gobi Desert Zone** – The Gobi is a huge desert on the border of Mongolia and the Inner Mongolia region of China. The desert has bare rocky mountains, sand dunes, huge desert flats and well-watered oases. The climate is harsh with 104 degree Fahrenheit in the summer to negative 40 degree Fahrenheit in the winter.

The geography in the country varies, the north and west are covered with mountains, meadows, steppes and forests that support good grasslands and have dense populations.<sup>53</sup> As mentioned, Mongolia has an abundance of lakes, rivers and streams located mainly in the north. The most notable of them is Lake Khovsgol in the northwest. It is a vast blue lake with crystal clear fresh water in the middle of a nearly alpine landscape surrounded by ancient forests and snow-covered mountains.<sup>54</sup>

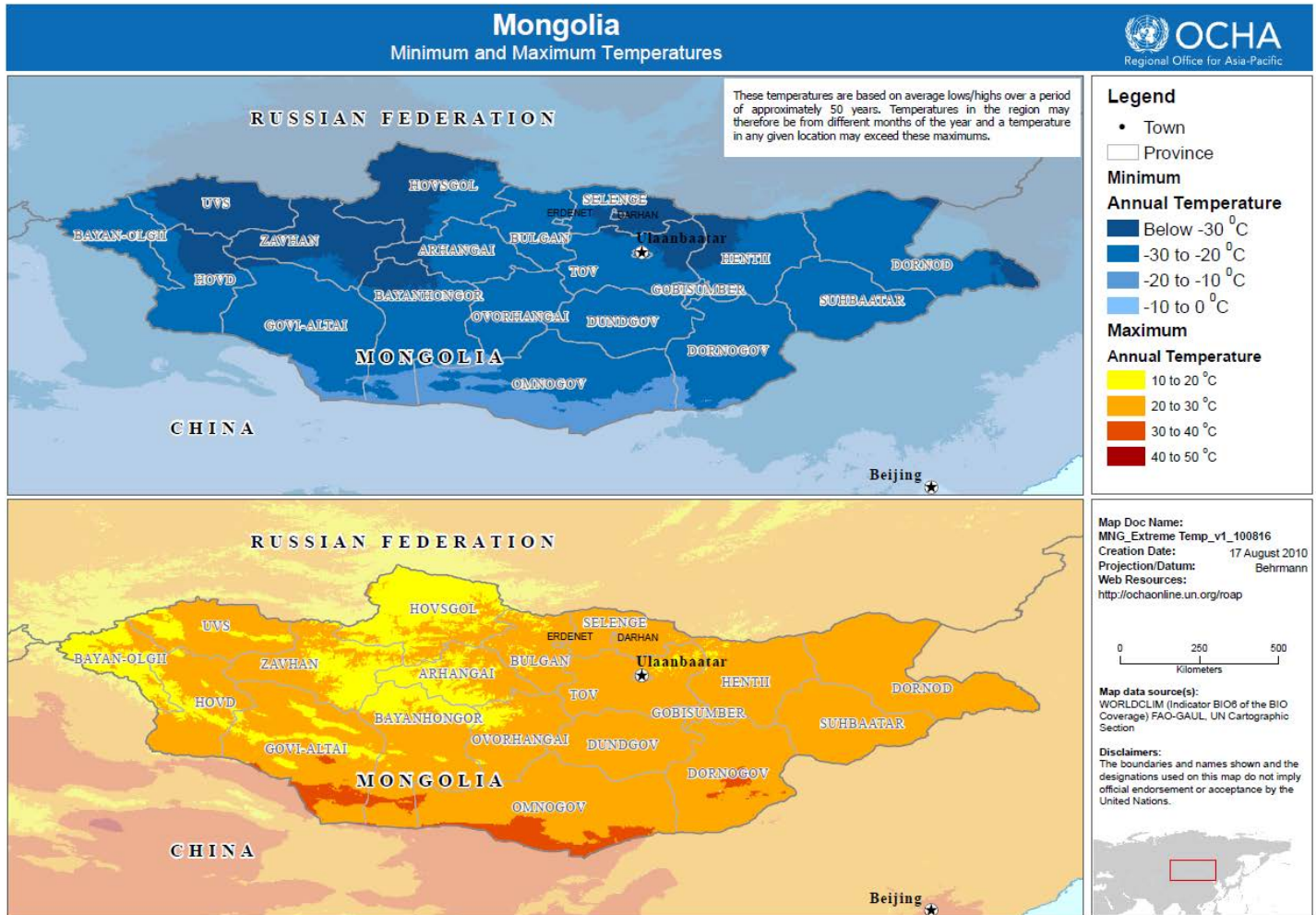
The Gobi Desert located in the south is home to rare mammals at the brink of extinction such as: the Gobi brown bear, black tail antelope, Mazalai and the wild Bactrian camel. This region is also filled with breeders of camels, goats and sheep that have adapted to scarce vegetation. To the east, it is mainly made up of vast steppes and plains.<sup>55</sup>

There are three mountain ranges and high plateaus that make up the west and southwest region of Mongolia. The Chain of Altai is located in the west, this is where the country’s highest peak is located at 4,374 meters and extends in a bend reaching the Gobi Desert and forms the region of Gobi Altai. The Khangai Range, located in the central region, this ranges’ peak is 3,905 meters and is the principal water tower of the country and the source of Selenge River which is the largest river in the country. Khentii Mounts is abundant forests and peaks rising to 2,800 meters which extend to the east of the capital city.<sup>56</sup>

## Climate

The climate of Mongolia can be described as continental and extreme and is known as “the land of blue sky” because the country experiences roughly 250 sunny days a year. The capital city of Ulaanbaatar is the coldest capital in the world.<sup>57</sup> Winters are long, starting in November and ending in late April. Spring is May through June and summer from July to September.<sup>58</sup> Winters are long, dry and cold while summers are warm.<sup>59</sup>

The summer months are usually rainy and sometimes turn into snow atop the mountain peaks. Rainfall is typically in the form of downpours and storms rather than continuous rain. Another nickname for Mongolia is “country of the seven winds”, due to the permanently blowing wind on the high plateaus. Strong winds turn into devastating dust and sandstorms in the spring. The winter brings large amounts of snow and the inaccessibility of pastures mixed with lack of feed deprives animals. Livestock aggra-



vated by the near arctic temperatures cause devastation in the herds and increase the desolation of nomadic families.<sup>60</sup>

Mongolia is already seeing indications of climate change. The government and the people need to sustain their joint efforts in dealing with

these challenges ahead, determine the vulnerabilities, prepare to adapt to changes, and to help curb the causes through all avenues available. For the past decade, Mongolia has been involved in climate change activities.<sup>61</sup>



# MONGOLIA

## Disaster Threat Analysis

Mongolia Disaster Management Reference Handbook | 2014

# Disaster Overview

## Hazards

Mongolia faces disaster threats that share common underlying factors. Mongolia’s disaster hazards are largely intertwined because of the contributing weather, climate, and environment factors, so one type of disaster has effects that create conditions for another type of disaster. These interconnected hazards pose significant threats to livestock, leading to food security and economic secondary effects.

## Natural

Mongolia’s most common and most devastat-

ing disasters come from natural hazards. Mongolia’s culture and traditions of nomadic lifestyles and animal husbandry leave large portions of the population and the economy vulnerable to natural disasters.

### Zud (dzud)

A dzud or zud is a complex meteorological natural disaster in which a dry summer is followed by a winter with abnormally low temperatures and high winds. The dry summer means that livestock have not grazed sufficiently, so they are underweight and less resilient to the harsh winter weather. Dzuds can lead to economic crisis and food security issues because of the overwhelming loss of livestock. Dzuds come in various forms, listed below.<sup>62</sup>

Type	Conditions	Effects
White (tsagaan) dzud	A thick layer of snow covers pastureland. This is the most common form of dzud	Affects large areas; prevents animals from grazing
Black (har) dzud	No snow in the winter and temperatures are consistently colder than average	Causes a water shortage and often coincides with a lack of winter grass
Iron (tumor) dzud	Snow melts and freezes, creating a covering of ice over the pastureland.	Blocks access to pasture, preventing livestock from grazing
Hoof dzud	Drought	Depletes grassland
Combined (havsarsan) dzud	A combination of any of the above conditions	Above effects are compounded, exacerbating the strain on livestock

In 2009-2010, Mongolia experienced a severe dzud in which 8.5 million livestock died which was about 20 percent of the country’s livestock. The Red Cross says 22,000 herding households were affected and either lost half or most of their entire herd.<sup>63</sup> For calculating and classifying the impacts of a disaster, any cattle loss over 5 to 6 percent of livestock is considered catastrophic in Mongolia.

### Drought

Most of Mongolia, approximately 90 percent of the country, is considered moisture deficient to arid. The Gobi Desert makes up about 40 percent of the country’s territory, which makes desertification and drought a pressing concern, especially for a country dependent on a nomadic tradition and livestock for livelihoods, food secu-

urity, and trade. Historically, Mongolia has had a notable drought every three years on average.

Mongolia experiences soil degradation caused by wind and aridity. The soil degradation is exacerbated through deforestation for fuel, overgrazing, overuse of fertilizers and insecticide, and poor irrigation practices. Overgrazing is a threat because in the past three decades, the number of livestock has grown by 44 percent while grasslands have been reduced by 20 percent, and over the same time period the yield per hectare has dropped significantly.

Global warming projections add to concerns about the drought hazards threatening Mongolia. As air temperatures increase, surface water levels and river flows decrease because of water evaporation. Increased evaporation and decreased surface water levels lead to poor soil conditions and changes in vegetation, which in turn hold

less moisture and topsoil and can contribute to further soil erosion, dust storms, and desertification. The table below shows historical drought indices for Mongolia, and it is clear that drought conditions have gotten worse in recent years.

harvesting of fuel woods.

The livestock population in Mongolia has been growing and has exceeded the capacity of pastures to feed grazing herds. Lax land access and animal husbandry practices have led to a significant increase in herd sizes and the ways in which nomads identify which grasslands they will use to allow their livestock to feed, without suitable oversight and management of resources with a vision toward conservation. At the same time, over the past 40 years many water sources in Mongolia have gone dry. According to the United Nations, 2,096 springs, 887 rivers, and 1,166 lakes have died across Mongolia, which is a clear factor in shrinking grasslands. When considering that Mongolia is left with 6,900 springs, 3,811 rivers and streams, and 3,000 lakes, those losses represent a substantial proportion of Mongolia's water resources.

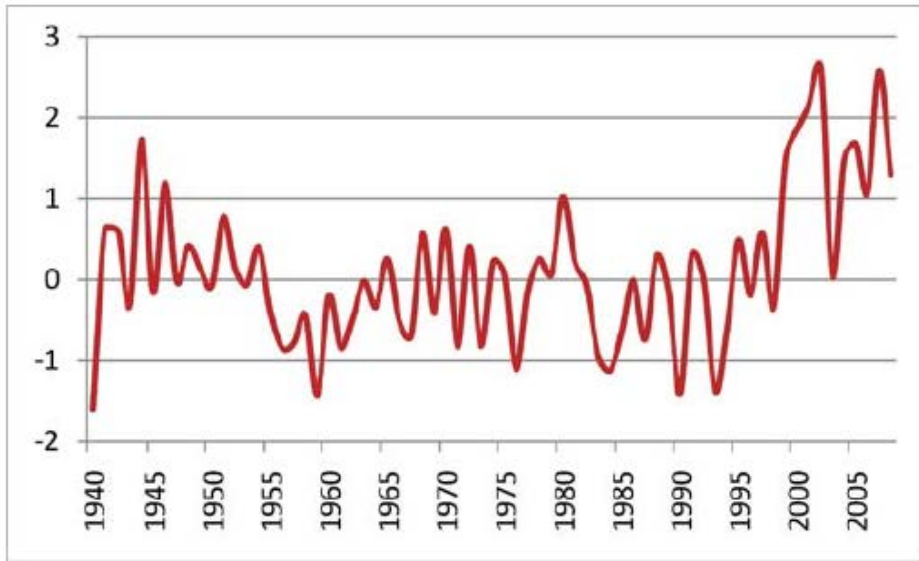


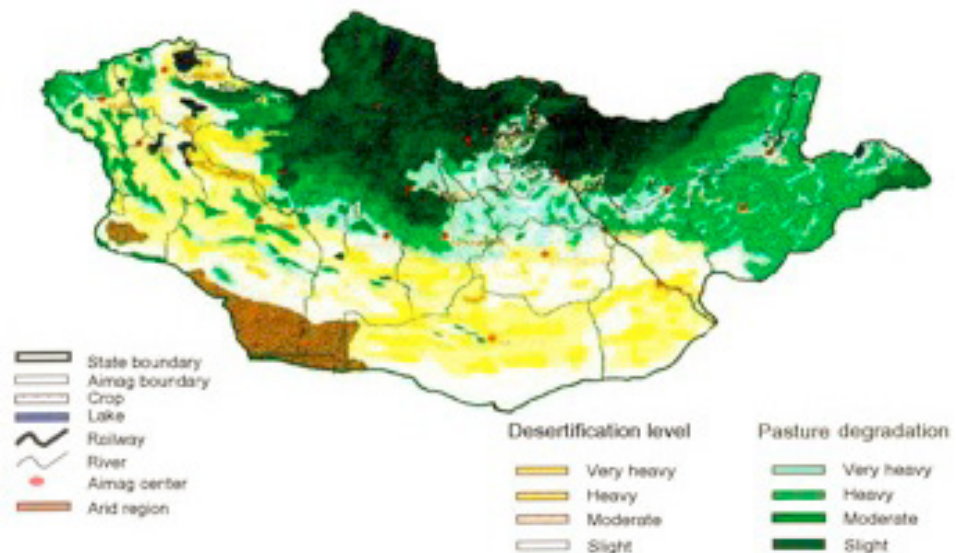
Figure A3.5.2. Multiyear History of Drought Indices.

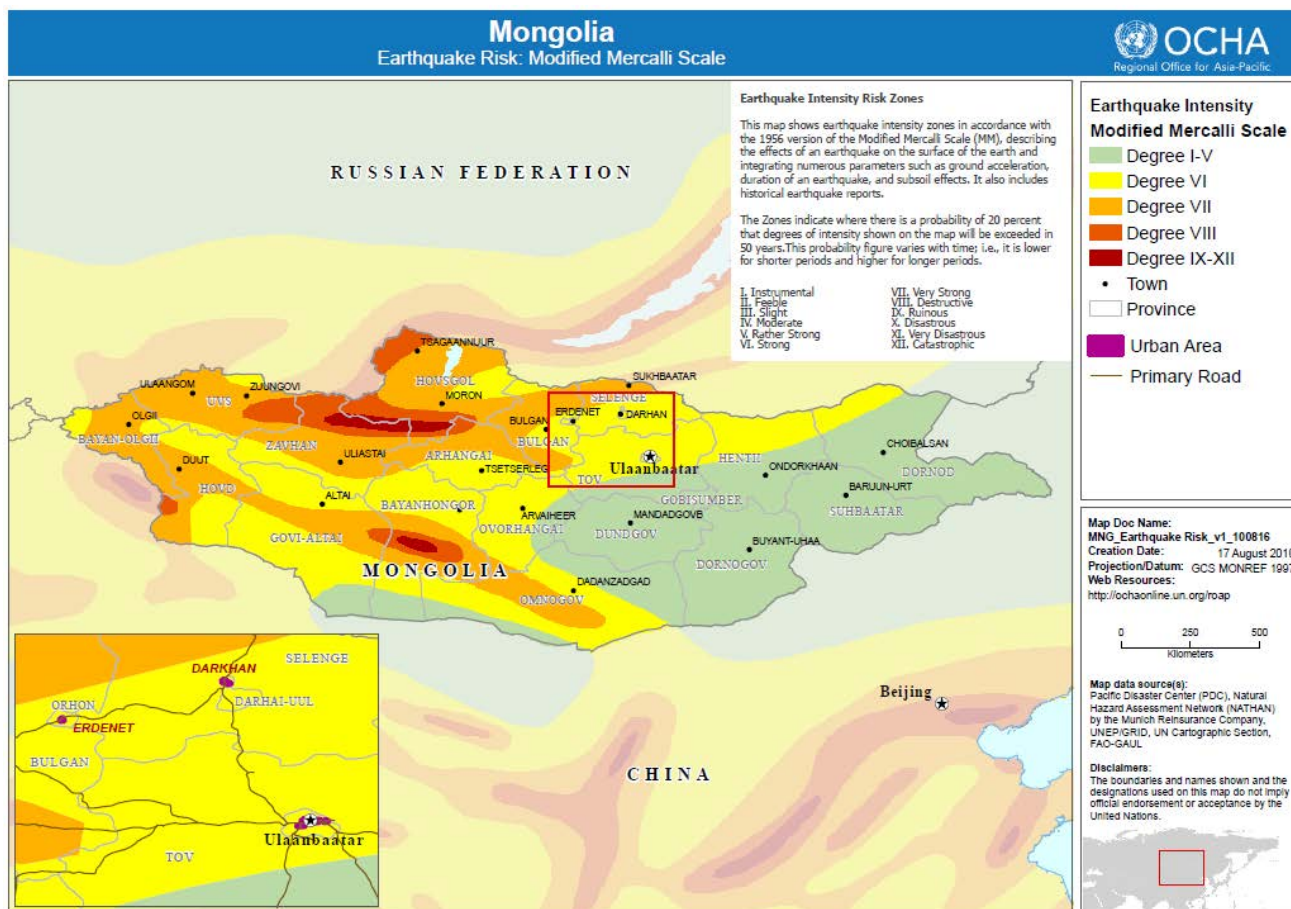
### Desertification

Desertification is the spread of deserts to previously fertile land. This process happens in transition zones on the fringes of deserts where stress on the ecosystem through human, animal, or other activity degrades vegetation and soil beyond its tolerance. As animals graze on grasslands in fringe areas, they remove plants that can hold the soil in place and their hooves pound the soil into finer powder that is more easily blown away by the wind. The Gobi desert covers almost 40 percent of the country's territory, and nearly 90 percent of grasslands in Mongolia are threatened by desertification due to overgrazing and

### Earthquake

Approximately 80 percent of Mongolia is seismically active. The country has an average of almost 30 earthquakes every year, but these earthquakes measure 4.5 or weaker, so many of





them are not even felt. Strong earthquakes are rare in Mongolia, so the population and infrastructure are largely unprepared for a massive earthquake. The areas of Mongolia that have the highest earthquake intensity risk zones do not have major population centers, but without earthquake resistant infrastructure in place, the effects of a less intense earthquake in a major urban zone could have more damaging impacts.

## Forest and Steppe Fires

Mongolia's steppes and forests are vulnerable to fires during the spring and fall dry periods, and they spread in the areas and seasons when winds are high. Over 60 percent of forest and steppe fires in Mongolia are started by human actions. Approximately 50 to 60 forest fires and about 80 to 100 steppe fires happen in Mongolia each year, with about 80 percent of those fires happening in the timeframe from March to mid-June. This season is ripe for such a high percentage of forest fires because the snow cover melts and wood dries out quickly on elevated

landscapes. Steppe fires are common in the spring and fall in the forest-adjacent areas where pine needles are plentiful, and they are common in high elevations in May and June when lightning strikes are more frequent and can ignite dry grasses. The Mongolian Government has passed a Law on Forest Fire Prevention but enforcement is not entirely successful because of gaps in institutional capability.

## Storms

Mongolia has a variety of types of storms that present hazards: snow storms, dust storms, wind storms, and sand storms.

Snow storms are one of the greatest concerns for Mongolia's nomads and livestock after drought and desertification. People caught in heavy snow storms can become lost and herders in the countryside may not be able to return to shelter and warmth. Blizzards that are sustained longer than nine hours and have winds stronger than 35 miles per hours are given special consideration as dangers.

Dust storms are common in Mongolia as soil

from the desert's boundaries is picked up by strong winds and carried across the country. The dust storms are one of the biggest contributors to soil erosion in Mongolia and further the spread of the desert.

Wind storms in lower lying part of Mongolia have gusts over 35 miles per hour, but stronger winds over 90 miles per hour can turn into tornadoes in almost any part of the country.

Hail is fairly common in the summer in the Khangai, Khovsgal, and Khentii regions. Hail storms in Mongolia are quite destructive and have been reported to cause great damages to crops and, in some cases, deaths.

Finally, Mongolia has sandstorms in the Gobi Desert and surrounding regions where the wind is strong. Sandstorms are by far most common during the spring, and least frequent in the summer.

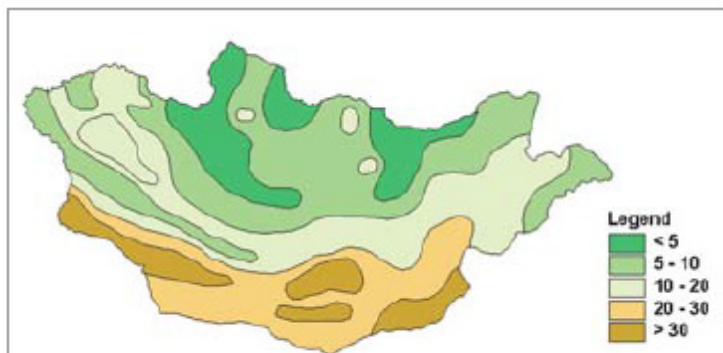
## Flood

Floods in Mongolia are mainly caused by snowmelt in the spring and heavy rains in the summer. Since Mongolia is a mostly arid country, it might seem strange that floods would be a disaster threat. However, the low precipitation and high evaporation of surface water mean that the soil generally has a low absorptive capacity, so higher than normal precipitation turns into runoff that has the potential to build into floods. As much as 70 to 80 percent of the flooding in Mongolia is caused by rainfall floods from June to September, while anywhere from 20 to 60 percent of flooding is caused by snow melt in April and May.

## Insects

Mongolia's plant life is affected by insects, with severe infestations happening about every decade. However, many of the insects that attack Mongolia's forests feed on dead trees, so growing drought conditions are increasing the frequency of these major insect infestations. Grasslands, steppes, and agricultural areas are impacted by grasshoppers and other types of winged insects. Mongolia's deciduous and coniferous forests are home to insects like the Siberian silk moth, Jacobson's inchworm, and others that cause as much damage as fires. The damage that insects cause to Mongolia's forests is extensive, affecting almost one-third of the 10 million hectares of the country's forest cover.<sup>64</sup> Insects affect naturally regenerating forests as well as the planted forests that are legally mandated to replace harvested timber by logging companies, effectively reducing the number of trees that have economic value.

Pest control efforts are complex and have mixed results, because of factors like the range of plants that the insects eat, cost of materials and equipment, the large geographic regions affected, the broad variety of insects that pose a large scale problem, and budget constraints. Sprays are the most common method of pest control, but there is a lack of expertise in pest management in Mongolia. Most spraying is done on the ground, since there are extremely limited resources to conduct aerial spraying.



**Figure 3.8 Geographical Distribution of number of days with Dust Storm**



**Figure 3.9. Geographical Distribution of number of days with Drifting Dust Storm**

## Infectious Disease

Mongolia has relatively low incidences of many infectious diseases like tuberculosis and HIV/AIDS, but the close proximity of a large segment of the population to livestock presents vectors for the transmission of zoonotic diseases. Mongolia has a small number of anthrax and plague cases each year, and it has one of the highest rates of prevalence of Brucellosis. The country had cases of avian influenza (H5N1) and pandemic influenza in 2009 that spread to areas across the country.





# MONGOLIA

## Government

Mongolia Disaster Management Reference Handbook | 2014

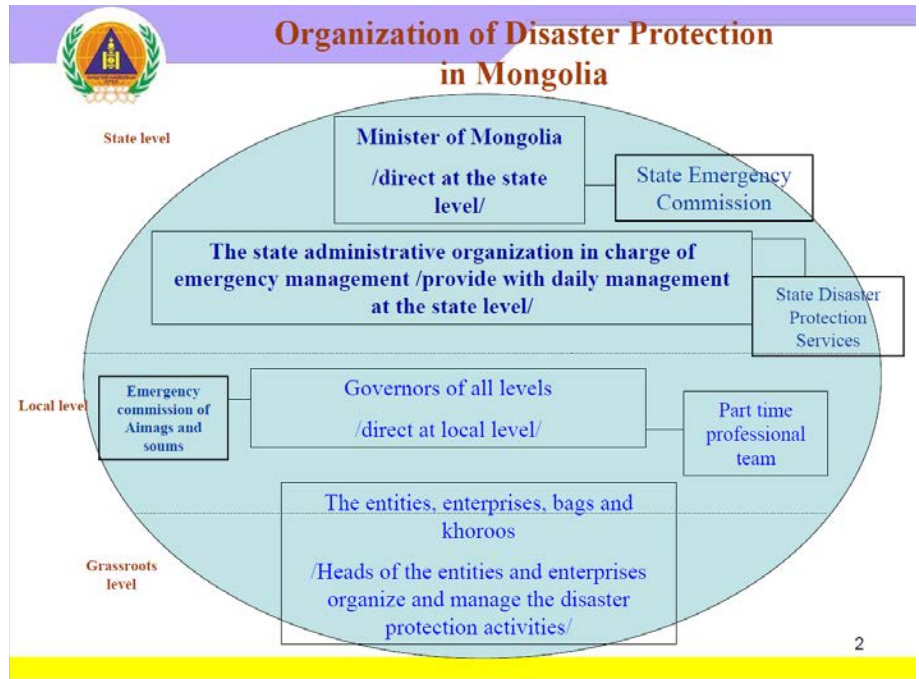
# Government Structure for Disaster Management

As with the rest of the world, Mongolia has experienced an increase in the number and severity of disasters over the last decade. Previously, the government centered disaster protection efforts on response activities such as search and rescue and receipt of humanitarian assistance with little effort spent on reducing disaster impacts. The stance of the government on disaster preparedness has shifted since the devastating severe winter conditions in 1999-2000 and 2000-2001, which led to huge losses in livestock and crippling losses of livelihood for the herder populations (dzuds). Mongolia transitioned the disaster response approach to disaster risk reduction and preparedness activities, and building capabilities with the assistance of all levels of government and their international partners. The Government of Mongolia founded the critical infrastructure of disaster management by establishing disaster management entities and the legal framework to support disaster management.<sup>65</sup>

## National

### State Emergency Commission

The original state commission was established as the State Permanent Emergency Commission (SPEC) in 1990 by the Government of Mongolia. The four main functions of the SPEC included the national plan, coordination from ministerial to the local government level, coordination of relief activities and measures to reduce consequences and oversight of reconstruction or rehabilitation measures in the cities and each aimag.<sup>66</sup> The SPEC evolved into the current State Emergency Commission (SEC) which has is the primary decision maker for the political and operational issues during the advent of a national emergency. The SEC is chaired by the Deputy



Prime Minister and is responsible for elevating issues raised by NEMA and the humanitarian community to the awareness of the government. Funding requests and resource requirements are examples of the types of issues that might be broached.

Ten key ministries/agencies comprise the SEC and are responsible for disasters and crisis management. The SEC members (new ministry titles were announced in 2012)<sup>67</sup> are:

- Ministry of Industry and Agriculture (formerly known as Ministry of Food, Agriculture and Light Industry)
- Ministry of Energy (formerly known as Ministry of Mineral Resources and Energy)
- Ministry of Nature, Environment and Green Development (formerly known as Ministry of Nature, Environment and Tourism)
- Ministry of Health
- General Police Department
- General Agency for Specialized Inspection
- Information, Communication, Technology and Post Authority
- Ministry of Roads and Transport and Ministry of Construction and Urban Development (formerly known as Ministry of Roads,

Transportation, Construction and Urban Development)

- Government Press Agency
- Nuclear Energy Agency

The National Emergency Management Agency (NEMA) supports the SEC in overall crisis management including planning at the interdepartmental and interagency levels.

### National Emergency Management Agency (NEMA)

The Government of Mongolia established the National Emergency Management Agency (NEMA) in January 2004 through the unification of three key entities, the State Board for Civil Defence, Fire Fighting Department and State Reserve Agency. The vision of NEMA is “to support in providing national safety through risk and vulnerability reduction, strengthening disaster management and implementing intensive disaster protection measures based on community involvement.” NEMA’s responsibilities are defined by four basic laws: 1) Law on Disaster Protection, 2) Law on Fire Safety, 3) Law on Forest

and Steppe Fire Protection, and 4) The Law on State Reserve.<sup>68</sup>

The agency’s emergency resources encompass 3200 emergency personnel (rescuers and firefighters) disseminated across the nation in the local emergency management divisions or departments. The resource cache include the Emergency Motor Depot from which emergency trucks are dispatched and repaired, the Rescue Special Unit (search and rescue teams and firefighters), firefighting stations, and the armed force as mobilized under mutual agreements. In the event of a disaster, NEMA will provide oversight, coordination, and direct assistance. The organization utilizes the Incident Command System, a standardized, on-scene, all-hazards incident management approach.<sup>69</sup> NEMA is present in all 21 provinces and the capital city in the emergency management divisions and departments.<sup>70</sup>

NEMA actively prepares for disasters as seen by the actions taken in preparation for the winter of 2012-2013. During an irregular meeting, NEMA resolved to withdraw from the State Reserve Fund 42 million MNT (almost \$24,000) to evacuate 907 households from Uvurkhangal aimag to Bulgan and Bayankhongor aimags. The Deputy Prime Minister and State Commis-

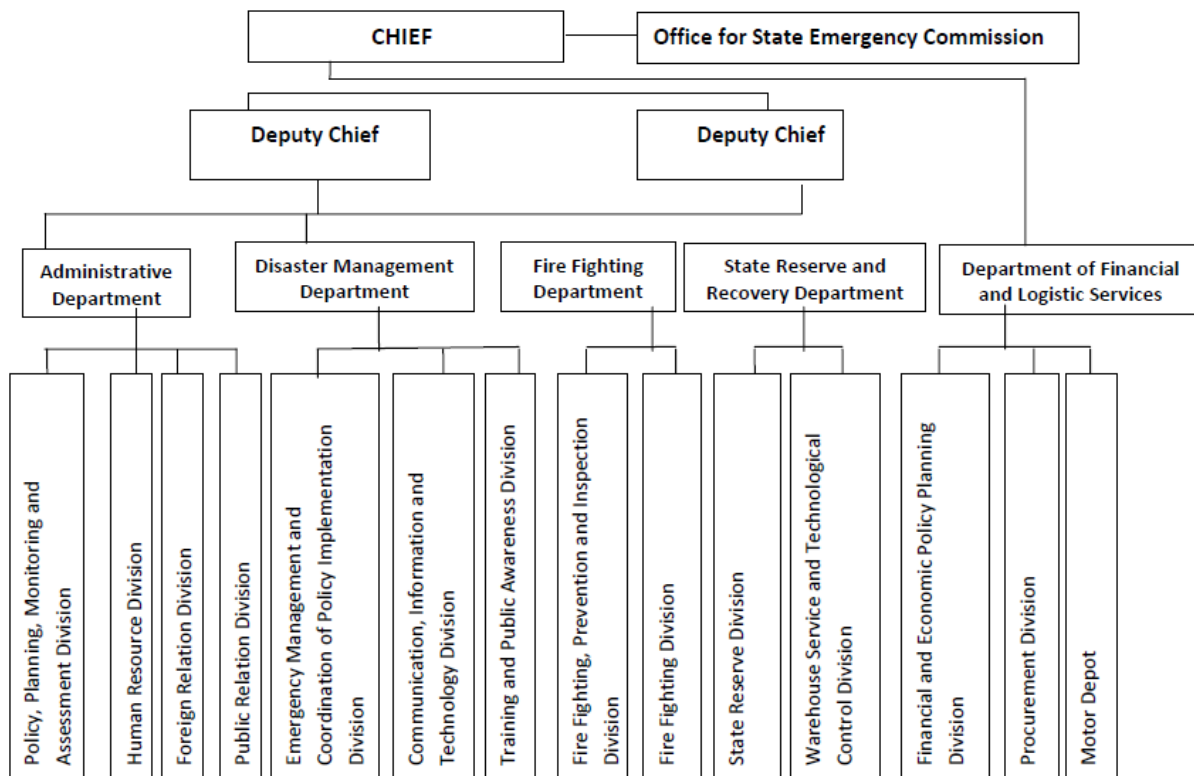


Figure: NEMA Organization<sup>72</sup>

sioner of NEMA also charged the governors and authorities and the associated Emergency Management Service to prepare and strengthen disaster protection capacities and technical support.

NEMA develops policies for disaster risk reduction as evidenced by the “State Policy on Disaster Protection” and “National Program for Strengthening the Disaster Resilience of Mongolia” reported in the 2011 Hyogo report. These policies serve to protect and build resiliency of the population.<sup>71</sup>

### **National Climate Committee (NCC)**

The Government of Mongolia recognizes the potential of extreme climate change to adversely impact the Mongolian economy and social welfare. Since the 1990’s, the government has invested in environmental priorities and policies as demonstrated in the signing of the United Nations Framework Convention on Climate Change (UNFCCC) in June 1992. From 1992 until 1997, the Ministry of Nature and Environment was created and environmental action plans were written.<sup>73</sup> In 1997, the National Climate Committee (NCC) was established to coordinate and guide national activities and measures directed to adapt to climate change and mitigate greenhouse gas (GHG) emissions. The committee approves and guides climate change policies and projects for the country. The NCC is responsible for implementing UNFCCC and Kyoto Protocol commitments and nationwide activities.<sup>74</sup>

### **Provincial Disaster Management Structure**

While NEMA is the operational national level disaster management entity, the provinces have administrative responsibilities as well. The Emergency Management Unit (department or division) resides in each of the 21 provinces and is responsible for disaster prevention, recovery, reduction of risks and vulnerabilities, and assessment of previous emergencies and disasters within the province. The units function as implementing agencies together with the provincial Governor’s Office as funded by the state budget.<sup>75</sup> The governors at the provincial (aimag) level are responsible for leading the emergency response for their authorized areas.<sup>76</sup>

### **Community Groups**

Community-based disaster management initiatives strive to establish partnerships and cooperatives among the vulnerable social groups and certain target groups. The groups organize to mitigate disaster risks and protect their sources of livelihood such as livestock and crops. The end result is the establishment of local capacities to deal with disasters. One of the initiatives involves the over 40 Herders’ groups comprised of 300+ households and 600 herders. The groups are focused on reducing disaster risks and develop their capabilities through training and small grants. The herders’ groups have built the capacity to take joint measures against disasters, established a joint disaster protection fund and improved their standard of living by 10-50 percent.<sup>77</sup>

Climate change measures and actions are managed by the Ministry of Environment and Green Development (previously Ministry of Nature, Environment and Tourism), Ministry of Energy (previously Ministry of Mineral Resources and Energy), Ministry of Industry and Agriculture (previously Ministry of Food, Agriculture and Light Industry) and Ministry of Foreign Affairs (previously Ministry of Foreign Affairs and Trade).<sup>78</sup> The implementing agency for the Ministry of Environment and Green Development is the National Agency for Meteorology, Hydrology and Environmental Monitoring (NAMHEM). Organizations under the NAMHEM include the Institute of Meteorology and Hydrology (IMH) and all of the local centers for Meteorology, Hydrology, and Environmental Monitoring of Mongolia.<sup>79</sup>

### **Laws, Policies, and Plans on Disaster Management**

The Government of Mongolia progressively developed the legal framework and plans for disaster management in conjunction with the guidance and assistance of multiple international organizations and as a result of national level projects designed to build the country’s capabilities and capacities. The Government of Duchy of Luxembourg and United Nations Development Programme (UNDP) 2002-2011 project “Strengthening the Disaster Mitigation and Management System in Mongolia” delivered a number of policy making and planning proposals such as “Law of Disaster Protection, “National Policy in Disaster Protection, and National Pro-

gram on Strengthening Disaster Protection/Risk Management Capacity in Mongolia.<sup>80</sup>

## Law of Mongolia

The Law of Mongolia on Disaster Protection written in 2003 authorizes the legal framework for disaster prevention, rescue, response, and recovery measures except for circumstances involving war or weapons of mass destruction. The purpose of the law is to regulate matters involving the principals and full powers for the disaster protection organizations and agencies and the associated activities. The Law addresses the rights and responsibilities for the State, local authorities, and other stakeholders including the citizens. The Government of Mongolia defines disaster protection as the measures taken to prevent, protect and rescue the population, live-stock, properties, and environment from disaster impacts and consequences and to train the public in preparation of disasters. Disaster is defined as loss from the perspective of human lives, live-stock, property, and environment due to hazards, technological accidents, and terrorist acts. The law describes the purpose, framework and definitions include disaster protection activities principles, transparency of disaster information to the public, and disaster protection training.<sup>81</sup>

Disaster protection readiness measures are designated for the phases of everyday, high level, and all-out readiness. Disaster protection readiness is comprised of a disaster protection plan, communication and information dissemination, mobilization of staff, provision of necessary equipment, coordination with appropriate organizations, and communication and use of the early warning system to notify the public.<sup>82</sup>

The structure and management of disaster protection organizations are detailed for the national, provincial, district and sub-district levels (state, aimag, capital city, soum, district, bag, and khoroo). The State Disaster Protection Service is tasked to plan and implement disaster protection activities, train staff to build capabilities, keep warning systems ready, support the division services, build a reserve of equipment and materials for use in preparing and responding to a disaster, and provide resources for rescue units, teams and branches.<sup>83</sup>

Powers of the Government are authorized for the Prime Minister, Head of State and State Administrative Organizations in Charge of Disaster Protection, and Governors of the Aimag, Capital City, Soum, District, Bag and Khoroo. The ad-

ministrative government levels are given specific authorities for disaster protection and fiscal responsibilities to allocate funding to support the identified activities. The Prime Minister's responsibilities involve development of policy, and plan to support disaster protection and propose decisions and actions on disaster protections funding and reserves. The Head of State Administrative Organization determines the organization and structure of the disaster protection services of the Aimag, Capital City, Soum, District, Bag, and Khoroo and defines the responsibilities. The Head of State ensures the public receives disaster hazard information and receives training on disaster protection measures. The State Administrative Organization coordinates and implements disaster protection activities at the national level in line with State policy and legislation and supports the activities of the state and local administrative authorities. Disaster protection activities encompass disaster prevention, rescue, response, and recovery, risk assessments, managing domestic reserves and humanitarian aid from the international community, and communicate and build partnerships with international entities. The Governors of Aimag, Capital City, Soum, District, Bag, and Khoroo have the authority to plan, finance, and manage disaster protection activities at the administrative and territorial levels. The responsibilities include creating disaster protection services and staff, mobilizing equipment and other resources, maintain rescue teams, units, branches, and maintain warning systems.<sup>84</sup>

Entities, enterprises and the citizens also have disaster protection responsibilities. Entities and enterprises are responsible for following the disaster protection law, implementing a disaster protection plan, forming trained disaster protection staff to address their organization's needs, providing the required equipment and materials, conducting vulnerability and risk assessments, and communicating information to the higher authorities. Citizens are responsible for following the disaster laws and regulations, participating in training and associated disaster related activities, following safety requirements, being educated on the disaster warning system and assisting fellow citizens.<sup>85</sup>

Citizens are provided the opportunity to train and serve as Disaster Protection Servicemen for the state administrative organization as a special service. As disaster protection staff certain rights are provided while the individuals are in the line of duty during a disaster to include food, cloth-

ing, and medical treatment. The duties of these special service people involve readiness for disaster prevention, response, and recovery activities and providing guidance to organizations and citizens during disasters.<sup>86</sup>

The law designates budget sources to finance disaster protection activities. State activities are supported from the State budget. The Local budgets are used for the Aimag, Capital City, Soum, District, Bag, and Khoroo. The legal framework also imposes penalties against entities and enterprises who breach the law and officials who endanger the public, livestock, animal and environment during a disaster response. The law in essence assigns disaster protections responsibilities to everyone from the government to the private and public sectors.<sup>87</sup>

Legal Support for Disaster Protection <sup>88</sup>	
Year	Law, Regulation, Policy
1992	Fundamental Law
1996	Law on Forest, Steppe Fire Protection
1999	Law on Danger of Fire Protection
2003	Law on Disaster Protection
2009	Law on State Resource
2010	National Security Concept
2011	Policy and Programs of Government on Disaster Protection

**National Action Plan on Climate Change (NAPCC)**

The National Action Plan on Climate Change (NAPCC) was developed under the Netherlands Climate Change Studies Assistance Programme and approved by the Mongolian government in July 2010.<sup>89</sup> The NAPCC serves to address climate change challenges and incorporates national policy and strategy programmatically to confront adverse impacts and mitigate greenhouse gas emissions.

**NAPCC Overview:**

The action plan includes a set of measures, actions and strategies which enable vulnerable sectors to adapt to potential climate change and mitigate GHGs emissions. Implementation strategies encompassed institutional, legislative, financial, human, education and public awareness,

and research aspects. Implementation obstacles and possible solutions are also identified.

**Intent of action plan:**

- Meet UNFCCC obligations
- Set priorities for action on a national level
- Integrate climate change concerns across national and sectoral development plans

**Basis of action plan:**

- Pre-feasibility studies on climate change impact and adaption assessment
- GHG inventories and mitigation analysis

**Strategies in plan:**

- Implementation strategies encompass institutional, legislative, financial, human, education and public awareness, and research aspects. Implementation obstacles and possible solutions are also identified.
- Adaptation strategies involve measures for agriculture and water resource sectors which include education and awareness campaigns for agriculture people, technology and information sharing to farmers and herdsman, research and technology to ensure agriculture development in the 21<sup>st</sup> century, and management measures through coordination of research information, inventory, and monitoring.
- Mitigation strategies for greenhouse gas emissions focus on institutional integration between the responsible ministries of the Ministry of Energy (formerly Ministry of Mineral Resources and Energy) and Ministry of Nature, Environment and Green Development (formerly Ministry of Nature, Environment and Tourism) to formulate the necessary policies, prioritization of funding and investment, and provision of a legislative base in terms of defining legislative and administrative frameworks.<sup>90</sup>

Climate Change Legislation and Policy Documents <sup>91</sup>	
Law on Air	1995, 2010
Law on Environmental Protection	1995, 2007
Law on Disaster Prevention	2003
National Security Priorities	
The Mongolia Action Programme for the 21 <sup>st</sup> Century (MAP21)	1998
The MDG-based Comprehensive National Development Strategy of Mongolia	2008
National Action Programme on Climate Change (NAPCC)	2000, 2010

### Logistics Contingency Plan Mongolia

The Logistics Contingency Plan Mongolia preparation was facilitated by United Nations International Children’s Fund (UNICEF) in coordination with the Government of Mongolia, United Nation Agencies, International Federation of the Red Cross and Red Crescent Societies (IFRC), nongovernmental organizations (NGOs) and other stakeholders. In the plan, the Government of Mongolia will lead emergency response with support from the Humanitarian community to fill the disparities beyond the capacity of the government. The strategy selected by the Humanitarian Country Team is the cluster system which will ensure a coordinated emergency response. Cluster lead agencies have been designated that will coordinate with the various humanitarian agencies to support the ministries of the government in the preparedness and response efforts.

The intent of the logistics contingency planning process is to build effective and timely emergency responses in Mongolia. The emergency scenario written in the plan is used to identify logistical gaps and chokepoints and methods to overcome these challenges. The roles and responsibilities of the Logistics Cluster members are explained for preparedness and disaster activities. The logistics preparedness and response aspects in the plan complement the Inter-Agency Contingency Plan of September 2011.<sup>92</sup>

### Disaster Protection Plan

In 2012, the Mongolian cabinet approved a state policy and program on protection against disasters. The government will allocate funding

in the annual budgets with guidelines for socio-economic development and localities. Funding sources involve domestic and foreign organizations for the program which will end in 2020. The program will be relied upon to improve the disaster management system, enhance collaboration between the state organizations, NGOs, private sector, and voluntary organizations, and roles clarified for these stakeholders. International and United Nation’s disaster risk assessments will be referenced to build the assessments for Mongolia to predict possible disaster damages which will lead to disaster prevention measures.<sup>93</sup>

### Policy for Strengthening the National Capacity for Disaster Prevention and Mitigation

This policy includes three subsections and 15 stipulations that are aimed to produce specific positive results on disaster prevention, risk and vulnerability reduction, and improvement on preparedness. Policy implementation is reviewed semi-annual to annual basis.<sup>94</sup>

### Comprehensive Policy for Local Development Policy (5 year)

The United Nations Development Programme (UNDP) sponsored the Strengthening the Disaster Mitigation and Management System in Mongolia in partnership with the National Emergency Management Agency from 2002-2011. The project focused on disaster risk reduction and preparedness with the involvement of communities and related sector organizations. In phase one and phase two from 2002 to 2007, the project successfully completed major action items impacting the legal framework and disaster management structure at the national, soum, aimag, and community levels (herders). The results of the project were:

- Created a comprehensive legal framework for disaster management
- Established the National Disaster Management Agency (currently the National Emergency Management Agency) by merging the Board of Civil Defense, the State Reserve Agency, and the Fire Fighting Agency into the single civil organization
- Augmented the capacity of the newly formed national agency
- Developed the “National Framework for Action 2006-2015: Strengthening the Disaster Resilience of Mongolia”

- Founded forty herder groups in target areas as funded by small grants to introduce community based disaster risk reduction
- Launched cross-sectoral Disaster Risk Reduction Councils to the soum and aimag levels in project target areas
- Contributed to the reduction of poverty, environmental protection, and development of good governance<sup>95</sup>

## Government Capacity and Capability

Mongolia has been experiencing a drastic incidence of disasters and losses due to these devastating events. The dzuds in 1999-2000 and 2000-2001 decimated 20 percent of the national herd and destroyed the livelihood of over 10,000 herding families with damages up to \$369 million. In the aftermath of these disasters, the Government of Mongolia focused on disaster risk reduction and preparedness activities with the assistance and involvement of domestic and international organizations. The Strengthening the Disaster Mitigation and Management System in Mongolia project is an example of this effort which spanned three phases starting from 2002 and ending in 2011. The results of the project are reflected in the increased disaster management capability and capacity of the government and associated agencies.

The April 2011 Mongolia National Progress Report for 2009 to 2011 documents the Government of Mongolia's disaster management actions against the Hyogo framework with progress levels ratings. The Priority for Action items and the ratings provide insight on the government's progress.<sup>96</sup>

A summarization of the results is detailed below:

### Priority for Action 1 Items

**Core Indicator 1:** *National policy and legal framework for disaster risk reduction exists with decentralized responsibilities and capacities at all levels*

**Level of Progress Achieved: 3** Institutional commitment attained, but achievements are neither comprehensive nor substantial

**Description:** Disaster risk reduction elements have been incorporated into several programs and policies and these documents were undergoing the government approval process. The documents include the following:

- State Policy on Disaster Protection
- National Program for Strengthening Disaster Resilience
- National Program for Climate Change Induced Risk Management

**Discussion on Context and Constraints:** Three constraints are defined and should be addressed by the Government Action Plan to resolve the issues. State policy should be developed to resolve the development of described infrastructure, support of herders' groups and cooperatives system, and establishment of a disaster risk reduction system. Details on the constraints are described as follows:

- Absence of road, transportation and communication infrastructure
- Lack of an integrated educational system and educational standards to distribute information on disaster risks and methods of protection
- Misalignment of existing sectoral policies with the national disaster risk reduction policy and program

**Core Indicator 2:** *Dedicated and adequate resources are available to implement disaster risk reduction plans and activities at all administrative levels*

**Level of Progress Achieved: 3** Institutional commitment attained, but achievements are neither comprehensive nor substantial

**Description:** Mongolia established the legal environment for disaster risk reduction however there is limited resources for full-scale implementation at all of the administrative levels.

**Discussion on Context and Constraints:** There are insufficient financial resources to implement the disaster risk reduction plan however this deficiency can be addressed through redirection of funds from the state budget or loan and grant support from developed countries.



**Core Indicator 3:** *Community participation and decentralization is ensured through the delegation of authority and resources to local levels*

**Level of Progress Achieved: 3** Institutional commitment attained, but achievements are neither comprehensive nor substantial

**Description:** To address community participation and delegation of authority to local levels, amendments to the “Law on Mongolia Disaster Protection” will be written.

**Discussion on Context and Constraints:** Although support has been lacking for the amendment proposals, one amendment to the law has been completed. The Government of Mongolia is working to resolve the issues related to the law through the planned second amendment.

**Core Indicator 4:** *A national multi-sector platform for disaster risk reduction is functioning*

**Level of Progress Achieved: 2** Some progress, but without systematic policy and/or institutional commitment

**Description:** The State Emergency Commission serves as the emergency discussion platform of all ministries and sectors as Mongolia does not have a national multilateral platform for risk reduction. The emergency discussion platform is led by the Minister in charge of disaster issues and follows internal operational regulations versus being regulated by the law. The commission operates during emergencies and disasters and leads response measures. The organization mobilizes funding required for response, recovery, and rehabilitation.

**Discussion on Context and Constraints:** The government is working on establishing the legal and institutional environment for disaster risk reduction at the national and local levels. The existing laws related to disaster management are being reviewed and the analysis information used to draft law for amendments to the Law of Mongolia on Disaster Protection.<sup>97</sup>

Mongolia has been developing response capabilities with assistance from the International Federated States of Red Cross and Red Crescent Societies (IFRC). IFRC has supported the National Disaster Response Teams (NDRTs) and/or emergency response teams (ERTs). Logistics

and warehouse capacity for prepositioning and effective mobilization of relief supplies during disasters is the second key IFRC accomplishment for 2012.<sup>98</sup>

Assessment tools for multi-hazard situations have been developed by the Disaster Research Institute, NEMA and by the United Nations country office under guidance from United Nations Office for the Coordination of Humanitarian Affairs (UNOCHA). The tools are available however a systematic policy needs to be built.<sup>99</sup>

## Emergency Management Organization Capacity<sup>100</sup>

The Government of Mongolia has invested in establishing emergency management organizations and personnel at the national, provincial and local levels.

Description	Qty.
Emergency Management Department and Divisions	22
Fire Brigade	41
Rescue sub-unit	10
State Reserve Branches	32
Research Institute of Emergency Management Organization	1
Rescue Specialized Unit	1
State Disaster Protection Service	11
Group	37
State servicemen	3068
Local Disaster Protection Service in 21 territorial units	198
Servicemen	594
Part-time Professional Team	1981
Servants	44866
Total Number of Servants	
Full-time	3148
Part-time	48528

## Education Programs

Educating and training people on disasters and disaster risk reduction is approached from several different levels to include the educational

system, regional seminars, disaster response drills at the provinces, and mass media programs. Disaster and disaster risk reduction standards and curriculum have been developed for primary and secondary levels of education through the Ministry of Education, Culture, and Science. Disaster management and basic concepts of disaster are topics incorporated into the undergraduate courses.<sup>101</sup> Three editions of the “Basics of Safety Living” textbook have been published and a “Civil Safety Education” program developed for the educational programs.<sup>102</sup>

Regional trainings have been organized to reduce disaster risks, improve disaster preparedness and strengthen capacities of specific stakeholders in 11 soums and 2 khorooos. Trainings have been conducted in Ulaanbaatar, Bulgan, Dundgobi, and Zavhan for a total of 160 participants from the local Disaster Risk Reduction Partnership Councils, heads of urban self-help and rural herders’ groups as reported for 2011.<sup>103</sup>

Disaster protection and response training and drills are organized annually and executed in 5-6 provinces. The events cultivate understanding of disaster management roles and responsibilities

by the government officials and the people. The two types of trainings are the Comprehensive Disaster Protection Training for the public and Drills for the Disaster Protection Headquarters and Squad. Every three years, the Comprehensive Disaster Protection training is executed with local government officials, business entities, and the people. For the drills, a hypothetical emergency is used to test the local government officials’ ability to make appropriate emergency decisions which are then implemented by the emergency squads composed of rescuers and civilians. Training will include fire extinguishing, fire containing, and emergency decision-making techniques in the special protected areas during the dry season in preparation of forest and steppe fires. Training centers will be the base for these events as the centers are established in the various provinces and districts. The trainings comply with the Law of Mongolia Disaster Protection which mandates training of disaster managers, search and rescue and professional squads, students, and other civilians.<sup>104</sup>

Completed training events are listed below<sup>105</sup>:

Training and Date	Location	Number of Participants
Disaster Response Drills, 2009	Tuv Province	195 government officials and citizens
	Dungobi Province	283 government officials and citizens
Comprehensive Disaster Protection Training, 2009	Gobi-Atai Province	200+ government officials and citizens
Comprehensive Disaster Protection Training, 2010	Darhan-Uul Province	520 government officials and citizens
	Gobisumber Province	380 government officials and citizens
	Selenge Province	590 government officials and citizens

Mass media is used to raise public awareness as another method to educate the public. Television training programs such as the “Wisdom of Safe Livelihood” has been broadcast through local mass media. Commemorative days and special events are used as another forum to advance public awareness.

Training opportunities are sought by the government from the international community or with bi-lateral partners. Joint training and exercises have been conducted with China, Japan, Nepal, Republic of Korea, Russian Federation, and United States as examples. Disaster preparedness exercises under the name “Gobi Wolf”

have been executed from 2009-2011 with the United States. Urban Search and Rescue Training have been held with the Republic of Korea, National Rescue Service-119 in 2009 and 2010. In 2010, China hosted an earthquake rescue workshop.<sup>106</sup>

The Russian Federation and Mongolia have conducted large scale joint exercises since 2010 based on their intergovernmental agreement. The Joint Search and Rescue Exercise (SAREX) rotate locations between the two countries. In June 2010, the first SAREX was held in the Altai Republic of the Russian Federation.<sup>107</sup> The 2012 SAREX was conducted in the Khatgal sum of

Khuvsgul aimag in Mongolia. The exercise included a number of Mongolian ministries such as the Ministries of Roads and Transportation, Construction and Urban Development, Defense, Health and organizations such as NEMA, Civil Aviation Authority, General Police Department, Central Intelligence Agency and others. Russian Federation participants included the Federal Air Transport Agency, West Siberian Air Service Agency and others.<sup>108</sup>

NEMA staff participated in the “International Training and Drill on Urban, Search, Rescue, and Recovery Operations in case of an Earthquake Disaster in the Asia Pacific Region” held in Nepal by the International Council for Search and Rescue, UN Office for the Coordination of Humanitarian Affairs in 2011.<sup>109</sup> The Asian Disaster Reduction Center sponsored a project between Japan and Mongolia which focused on the exchange of earthquake preparedness measures and evacuation drills information in 2011. NEMA representatives toured Japan’s disaster management center, observed drills and participated in disaster lectures and workshops as a part of their training. In Mongolia, training and workshops were conducted based on educational materials from Mongolia and Japan for teachers and students.<sup>110</sup>

Disaster management projects are implemented by international organizations to assist Mongolia as seen in projects reported for 2012. The Norwegian Red Cross supported disaster preparedness at the community level. DFID funded community based programming for a national disaster response team. USAID funded an earthquake preparedness project.<sup>111</sup>

## Disaster Management Communications

Mongolia has developed a disaster management communications systems next work within the country. Disaster information is broadcast through several media tools to notify the public.

The disaster management communications systems include:

- Early warning system
- Telecommunication with internal and external switches and systems
- Radio communication networks
- Satellite mobile networks and leased channels

- Integrated State organization networks
- Integrated information data bases for disaster management

## Early Warning

Early warning systems in the country transmit weather forecast information through multiple media tools using the internet, national radio and television outlets, and telephonic type devices. The national agency is able to disseminate early warning messages to the province and soum levels. The difficult population to reach with the early warning notification is the herder communities who reside in remote locations without television and radio broadcasts or mobile phone services. This disparity is being addressed by the government through several communication projects predicated on the availability of funding.<sup>112</sup>

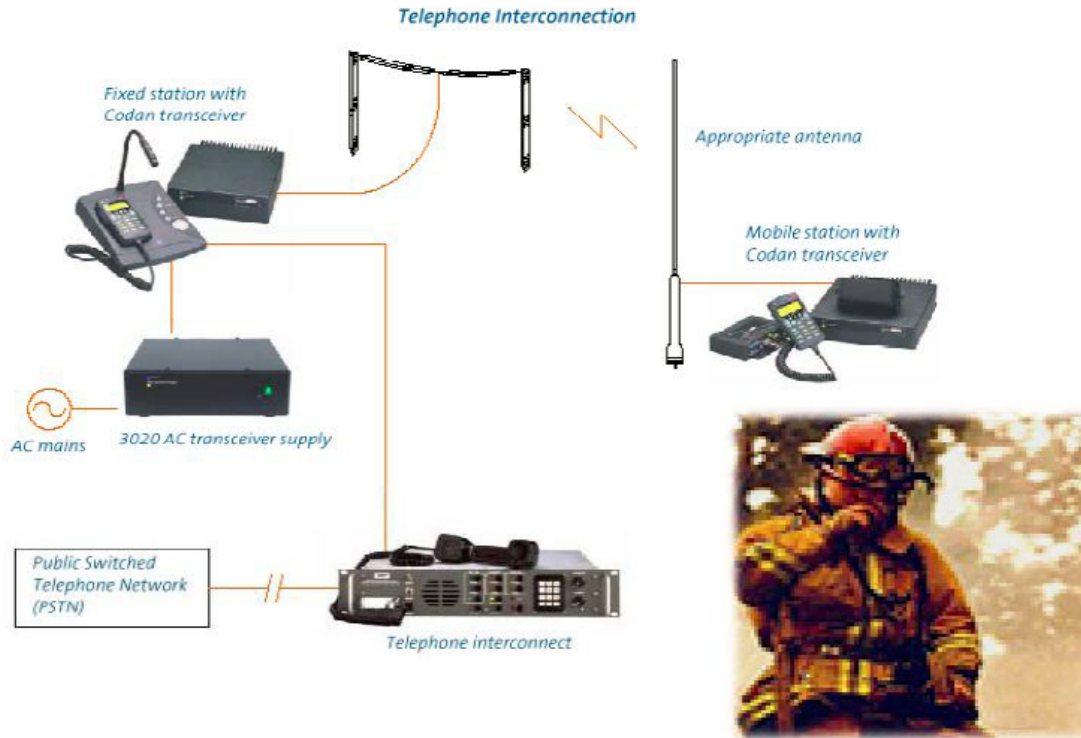
## Media Tools for Weather Forecast:<sup>113</sup>

Internet	<a href="http://www.imh.mn">http://www.imh.mn</a> <a href="http://www.tsag-agaar.mn/">http://www.tsag-agaar.mn/</a>
National TV	Mongolia National Broadcaster (MNB), TV-5, TV-8, TV-9, UBS, MN-25, C1



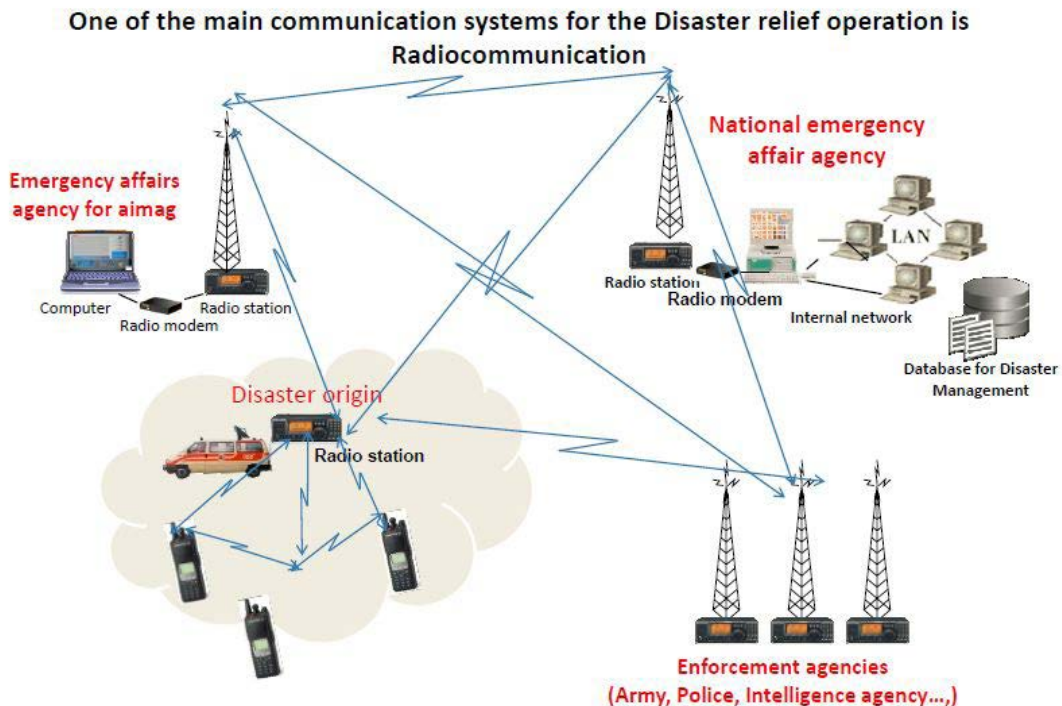
Equipment such as the Barrett 2050 HF is used as an interface for speech, data, fax, and e-mail in an HF network.

Telecommunication switches and mobile networks support the telephone interconnection. A call center (call 105) is in place to be utilized for emergency and disaster situations.<sup>114</sup>



Models to communicate from Disaster origin to Telecom Switches and Mobile networks ...

A radio communication system has also been established.<sup>115</sup>



In 2012, Mongolia signed a memorandum of understanding with the Atmosphere and Space Research Agency of Japan which allows the use of communication satellites to obtain information during disasters. NEMA installed a land antenna to be able to retrieve the satellite information.<sup>116</sup>

## Military Role in Disaster Relief

Until the Dzud in 1999-2000, there was a unit under the direct supervision of the Ministry of Defence charged with the responsibility of disaster mitigation and responding to disasters. This structure under the National Defence system and the associated legalities limited assistance from the United Nations Disaster Assessment and Coordination (UNDAC) for the dzud. This situation identified the need to restructure from a military based system to a civil support system as noted in the “Strengthening the Disaster Mitigation and Management System in Mongolia” project. The establishment of NEMA with the unification of the State Board for Civil Defence, Fire Fighting Department and State Reserve Agency resolved the requirement for an organization with disaster risk reduction capacity and civil defense functions.<sup>117</sup>

Disaster assistance from the Mongolian Armed Forces is requested through the State Emergency Committee and approved by the President. The armed forces would operate as a discrete response unit as appointed by the Ministry of Defense to provide transport and manpower support.<sup>118</sup> The Mongolian military response to disasters is similar to the Defense Support to Civil Authorities (DSCA) utilized by the U.S. military. The military units will coordinate preparation and response activities with NEMA and provide support for emergencies and disasters as officially requested through the SEC process. There are many military units situated at the town level throughout the country and thus able to work closely with the local government officials and NEMA. The military will assist in tasks such as snow removal during the winter. The Air and Air Defense Command (AADC) supports NEMA emergency personnel on SAR operations by flying helicopters and dropping smoke jumpers. The AADC is the air support for the civil authorities as necessary.<sup>119</sup> The military also stocks disaster response reserves in preparation for disasters.<sup>120</sup>

Mongolia’s defence spending from 2010 to 2012 has been increasing in terms of dollar amounts however the GDP percentage is still less than 1.0 percent GDP. Military forces were num-

bered at 10,000 with 137,000 reservists and 7,000 paramilitary.<sup>121</sup>

Mongolia122	2010	2011	2012
Defence Spending in US \$Mil	55	84	90
Defence Spending in percent of GDP	.88	.96	.91

## Foreign Military Assistance

The Alaska National Guard has partnered with the Mongolia since 2003 through the National Guard State Partnership Program (SPP). Mongolia and Alaska have been joined together in the SPP due to the similarities between the two regions in terms of size, terrain, natural disasters, and similar challenges with the many of the citizens dispersed in rural areas. This relationship is fostered through annual activities which include joint exercises and delegates travel between the countries to understand each other’s policies and programs. One example of the joint collaboration is participation of the Mongolian delegates from the Ministries of Defense and Health and NEMA as observers in Operation Arctic Care, a medical exercise held in Northway, Alaska. Arctic Care provides medical care to remote Alaskan villages by government and military medical specialists.<sup>123</sup>

NEMA and the Alaska National Guard, U.S. have a Memorandum of Understanding for cooperation and support through the State Partnership Program. Army Brig. Gen. Michael Bridges Assistant Adjutant General for the Army Alaska National Guard and Dumaa Namsrai, Deputy Chief of the Mongolia NEMA have met to discuss emergency preparedness and training partnerships.<sup>124</sup>

China and Mongolia armed forces conducted joint training in Mongolia for the first time in September 2013. The “Prairie Pioneer” focused on natural disaster relief and featured joint training courses, discussion forums, and simulation and field exercises.<sup>125</sup>

## Foreign Assistance and International partners

Mongolia maintains international cooperation with a number of country partners and organizations. Country partners include China, Federal Republic of Germany, Hungary, Japan, Kazakhstan, Republic of Korea, Russian Federation, Ukraine, United States, and Vietnam. Organi-

zational partners from the region include the Asian Disaster Reduction Centre, Asian Disaster Preparedness Centre, International Civil Defence Organization, and the Disaster Management Committee of ASEAN as examples.<sup>126</sup>

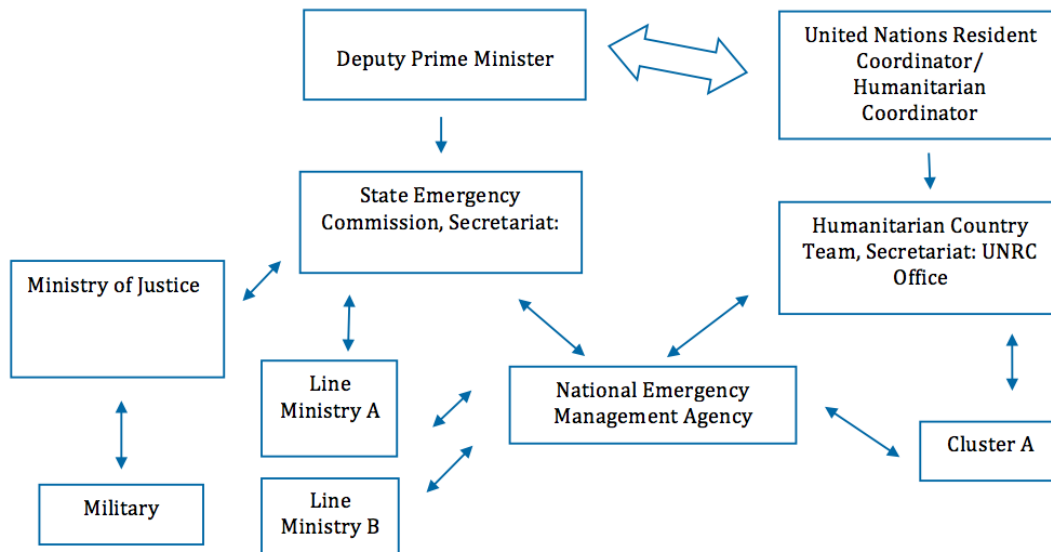
Mongolia has search and rescue agreements with China and the Russian Federation. The Government of Mongolia has an agreement with the Russian Federation to institute cooperation in respect to aviation search and rescue (SAR). An operational agreement for SAR cooperation between the Federal Aeronautical Agency of the Russian Federation and Civil Aviation Authority of Mongolia (MCAA) was established on July 11, 2006 and signed on April 11, 2008. In conjunction with this agreement, the two countries conducted joint SAR exercises which led to amended working documents, national rules, procedures to deliver emergency reports, and streamlined the rapid facilitation of border control of cross border search and rescue units. The training section of the report described the joint exercises with Russia.<sup>127</sup>

Mongolia and China officials signed an Intergovernmental Agreement on Civil Aircraft

Search and Rescue on October 25, 2013 to strengthen bi-lateral cooperation. The agreement was endorsed by Li Jiaxiang, Chief of Civil Aviation Administration of China and A. Gansukh, Mongolian Minister for Road and Transportation in China with attendance by the Prime Ministers from both countries. The intent of the agreement is to strengthen cooperation on the regulation of civil aircraft search and rescue, and provide a mechanism for information exchange and coordination. The mutual support between the countries will help to provide effective and efficient search and rescue for aviation disasters.<sup>128</sup>

**Humanitarian Country Team (HCT)<sup>129</sup>**

The Humanitarian Country Team is a component of national disaster management structure which implements the cluster system approach. The HCT members are comprised of NEMA, United Nation agencies in Mongolia, the IFRC, World Vision, and Save the Children International. The United Nation agencies, NGOs, and IFRC are co-leads of the clusters together with the line ministries.



Linkages between Clusters and Government Ministries/Departments as described in the Inter-Agency Contingency Plan Mongolia Version 1.4, September 2011.

There are 11 emergency clusters designated according to the Logistics Contingency Plan for Mongolia and shared responsibilities for the lead between the leading agencies and government ministries.

Emergency Clusters in Mongolia: Cluster Coordination directed by NEMA Nations Resident Coordinator’s Office. The new ministry titles have been cross walked into the plan based on the government structure designated for 2012-2016.<sup>130</sup>

Cluster	Lead	Government Leads
Agriculture	Food and Agriculture Organization of the United Nations	<ul style="list-style-type: none"> <li>• Livestock Policy and Coordination Dept- Ministry of Industry and Agriculture (formerly known as Ministry of Food, Agriculture, and Light Industry)</li> </ul>
Early Recovery	United Nations Development Program	<ul style="list-style-type: none"> <li>• Dept. of Construction Housing Public Utility – Ministry of Construction and Urban Development (formerly known as Ministry of Road, Transportation Construction and Urban Development)</li> <li>• Road and Transportation Policy Dept., Ministry of Road and Transportation (formerly Ministry of Road, Transportation Construction and Urban Development)</li> <li>• Policy Implementation and Coordination Dept, Ministry of Social Welfare (formerly known as Ministry of Social Welfare and Labour)</li> </ul>
Education	United Nations International Children’s Fund (UNICEF) and Save the Children	<ul style="list-style-type: none"> <li>• Ministry of Education and Science (formerly known as the Ministry of Education, Culture and Science)</li> </ul>
Food	World Vision	<ul style="list-style-type: none"> <li>• Dept. of Policy Implementation and Coordination, Ministry of Industry and Agriculture</li> </ul>
Health	World Health Organization	<ul style="list-style-type: none"> <li>• Dept. of Policy Implementation and Coordination, Ministry of Health</li> <li>• Public Health Institute</li> </ul>
Logistics	UNICEF	<ul style="list-style-type: none"> <li>• NEMA</li> </ul>
Nutrition	UNICEF	<ul style="list-style-type: none"> <li>• Policy and Coordination Department, Ministry of Health</li> </ul>
Protection	United Nations Population Fund (UNFPA)/ UNICEF (sub-cluster on child protection)	<ul style="list-style-type: none"> <li>• State Registration Authority</li> <li>• The National Human Rights Commission of Mongolia</li> </ul>
Shelter	International Federation of the Red Cross and Red Crescent Societies (IFRC)	<ul style="list-style-type: none"> <li>• Ulaanbaatar City Office</li> </ul>
Telecommunications	UNICEF	<ul style="list-style-type: none"> <li>• Information, Post, Communication and Technology Authority</li> <li>• National Public Radio and Television</li> </ul>
Water, Sanitation and Hygiene (WASH)	UNICEF	<ul style="list-style-type: none"> <li>• Water Department, Ministry of Nature, Environment and Green Development (formerly known as Ministry of Nature, Environment, and Tourism)</li> <li>• Department of Policy Implementation and Coordination, Ministry of Health</li> <li>• Water Channel Utilization Authority</li> </ul>

The United Nations Office for Disaster Risk Reduction launched a Disaster Risk Reduction in North East Asia (DRR in NEA) program in 2013 which provides support to the Government of Mongolia. The program offers policy guidance to improve coordination and effectiveness of disaster risk reduction, management and response in Mongolia as requested by the UN Resident Representative Office. The focus for 2012-2015 will be to:

1. Promote Disaster Risk Reduction by outreach and advocacy for Mongolian cities through engagement in the UNISDR Making Cities Resilient (MCR) campaign (launched in 2010 to address issues of local governance and urban risk)
2. Provide policy advice to the UN Resident Coordinator Office in Mongolia to assess the current status of disaster risk reduction related to institutional mechanisms, policies, regulations, and practices in Mongolia and provide recommendations to improve coordination and effectiveness of disaster risk reduction, management and response in the country<sup>131</sup>

## Foreign Assistance Logistics Humanitarian Transportation

### Air Transportation <sup>132, 133, 134</sup>

In 1993, Order No. 180 by the Ministry of Road, Transport and Communication established the Civil Aviation Authority of Mongolia with the main goal of instituting government surveillance to ensure civil aviation safety and security together with the provision of air traffic services and operation of airports.

The Civil Aviation Authority of Mongolia abides by the Standards and Recommended Practices of the International Civil Aviation Organization (ICAO) and the Civil Aviation Law of Mongolia. In addition to the Law, the State Policy on Civil Aviation in Mongolia (in place until 2020) contains the main objectives for the development of Mongolia civil aviation. Under the Law, the government agency ensures civil aviation safety and security exercises the following powers

- Develops aviation safety, regulations/standards compliance with Annexes of the Chicago Convention, obtains approval from relevant authorities and implements
- Resolves matters related to air navigation

charges

- Collects, publishes, exchanges, and distributes aviation related information in collaboration with appropriate agencies
- Arrange income under the related laws which are derived from civil aviation services to ensure aviation safety
- Issue reports and safety recommendations
- Foreign aircraft operation in Mongolia should follow the country's guidelines: Mongolia agreed to the terms in the Convention on International Civil Aviation in 1989 which includes articles related to health measures for aircraft.
- The Federal Aviation Administration advises that ICAO member countries usually accept the following standard ICAO Annex 9 Entry/Exit documents: General Declaration, Passenger Manifest, Cargo Manifest, Embarkation/Disembarkation Card, and Certificate of Residual Disinsection.
- International flights into the airspace of Mongolia (Technical Stop/Overflight) must be granted permission by the Civil Aviation Authority of Mongolia (CAAM). The request must be submitted at least 2 working days prior to the beginning of flight operation.
- Non-scheduled charter flights are approved by the Air Traffic Flow Management Department (ATFM) and Flight Permit Department of CAAM.
- Mongolia has bilateral agreements on international air services with 36 countries.
- Mongolia has five active Air Service Agreements with Russia, China, South Korea, Japan, and Germany.

### Driving License for individuals with a Foreign Driver's License: <sup>135</sup>

- Foreigners residing in Mongolia for 3+ months will be provided a Mongolian's Driver's License with the proper foreign driver's license, passport, and documentation with the employer's request and description of the employer
- The following documents are to be prepared by the foreigner:
  - Request letter with the employer/entity



statement of the work mission

- Copy of foreign passport and foreign driver's license
- A translation of the driver's license into the Mongolian language
- Completed driver's license registry form letter in Mongolian language
- Submittal of the driver's license fee of 37,500 MNT to a bank (Receiver bank: Tuv Turiin San (Central Bank State Fund); Receiver organization: Traffic Police Department; Account Number: 900012042)
- Provide the described documents to window number 3 of the service hall at the Professional Control Bureau of the Traffic Police Department
- International driver's license provided from the Vienna Convention member countries will not be required to be replaced

## Customs<sup>136</sup>

Mongolia customs control defines customs clearance as the complex process beginning with the submittal of the customs declaration on goods and means of transport crossing the customs border, and ending with the customs permission to release goods after the completion of the required inspection and payment of customs duties and taxes. The Customs Law of Mongolia (revised), 2008 states the principles, information and guidelines for customs.

There are five major steps for customs clearance for export and import:

1. Declaration of goods Inspection of customs documents
2. Inspection of goods and means of transport
3. Levying of custom duties and taxes and payments
4. Release of goods and granting permission to cross the goods across customs borders

Declaration of goods means submitting all necessary information with the customs declaration form for goods and means of transport crossing the customs borders to the customs.

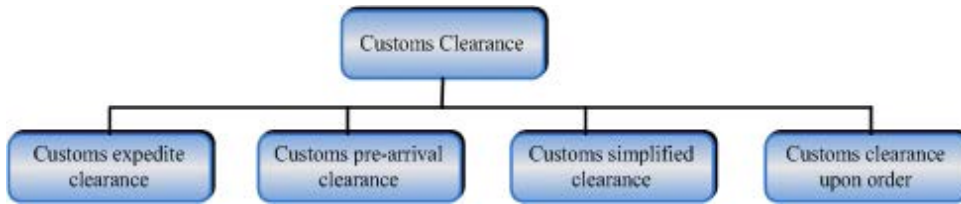
There are four methods of declaring goods in

Mongolia:

1. Declare in writing
2. Declare through the information network
3. Verbal declaration by travelers in regards to personal effects and declarations for postal items
4. Declare through the selection of either red or green channels by passengers: At the airport, passengers are allowed to self-select from two channels to declare their goods to customs. The action of selecting the green channel means the passenger is declaring that he has no prohibited, restricted, and taxable goods. When a passenger chooses the red channel, it means he is declaring that he has taxable goods. The passenger chooses the form of declaration dependent on the goods he possesses.
  - a. Passengers with the following types of goods should select the red channel. Passengers without these types of goods can proceed to the green channel.
  - b. Red channel goods:
    - Taxable goods
    - Unaccompanied goods, cargo
    - Goods to transfer to a third party
    - Mongolian national currency, foreign currency and/or check equal to or over 5000 USD
    - Prohibited /psychotropic substances, and other narcotic drugs, devices for using drugs, distilled spirits/ or restricted goods /Uranium, hazardous chemicals, organs, donation blood, ammunition, firearms, explosives etc.

## Customs Clearance Processes:

Four types of customs clearance processes are utilized dependent on the type of goods. For disaster relief and assistance, the customs expedite clearance process is applied.



### Customs Expedite Clearance:

The customs expedite clearance is applied for the following goods:

- Relief goods transported to assist the country due to disaster and force majeure losses and damages
- Radio-active substances, toxic and dangerous chemicals, explosives
- Livestock and animals
- International postal items
- Newspapers, periodicals, media materials, scientific and research materials
- Perishable goods which require special storage conditions
- Donor organs or blood, blood products
- Other goods as specified by law

### Customs Pre-Arrival Clearance:

The customs pre-arrival clearance maybe utilized for goods dispatched from the departure country and prior to their entry into the Mongolian border or before the completion of the transport of goods from the border customs control to the inland customs. The copy of the documents accompanying the goods submitted to customs will be compared to the original documents once the good arrive.

### Customs Simplified Clearance:

The customs simplified clearance does not require all of the documents to be submitted however certain sections would be completed

in the customs declaration as requested. This process applies to

- Goods entering the customs bonded zones directly from abroad and not transiting through the customs territory
- Goods sent abroad from customs bonded zones and not transiting through the customs territory

### Customs Clearance upon Order:

Declarants are able to request customs clearance at their expense at the shipping location (upon order) for perishable/easily spoiled goods, special conditions goods (transporting, loading or storage requirements), confidential goods, historical heritage items, bonds and chemical precursors being sent to or from overseas, goods or personal effects from foreign diplomatic mission office or organizations of similar status or workers of said agencies.

### International Trade Documents:

The three International trade documents classifications are road transport carriers, airway carriers, and railway carriers.

Required documents for road transport carriers include certificate of vehicle, transport bills, trade documents/trade contract, receipts, invoices, packing list, insurance documents and other documents necessary for the goods description.

Required documents for airway carriers include aircraft certificate, general declaration, list of passengers' names, cargo manifest, airway bill, list of food and other passenger consumable items, and trade documents.

Required documents for railway carriers include pass-over documents, railway car documents, railway bill, and trade documents.

### International Commerce Terms (INCOTERMS):

The international trade contracts contain the international commerce terms which define cost and the responsible party in case of risk and directly affect goods value.



# MONGOLIA

## Infrastructure

Mongolia Disaster Management Reference Handbook | 2014

# Infrastructure

Mongolia is a landlocked country, surrounded by China and Russia. The transport sector of the country has a significant importance for the economic development of the country. The location of Mongolia between these two global economies has increased demand for transportation services, but the transportation sector of Mongolia is unable to manage this increasing demand. Severe weather conditions also affect road and rail during the winter, therefore air transportation plays a vital role for the economy.<sup>137</sup> Infrastructure development in the transportation sector is necessary for trade with their international partners.



## Airports

Mongolia relies on air transportation to connect its major towns and cities. It is considered an important mode of domestic transportation and serves the majority of business travelers and tourists. Almost all international transport services use Chinggis Khaan International Airport, which is located in the capital city of Ulaanbaatar. It is the main international airport servicing the country and the hub to the domestic airports in the country. A flight originating from Kazakhstan is allowed to land in Olgii in which tourists are allowed to enter the country. There is also a flight from China that has a stopover in Choibalsan before making its way to Ulaanbaatar, but tourists are not allowed to leave the aircraft.

<sup>138</sup>The airport is subject to closures due to strong wind storms, sand or snow storms or due to poor visibility from air pollution.<sup>139</sup> A new international airport is set to be completed by 2015 and will be located about 30 miles outside the capital city in Khoshigit Valley.<sup>140</sup>

There are 22 airports in Mongolia, three of

them are private airports and nineteen are owned and operated by the Civil Aviation Authority of Mongolia. Only sixteen airports are considered operational and another six are no longer functional for regular flights. Only eight airports have runway lighting systems and paved runways.<sup>141</sup>

There are three national airlines in the country: MIAT Mongolian Airlines, Aero Mongolia, and Eznis Airways.<sup>142</sup> There are a handful of international carriers providing service to the country. Most domestic airports in country have sufficient infrastructure to handle a few flights a day, but only a few domestic airports have infrastructure that complies with the International Civic Aviation Organization. In 2013, the first specialized air cargo operator was formed, Air Cargo Mongolia. This cargo company has routes between Europe and Asia. It mostly operates from cargo terminals in Beijing and Seoul because these serve as the main linking points for import goods. Mongolia exports most of its goods to Europe and the United States.<sup>143</sup>

Below is a listing of airports in Mongolia servicing commercial airlines:

City	Province	Airport Name	ICAO	IATA	Runway
International					
Ulaanbaatar	Capital	Chinggis Khan International Airport	ZMUB	ULN	3100m x 60m, Asphalt
Domestic					
Altai	Govi-Altai	Altai Airport	ZMAT	LTI	2290m x 60m, Grass
Arvaikheer	Ovorhkangai	Arvaikheer Airport	ZMAH	AVK	2300m x 50m, Grass
Bayankhongor	Bayankhongor	Bayankhongor Airport	ZMBH	BYN	2800m x 35m, Asphalt/Concrete
Bulgan	Bulgan	Bulgan Airport	ZMBN	UGA	1900m x 50m, Grass
Choibalsan	Dornod	Choibalsan Airport	ZMCD	COQ	2600m x 40m, Concrete

Dalanzadgad	Omnogovi	Dalanzadgad Airport	ZMDZ	DLZ	2300m x 50m, Concrete
Khovd	Khovd	Khovd Airport	ZMKD	HVD	2850m x 49m, Asphalt/Concrete
Mandalgovi	Dundgovi	Mandalgovi Airport	ZMMG	MXW	1800m x 40m, Grass
Moron	Khovsgol	Moron Airport	ZMMN	MXV	2440m x 42m, Asphalt/Concrete
Oyuu Tolgoi	Omnogovi	Khanbumbat Airport	ZMKB	N/A	3250m x 45m, Concrete
Tavan Tolgoi	Omnogovi	Tavan Tolgoi Airport	ZMTT	N/A	2350m x 30m, Grass
Ulaangom	Uvs	Ulaangom Airport	ZMUG	ULO	1900m x 35m, Grass
Olgii	Bayan Olgii	Olgii Airport	ZMUL	ULG	2850m x 30m, Concrete

The Civil Aviation Authority of Mongolia has 36 Bilateral Air Service Agreements (BASAs) and 5 active service agreements with China, Germany, Japan, Russia and South Korea.<sup>144</sup>

### Mongolia has concluded bilateral agreements on international air services with 36 countries:



### Seaports

Mongolia does not have any external ports since it is a land-locked country and inland waterway transport is very limited.<sup>145</sup> There are thousands of rivers located in the country with significant waterways located in north and central parts of Mongolia due to its high precipitation. Rivers are subject to seasonal flows with more flow during the summer when there

is greater rainfall and as snowfall melts. Rivers freeze during the winter months and can often serve as roadways.<sup>146</sup>

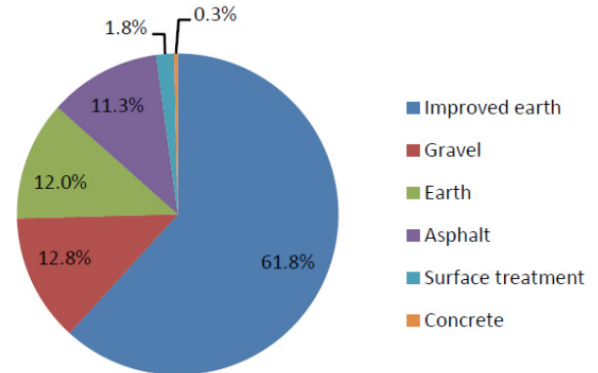
## Land Routes

### Roads

Road infrastructure in Mongolia is weak, with only 3,000 kilometers of paved roads, mostly in urban centers. Main routes include the north-south highway which connects Ulaanbaatar with Erenhot at the Chinese border and Kyakhta at the Russian border. The east-west highway connects Ulaanbaatar with Choibalsan in the east and Olgii in the west.<sup>147</sup> Bus service exists in major cities and towns, and in Ulaanbaatar there is a trolley line.

Because of Mongolia's small population, road density is low and road infrastructure does not provide sufficient coverage throughout the country. Low traffic volume in most parts of the country except for the capital city make economic capability of expanding roads insignificant. Roads in the capital city are poor and there is a need to construct new roads along with upgrading existing roads.<sup>148</sup> These road conditions are blocking economic development to

State road network (km)



Source: The World Bank

the country. Mongolia has plans to overhaul the road network based on projected foreign investment.<sup>149</sup> Mongolia's road sector expenses are in line with other developing countries at a comparable stage of development.<sup>150</sup>

In 2010, the government outlined a big infrastructure development plan to span 10 years with

Figure 6 Road Network Development Targets (2008–2012)



Source: ADB consultant, based on Government of Mongolia. 2008. *Action Plan for 2008–2012*.

a core network comprises - five north-south and one transversal Class III standard axes, coinciding in part with the international defined Asia Highway Network and Central Asia Regional Economic Cooperation (CAREC) corridors. These are to be complemented by paved access roads connecting to all provincial centers. The government is targeting construction of an 11,000 km national network by 2021.<sup>151</sup>

In 2013, Prime Minister N. Altankhuyag reported the completion of 1,824 kilometers of roads and 900 meters of bridge construction. And by the end of 2013, 5,000 km of roads would be paved.<sup>152</sup> The National Development Strategy considers road infrastructure a key mechanism in promoting regional development. The strategy has target of paving the entire national road network which totals 11,250 km by 2021. The national roads are maintained by 22 small mechanized maintenance units (18 are state owned) and employ around 500 people.<sup>153</sup>

The “Beijing Street” project in Ulaanbaatar was launched in September of 2013 and is funded by the Government China. The project aims to reduce traffic congestion and improve the capital’s urban façade. It has plans for 33 intersections in and around the city center, 16 intersections have already been completed.<sup>154</sup> According to a

study, 33.3 million cars pass through an intersection in the Bayangol District every year. This new intersection will save approximately 2 hours and 1,023 liters of fuel every year.<sup>155</sup>

The domestic road network provides connectivity between provinces and the capital city and the region. Roads are classified into two categories, state and local. State roads are intended to connect Ulaanbaatar with the provincial centers, important towns and border crossings designated by government resolutions. The country’s state road network is around 11,000 kilometers. Local roads are intended to connect provincial centers with other provincial centers and villages. The local road network totals about 38,000 kilometers. There are two roads which lead to border posts in Russia and China. There are roads from Ulaanbaatar to the Russian border and a road to the Chinese border at Zamyn Uud.<sup>156</sup>

## Bridges

There are 364 bridges on the state road network with a total length of over 13,500 meters. Around 178 of these bridges are made of wood construction and make up about 20 percent of the total length.<sup>157</sup>

## Planned Railways in Mongolia



## Railways

The Mongolian rail network is comprised of 1,815 kilometers of broad gauge track, 1,110 kilometers are on the main line linking Russia to China and 238 kilometers are on a separate network in eastern Mongolia which has its own link to the Russian railway. Rail is the preferred means of transport for Mongolia's international trade carrying more than 90 percent for freight. Main export and import commodities such as coal, minerals, timber, petroleum and animal products are transported to and from China and Russia.<sup>158</sup> However, Chinese authorities require that some Mongolian products, especially animal products and cashmere be transported by road into China.<sup>159</sup> Mongolia needs an estimated 2,000 kilometers of additional railway to exploit the mining resources in the southeast region.<sup>160</sup>

Main rail lines include the Ulaanbaatar Railroad, which connects Ulaanbaatar with Naushki, Russia in the north and with Erenhot, China in the south. The eastern line connects Choibalsan with Borzuya, Russia. The Trans-Siberian Railway links to Beijing. With assistance from The World Bank, the government is executing a railroad upgrade project which would introduce a rolling stock management system, a petroleum transshipment facility at Zamiin-Uud, a passenger coach depot, and a diesel engine maintenance project.<sup>161</sup>

The mining sector in Mongolia is growing and there is a need for infrastructure to transport its mining production to its commodity market. Existing railway capacity is not enough for the growing mining production. Many mining locations do not have any road or railway access. In 2010, the Mongolian Parliament announced its plan to build a 5,683 kilometer railway on Russian-gauge standard which would connect to Russian seaports.<sup>162</sup>

## Schools

School infrastructure in urban areas is poor and deficient. Limited capacity and poor conditions at schools continue to deteriorate and are major limitations for retaining enrollment and improving the quality of education services. Most urban schools teach in two or three shifts. Many of Mongolian school buildings are not designed to handle the harsh winter conditions. Proper buildings are mainly located in urban areas, but they also have structurally inefficient design with problems with leaking and moisture reten-

tion which add to the maintenance and heating costs.<sup>163</sup>

## COMMUNICATIONS

The Information and Communications Technology Authority is responsible for all ICT policies, coordination and implementation under the Prime Minister of Mongolia. In 2001, the government passed a Communications Law and established the Communications Regulatory Commission to regulate the telecom sector. The network consists of 1,000 kilometers of digital microwave, more than 7,300 kilometers long optical cable link, plus 19 Very Small Aperture Terminal (VSAT) systems linking Ulaanbaatar and all provincial centers. The country has made huge strides in developing their information and communications infrastructure over the past few years, mainly in the availability of modern basic service and cellular service.<sup>164</sup>

Due to Mongolia's challenging geography, the cost of rural communications is high. In the past, Mongolia's ICT was structured where most of the long-distance network was government-owned and controlled, and there was limited capacity to expand rural service. Private mobile carriers were also not mandated to provide services to rural areas. The lack of these ICT services influenced the rural population in several ways – limiting social communication and access to both information and education media, and delaying response time in the case of emergencies.<sup>165</sup>

The World Bank aided in the expansion of ICT services to rural areas in Mongolia. In partnership with the government and the Communications Regulatory Commission, they were able to complete the following:

- Mobile base stations to serve the population of 90 soum centers and surrounding herder areas without mobile telephone service.
- A network of 152 satellite public telephones to serve herders in remote areas beyond the reach of the mobile networks.
- Internet services for schools, commercial customers and Internet cafés in 34 prime soum centers.

With this new infrastructure and services in place, more rural residents are able to communicate and benefit from educations and commercial access to the Internet. This also assists the



government and other organizations to improve service delivery through new technologies. The implementation of these new services provided the following benefits to rural residents:

- All 335 soums in Mongolia have been provided with access to mobile voice service, in many cases also enabling a medium-speed Internet service. Although only 90 soums benefited directly from IDA financed subsidies, a large number of additional soums benefited indirectly as the Universal Access program demonstrated that demand for services in rural areas is significantly higher than originally expected.
- The herder public access network, combined with the mobile services, reduced the average travel distance required to make a call for herders to 15 km from 39 km.
- 34 prime soum centers have broadband Internet access for public and private users at the same tariffs as in the capital, Ulaanbaatar; schools are connected at discounted rates, and in all of these 34 communities people are benefitting from access to public Internet cafés.<sup>166</sup>

tricity and heat.<sup>168</sup>

The coal industry is very important for the operation of Mongolia's energy system. The quality varies from low-grade-coal-lignite to high-quality bituminous coal-coking coal. Most of the country's current production is low-quality coal which is mainly mined at Shivee Ovoo, Baganuur and Sharyn Gol. Mongolia has one of the biggest coal reserves in the world. According to the Mongolian Coal Association, there are more than 200 known coal deposits in the country. The Tavan Tolgoi deposit holds about five to six billion tons of coal – this could have a mine life of 50 years and an annual production of 100 million tons.<sup>169</sup>

#### Sources of Space Heating in Mongolia

- CHPs provide electricity heat and hot water to urban centers in Ulaanbaatar and other cities
- HOBs meet heating and hot water needs – usually serving single building or a small central network of several buildings
- Individual heat stoves – burning coal or wood

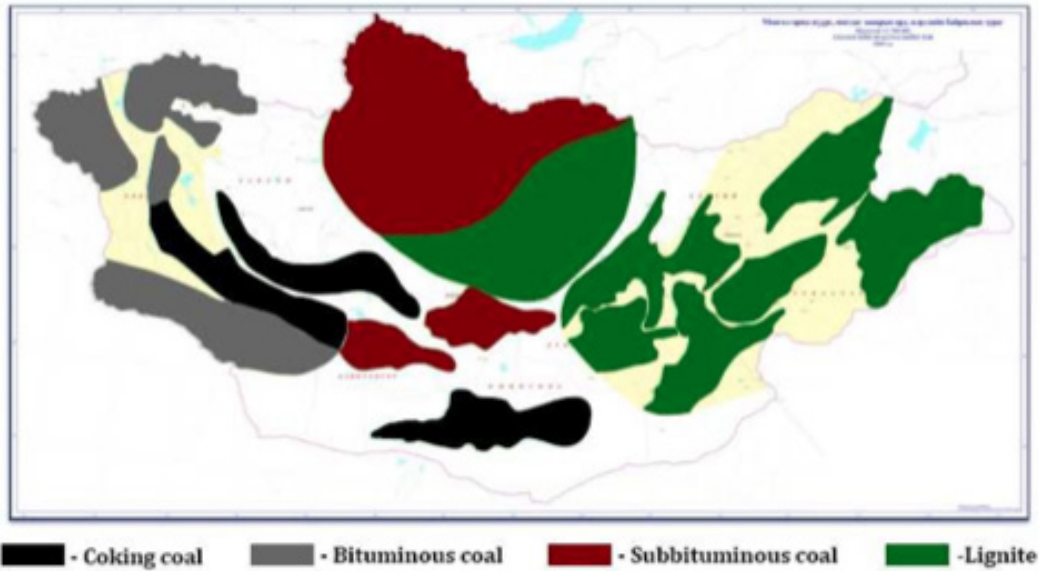
## Utilities

### Power

Mongolia has an integrated system of coal production for electricity and heat generations. Other than this integrated system, heat-only-boilers (HOBs) produce hot water and steam which is fueled by coal. The Central Energy System (CES) has five electricity generation companies, one transmission company and four distribution companies. Each of the combined heat and power plants (CHP) has two supply outlets: first, an electricity transmission system that buys and sells electricity to multiple distribution companies and two, a district heating company that purchases the heat and transmits it to substations and the municipal housing service company.<sup>17</sup>

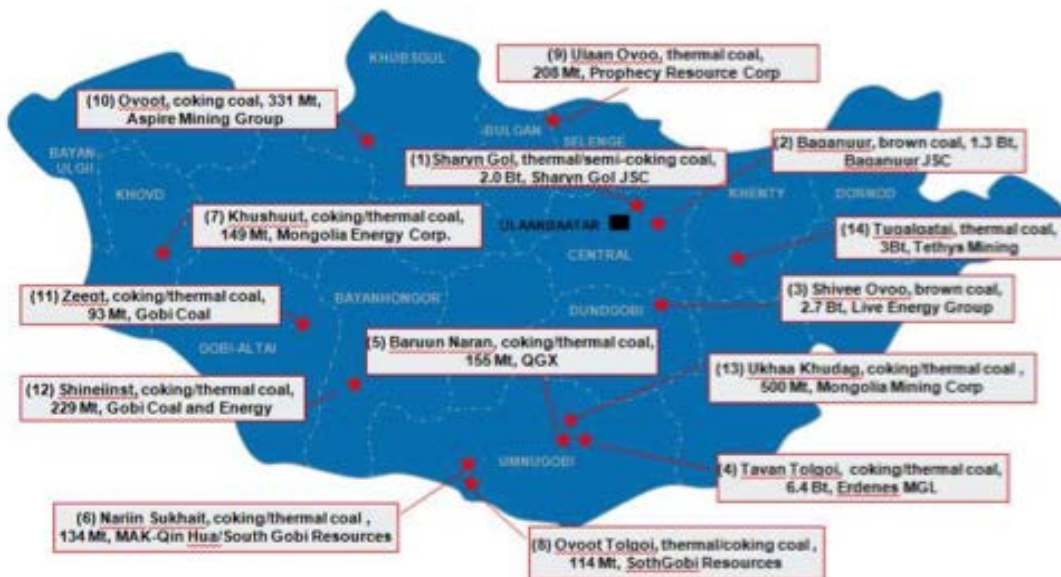
Energy stability in Mongolia indicates the country mainly depends on coal as the primary energy source. Coal is the only source of energy for electricity generation and space heating which accounts for 80 percent, petroleum makes the remaining amount. Almost all of the gross energy supply goes into the production of elec-

## COAL RESOURCES



Source: Mineral Resources Authority of Mongolia

## MAJOR COAL DEPOSITS IN MONGOLIA



Note:

(8) – (14): numbers indicate resources as reported by the companies

(1) - (7): numbers indicate reserves as defined by China Reality Research

Source: World Bank, US Geological Survey, Ministry of Fuel and Energy of Mongolia and China Reality Research

## Hydro-Power (Dams)

Hydroelectricity in Mongolia is produced at a few small plants within the country along with two larger – the Dorgon and Taishir. Most of the small plants were built using water diversion channels making the installed capacity small. During the winter, none of these plants are able to operate due to ice formation. Dams pose a threat to the freshwater biodiversity such as:<sup>170</sup>

- Fragmentation of formerly connected rivers and habits
- Alteration of the natural downstream flow and sediment regimes
- Abrupt conversion of flowing waters into standing ones through reservoirs and back-water effects

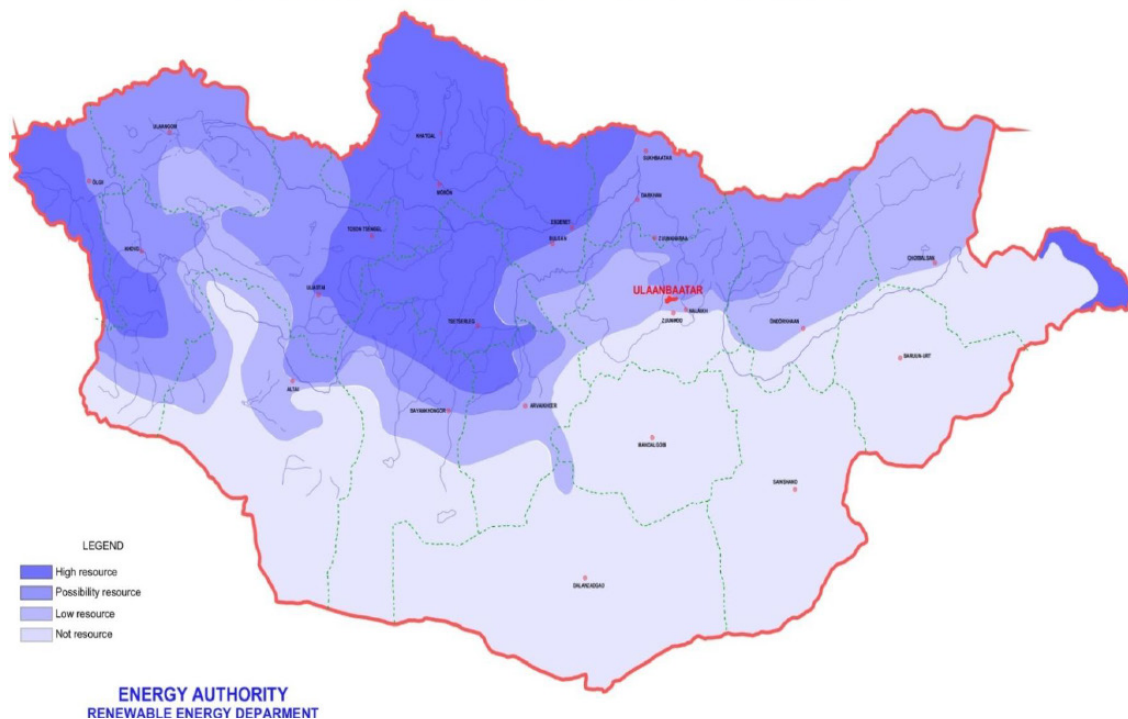
Dam construction in Mongolia will result in many resettlements along with negatively impacted traditional lifestyles of local people. The largest river in the country is the Selenga and it is the main source of water and sediments for Lake Baikal which is a World Natural Heritage Site. Lake Baikal is the largest freshwater lake in the world and is known for its biodiversity and endemism. Dams and reservoirs being built on the watercourses of the Selenga put the unique

natural ecosystem of Lake Baikal at risk. The ecosystem in the lake has already suffered from hydropower in Russia which relies on the flow of the Selenga River. Dams upstream will cause degradation of the delta and its ecosystem. Ethnic nomadic herders in Mongolia rely on the Selenga and Orkhon River Valleys as refuges, calving grounds for hayfields, and ancestral lands. Their livelihoods will also be affected by the reservoirs in downstream locations. In western Mongolia, the Taishir Hyrdo was recently built with support from the Kuwait Fund, but it has caused hardship for many of the nomads living along the Zavkhan River.<sup>171</sup>

## Water and Sanitation

The water sector in Mongolia is underdeveloped due low tariffs and insufficient investments. This has resulted in a deteriorating water infrastructure. Water services are poor, only 35 percent of the population has access to adequate water and 25 percent to proper sanitation. The government is aware and has set its Millennium Development Goals (MDG) targets to increase the proportion of the population using adequate water to 70 percent and increase proper sanitation to 50 percent by 2015. In order to achieve these targets, investment amounts will need to increase significantly.<sup>172</sup>

### HYDRO ENERGY RESOURCE OF MONGOLIA



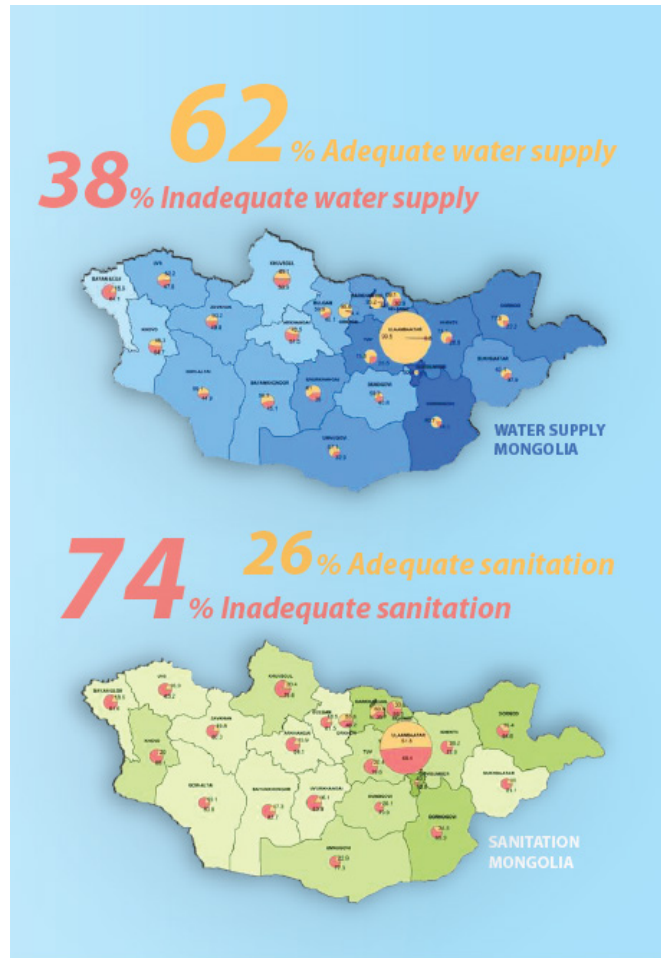
Water supply and sewage in Ulaanbaatar fall under the responsibility of the state-owned enterprise Ulaanbaatar Water and Sewage Authority (USUG). USUG's role performs the role of wholesaler in Ulaanbaatar water sector. It operates the Waste Water Treatment Plan (WWTP) which treats collected waste water before releasing it into the Tuul River. Water consumption in urban areas is growing. The Ministry of Construction and Urban Development predicts the population to increase by over 100,000 by 2020 which means water consumption will rise to 30,000m<sup>3</sup> per day by 2020.<sup>173</sup> The central government has updated the Provision of Safe Drinking Water to the Population of Mongolia (PSMFL) and will be implemented in two phases by 2015. The PSMFL assigns local governments the responsibility of ensuring the normal operation of water, sewerage and drainage systems.<sup>174</sup>

## Systemic Factors

Mongolian nomads call a ger home. A ger is a portable dwelling made of wood lashed together with leather thongs and covered with felt and canvas making it easy to build and dismantle. The felt helps to retain heat and the canvas sheds rain. The furnishings inside like a stove can be carried by three camels or wagons. The entrance of a ger always faces south.



Figure: A Mongolian Ger.<sup>175</sup>





# MONGOLIA Health

Mongolia Disaster Management Reference Handbook | 2014

# Health

Mongolia's healthcare system is ranked first in the world for having the most physicians per one thousand people. However, the quality of the country's health services is one of the worst. Preventative services are non-existent which force many Mongolians to receive their healthcare at foreign hospitals. The health policy lacks clarity.<sup>176</sup>

According to the World Health Organization (WHO), Mongolia moved up from number 130 in 2000 among the 193 member countries for its life expectancy measure to number 116 in 2009. Life expectancy at birth was estimated to be 68.1 years in 2010, indicating longevity has increased approximately by five years over the last 20 years. Gender difference in life expectancy at birth has also expanded reaching 7.4 years in 2010.<sup>177</sup>

One of the key documents, The Health Sector Strategic Master Plan, was developed through an analysis of the current situation in the health sector through a systematic and review of a wide range of existing documents and reports. Overall, the Health Sector Strategic Master Plan:<sup>178</sup>

- Serves primarily as a comprehensive technical long-term planning document that can be implemented by any government whatever its ideology or political mandate
- Takes a predominately primary health care and health promotion approach
- Highlights pro-poor interventions
- Shows that the strategies and outcomes are interlinked with the policies, priority issues and targets in each key area of work
- Reflects the need to think creatively if we are going to be even more successful in the future
- Takes an incremental and gradual approach to change
- Recognizes that health financing policies combined with non-financing measures are needed to address financial and resource allocation challenges
- Is not prescriptive. It allows for flexibility at different levels of the health system.
- Recognizes that improving the health status

Life expectancy at birth (M/F): 64/72  
 Total expenditure on health per capita: 250  
 Total expenditure on health as % of GDP: 5.3

of the people of Mongolia depends not only on actions within the health sector, but also on actions taken by other sectors.

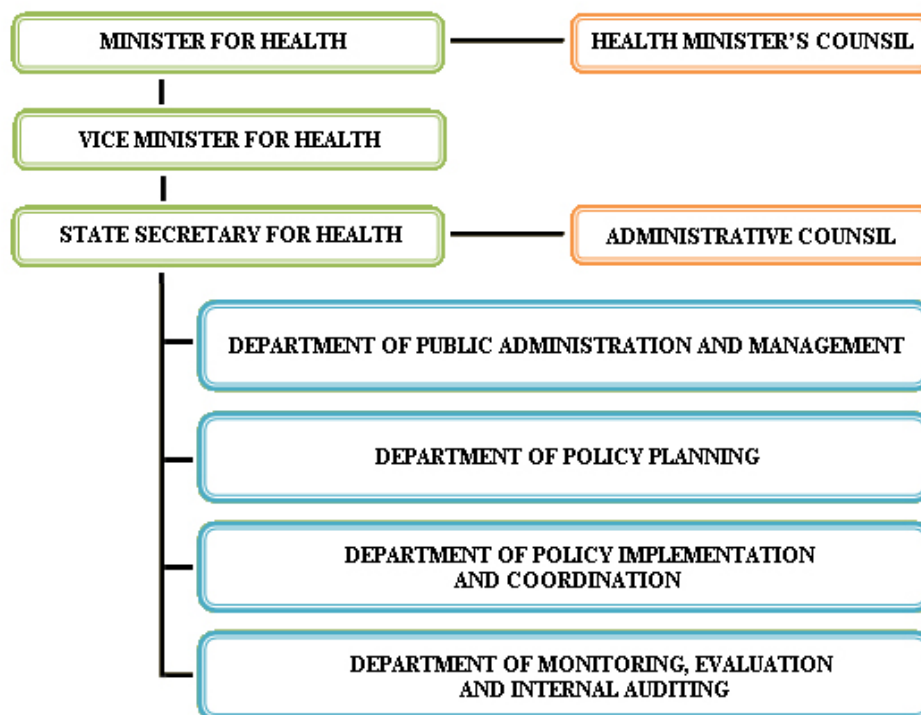
The Ministry of Health has adopted 24 strategies in 7 key areas of work to achieve its mission and policies which are discussed in the Health Sector Strategic Master Plan. The key areas of work below are listed in a conceptually logical order:<sup>179</sup>

- Health Service Delivery
- Pharmaceutical and Support Services
- Behavioral Change and Communication
- Quality of Care
- Human Resource Development
- Health Financing
- Institutional Development and Management

## Structure

The Ministry of Health (MOH) is the government's central administrative body responsible for health policy formulation, planning, regulation and supervision, and ensures the implementation of health-related activities and standards by its institutions and agencies.<sup>180</sup> The Mongolia Ministry of Health's vision is to strive to ensure the availability, accessibility, affordability and equity of quality healthcare services for Mongolians. Healthcare is provided through a needs-based health system which addresses health issues affecting vulnerable populations.

The ultimate goal is to encourage social and economic development through poverty alleviation. The MOH has four departments and eight divisions to carry out this vision.<sup>181</sup>



### Departments<sup>182</sup>

1. **Department of Public Administration and Management:** To create an effective, transparent and accountable working environment by providing leadership in health sector human resource development and management; to develop and coordinate international cooperation in line with the health sector policy, strategies and priorities
2. **Department of Policy Planning:** To provide policy guidance in developing health policy, health financing policy, medium and long-term strategy and health legislations
3. **Department of Policy Implementation and Coordination:** To organize and coordinate policy implementation for medical services, public health, health technology and medicines
4. **Department of Monitoring, Evaluation and Internal Auditing:** To monitor the implementations of health sector legislations, policy papers, programs and projects, evaluate their outputs and conduct internal auditing

### Divisions<sup>183</sup>

1. **Division of Finance and Investment**
2. **Division of Pharmaceutical and Medical Devices**
3. **Division of Medical Services**
4. **Division of Diagnostics and Treatment Technology**
5. **Division of Public Health**
6. **Division of Organization Management and Development**
7. **Division of Human Resource Development**
8. **Division of International Cooperation**

Ministries with a role in the Mongolian health system:<sup>184</sup>

**Ministry of Finance** – The MOF is responsible for overall fiscal planning and monitoring functions at the national level including the health sector.

**Ministry of Human Development and**

**Social Welfare** – The MOHDSW is the state administrative body responsible for social security issues at the central level. They are also the ministry in charge of healthcare for specific populations.

**Ministry of Education, Culture and Science** – The MOECS regulates and coordinates all levels of educational and research policy and its implementation, including undergraduate, graduate and postgraduate medical education in Mongolia.

**General Agency for Specialised Inspection** – The GASI is the government regulating agency in charge of monitoring the implementation of state regulations and standards, including those related to the health system.

**Implementing agencies and their interrelations:**<sup>185</sup>

**The Health Development Centre** – The HDC is a professional organization affiliated with the MOH, which provides formulation and technical capacity strengthening in the areas of health management and information, continuing medical education, telemedicine and emergency care.

**Implementing Agency of the Government – Department of Physical Culture and Sports** – The DOPS is responsible for implementation of Mongolian physical culture and sport legislation, to provide nationwide physical culture and sports activities with technical and professional methodology.

**The City/Aimags Health Department** – An implementing agency of the MOH, and one operates in each of the 21 aimags. The aimag health departments are in charge of implementing public health and medical care policies, the organization and management of healthcare facilities in the aimag, and the allocation and management of financial and other resources. Healthcare facilities in Ulaanbaatar are managed by the Ulaanbaatar City Health Department.

**The National Centre for Communicable Diseases (NCCD)** has the responsibility for the management and control of communicable diseases in Mongolia and provides specialized care with its 600 inpatient beds. They also have a national reference laboratory which confirms all laboratory tests conducted in aimag general hospitals, offers postgraduate training, and conducts research at the national level. The National

Communicable Disease Control Programme (2011-2015) has six sub-programs: control of vaccine-preventable diseases, TB, HIV/AIDS, STIs, gastrointestinal infections, communicable diseases with natural foci/zoonotic diseases and other infectious diseases. **The National Centre of Zoonotic Diseases (NCZD)** and the GASI are the involved in the control and management of zoonotic and natural foci diseases. The General Emergency Department is involved during outbreaks and emergency situations.<sup>186</sup>

## Legal

The government has written key laws and policies to define the legal environment and govern the operations of the health sector.<sup>187</sup>

### The Constitution of Mongolia states in Article 16:

The citizens of Mongolia are guaranteed to enjoy the following rights and freedoms:

- The right to healthy and safe environment and to be protected against environmental pollution and ecological imbalance
- The right to material and financial assistance in old age, childbirth and childcare and in other cases as provided by law
- The right to the protection of health and medical care
- The procedures and conditions for free medical aid shall be determined by law

### The Health Law states:

The citizens have a right to receive medical care and services from doctors and health organizations.

Under the Health Law, the citizens are entitled to receive medical aid and services such as medical emergency and ambulance service, treatment for tuberculosis, cancer, mental or some diseases which require long-term rehabilitation process, disinfection and outbreak management of infectious diseases and medical services for pregnant women, free of charge regardless of whether he or she is covered by the health insurance.

The Health Law defines the state policy and



basic principles on health. The law regulates the responsibilities of the organizations, business entities, and individuals in safeguarding the social health and rights of the citizens and officials of Mongolia for health protection and medical aid and service. The law also regulates the legal framework of activities of health organization and employees.

### **Health Insurance Law:**

The Health Insurance Law determines the health insurance system and services, the premium payments, and the associations between the insurance and health institutions, state, citizens and legal entities connected with the assembling, distribution, and utilization of the health insurance fund.

### **The Drugs Act:**

The Drug Act regulates the manufacture, import, storage, retail, distribution, utilization, and monitoring of drugs, and bio-preparation for humans and livestock.

## **Policies**

### **State Public Health Policy**

The policy intends to protect and promote health of the population by establishing a healthy and safe environment to live, work, and study by improving the synchronization between people, nature and the environment. The priority of the public health policy is increase involvement of the Government, NGOs, family, and community in fostering healthy behavior and attention on health promotion, preventive, and curative issues.

Since 1997, the government initiated 20 national programs to supplement the routine delivery of health services in the public sector as related to the State Public Health Policy.

### **Mongolian Traditional Medicine Development Policy**

The policy serves to develop Mongolian Traditional Medicine based on the principles of disease prevention, treatment, and rehabilitation as supplemented by modern science.

### **Other Policies**

In addition to the state and traditional medicine policies, the national health plan also described

the following policies as components of the legal framework defining and governing the health sector.

- Drug Policy
- Population Development Policy
- Health Sector Human Resource Development Policy (HRDP)

## **Health system**

The Mongolian health system delivers three basic services: preventive, curative, and rehabilitative care. These services are delivered through a two-tier health system: primary care and specialized care, including secondary and tertiary care. The primary responsibility of the state is to provide good quality primary healthcare services to its people. The improvement of these health services is determined by healthcare policies pursued by the government.<sup>188</sup>

Primary care is provided at soum hospitals and family group practice facilities. The funding is allocated in relation to the local population. As of 2014, the yearly funding per capita totaled about \$10 USD. This amount is six times below the amount recommended by the World Health Organization. Secondary care is supposed provided at aimag and district hospitals. However, district hospitals do not perform simple surgeries, deliver babies, or provide child health services. Surgeries and other treatments that should be provided at primary and secondary care institutions are being sent to tertiary care institutions, which are specialized hospitals and clinics. Tertiary care institutions are inundated with patients requiring surgery and treatment for people who belong to primary and secondary levels. These specialized institutions cannot fulfill their responsibilities which force people to travel abroad for these medical services.<sup>189</sup>

The Mongolian health system is one system constitutionally which reflects two main administrative divisions delineated as capital city and Aimags. The Aimags are divided into soums and soums into baghs. The capital city structure is divided into districts and districts into khoroos. The two-tier health system is defined as primary care and specialized care which include secondary and tertiary care. Until the Health Act of 2011, three levels of service delivery described as primary, secondary and tertiary existed however the types of health facilities at the levels were not clearly defined.

## Public Healthcare

The Mongolian health sector's primary priority is to provide healthcare services to the citizens. A number of national public health programs have been implemented by the government to coordinate efforts through all levels of the health system. Delivering health services is a challenge due to the country's low population density spread out over a large geography. Primary health care services are provided according to location.

- Family Health Centers (formerly Family Group Practices) in Ulaanbaatar
- Village Health Centers for outlying suburban areas
- Family Health Centers in the aimags (one per aimag)
- Soum Hospitals (one per soum)
- Intersoum Hospitals (serve multiple soums)
- Bagh felders for rural populations
- Secondary level health care provides inpatient and outpatient services at the following levels:
  - Public health centers in Ulaanbaatar
  - General hospitals in districts
  - General hospitals in aimags
  - Tertiary level healthcare involves hospitals and specialized medical centers in the capital city and regions.
- State Clinical Hospitals
- Regional Diagnostic and Treatment Centers (RDTCs)

Ministry of Health also operates specialized centers and tertiary level central hospitals in Ulaanbaatar.

## Private Healthcare

The private health sector is comprised of health organizations which provide healthcare for profit and are completely self-financed. Income is generated from patients through user and fee for service charges and reimbursements from the health insurance fund for accredited facilities. The private health organizations are

licensed and regulated by the government and are required to meet standards for practice, facility and equipment. As of 2009, the private sector leads in the areas of dentistry, internal medicine, obstetrics, and gynecological care, traditional medicine and high-tech laboratory services to support the public sector for diagnostic services. While the private health sector has been defined as for profit organizations, there are also some NGOs and religious organizations which provide private health care but may not be for profit.<sup>190</sup> The private sector provides about 16.2 percent of the hospital beds.<sup>191</sup>

## Hospitals

Hospitals exist at different administrative levels of the three level health services structure. The primary level of health services is provided by the Family Group Practice System (FGPS), soum and village hospitals. The secondary level of healthcare is provided by the district hospitals and ambulatory services at the health center. The tertiary level of health providers includes specialized hospitals which support the city and the entire country.<sup>192</sup> Specialized institutions are located in Ulaanbaatar such as the National Center for Communicable Diseases, National Center for Mental Health and the National Center for Cancer.<sup>193</sup> The City Health Department under the City Mayor's and Aimag Governor Offices manages the health services.

The soum hospital functions as the central health facility for the soum population and delivers the primary health care. General professional care is offered in accordance with the Essential and Complementary Package of Services (ECPS) for recommended, preventive, clinical, and follow-up care. Soum hospitals termed inter-soum hospitals may also be used for primary referral services for neighboring soums dependent on the location and large size of population.<sup>194</sup>

Public healthcare facilities statistics identify 549 primary healthcare clinics in remote areas and family group practices in the urban areas. There are 33 district and provincial general hospitals and 18 tertiary hospitals and regional centers.<sup>195</sup>

The Government of Mongolia strove to improve the primary level of health services provided by the soum hospitals by establishing the Soum Hospital Development Programme (2002-2008). The program has succeeded in improving rural facilities services in different aimags through renovation and upgrading of the health

infrastructure which included building of new hospitals, and upgrading the ambulance and hospital equipment. National programs to improve the FGPS also expanded primary level care as the FGPS serve as the first point of contact for health services. FGPS focuses on prevention and are set-up at all urban centers.<sup>196</sup> Hospital capacity has been issue for the country. Statistics in 2008 reported 68 hospital beds per 10,000 of the population.<sup>197</sup> While the overall hospital bed count is insufficient for the nation, there has been an excess of capacity at the secondary and tertiary healthcare level.<sup>198</sup>

## Laboratories

There are public and private laboratories supporting the delivery of health services however the government has recognized the need for improvement at different levels. The public and private laboratories in the urban centers lack networking, referencing and quality control. The public health laboratories in the rural facilities require overall strengthening.<sup>199</sup> In 2010, two BSL 2 laboratories were opened in the general hospital in Darkhan and in the regional diagnostic treatment hospital in Orkhon.<sup>200</sup>

## Challenges in the Healthcare System

Mongolia still faces substantial problems associated with poor quality of care, inefficiency, and inadequate implementation of reforms and institutional improvements. The main extent of health disproportion in Mongolia are geographical, urban versus rural. Many migrants living in the outskirts of cities and rural areas do not have sufficient access to the quality and range of services. Distance and scattered location of families and health facilities in rural areas affect disproportions in the health status of the population and delivery of care.

A hospital-oriented system which was inherited from the socialist period is a main barrier to improving the effectiveness of the health system even though the legislative environment and policy have changed during the transition.<sup>201</sup> The health system has a lack of accountability and transparency which is also seen throughout Mongolian society. In 2007, numerous studies were conducted which discovered a persistent public perception of corruption in the public sector. The Asia Foundation conducted research which found that healthcare providers are consistently ranked among the top three professions

open to bribes.<sup>202</sup> Another assessment conducted in 2008 revealed deficiencies in health sector accountability.<sup>203</sup>

Another issue in the Mongolian system is the lack of preventative medicine. The concept of preventative medicine is not firmly established into public awareness. The main preventative medical approach currently is mandatory examinations by mobile medical teams. This approach, which enforces healthcare has delayed public awareness that healthcare is a responsibility which applies at both the individual and community level. Campaigns and programs to increase the population's knowledge in primary are lacking and inadequate.<sup>204</sup>

## Outbreaks

### Communicable diseases

Mongolia has successfully reduced communicable diseases by implementing the EPI, and vaccine-preventable communicable diseases including polio and neonatal tetanus have been eliminated. HIV, STI, and TB infections have increased due to changes in the socioeconomic situation and inequalities related to income. An immunization program has controlled diphtheria, pertussis and neonatal tetanus.<sup>205</sup>

### Non-communicable diseases

As of 2010, the leading causes of death were diseases of the respiratory, digestive, genitourinary and circulatory systems along with injuries and poisoning. Respiratory, digestive, and genitourinary deaths are higher in rural areas. Cardiovascular and incidence rates for injuries are higher in urban areas. Respiratory and gastrointestinal diseases remain the highest causes of death however incidences of infectious diseases related to behavior and lifestyle along with living conditions, like HIV/AIDS, STRI, TB, viral hepatitis and zoonotic diseases are on the rise. Mongolia is one of the seven countries in the WHO Western Pacific Region with the highest tuberculosis (TB) incidence.<sup>206</sup>

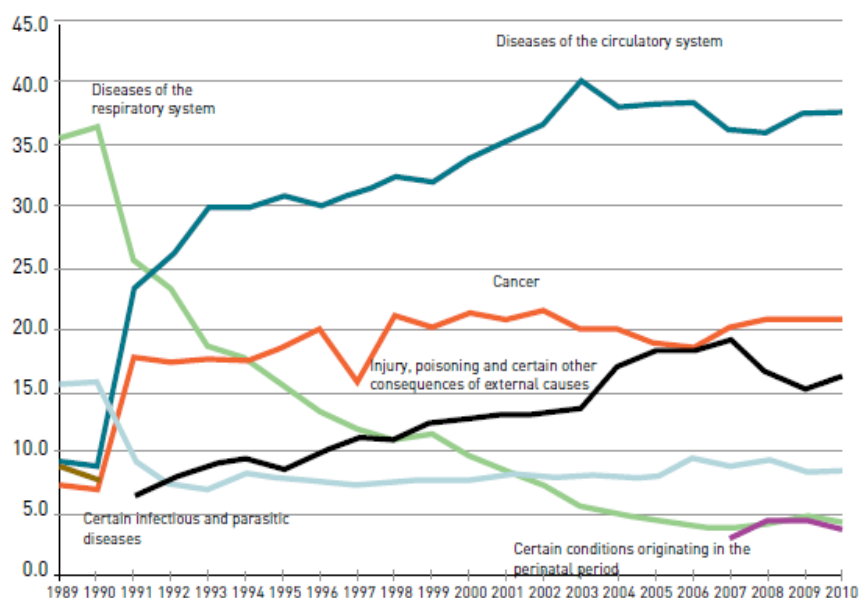
Adult male mortality (76.8 per 10,000 men) is higher than that of females (49.2 per 10,000). Coronary heart disease, mainly in men is the leading cause of death associated with cardiovascular diseases estimated to be 9.9 per 10,000 people in 2010. Death due to injuries and poisonings is the highest amongst men aged 20-24 years. Men are three times more likely to die than women in a traffic accident.<sup>207</sup>

### Training for Health Professionals

Under the Soum Hospital Development Programme, soum level staff received in-service training and continuing education in clinical and management areas. The training helped the soum level staff to advance their diagnostic, treatment, and management skills and competence.<sup>209</sup>

Currently, there is one state-owned university and five private schools/colleges training health professionals on almost 20 courses. The Health Sciences University of Mongolia is the state-owned institution and has seven schools for Medicine, Biomedicine, Traditional Medicine, Dentistry, Pharmacy, Public Health, Nursing and the aimag branches. These training institutions are under the authority of the Ministry of Education, Culture, and Science which registers and issues licenses for health professionals training entities. The Ministry of Health administers the licensing exams.<sup>210</sup>

Figure: Leading causes of death, as percentage of total deaths, 1989-2010<sup>208</sup>



Source: Compiled by using Health Indicators 2000-2010, DOH



# MONGOLIA

## Conclusion

Mongolia Disaster Management Reference Handbook | 2014

# Conclusion

The CFE-DMHA Mongolia Country Book revealed a number of significant themes in Mongolia's disaster management systems, authorities, capabilities, and vulnerabilities. These findings have been outlined in each of the sections of the report, but a summarization of key findings is captured here for quick reference. This country reference handbook is an important step in developing a common understanding of the disaster management context in Mongolia and to identify Mongolia's strengths and vulnerabilities for future disaster response and capability-building engagements.

**Finding #1:** Mongolia has a strong understanding of its disaster hazards and has prepared detailed plans for disaster risk reduction and response, but resource constraints limit the implementation of sustained capabilities and programs.

Mongolia has enacted laws and established plans for disaster management that outline the responsibilities for each level of the government, for enterprises, and for citizens. The policies and procedures that Mongolia has put in place set clear definitions, principles, and expectations for disaster management for each level of society but there are gaps for infrastructure and education. In a country with a population of just over 3 million people spread across a vast country with a low population density, great development needs but a limited budget, and minimal infrastructure outside of a few urban centers, the government has recognized that businesses, citizens, and other entities in Mongolia must assume roles and responsibilities in support and cooperation with national disaster management objectives.

In support of these plans and laws, the Mongolian government has established budgets for disaster management. Unfortunately, the costs of disaster impacts far outweigh the budgets available to government agencies, and the funding available through Mongolia's domestic spending is not enough to address gaps in official capabilities at each level. As a result, Mongolia depends on foreign aid and international loans and grants to support disaster risk reduction and emergency management progress.

Mongolia's natural hazards are interwoven in that the results of one hazard are the contributing factors to another. For example, dust and sand storms degrade soil, leading to desertification and

**Finding #2:** Mongolia's natural disaster hazards are connected in complex cycles through which the hazards contribute to each other.

worse droughts that contribute to harsher dzuds, which exacerbate drought conditions and soil degradation. Livestock, which are a crucial component of Mongolia's nomadic culture and economy, are part of the cycles as well, because overgrazing leads to soil and vegetation degradation and decreased water absorption into the soil, which then feeds into the drought and dzud cycles that can decimate large herds in open areas.

The interconnected nature of Mongolia's hazards creates a challenge in determining how to proceed with disaster risk reduction programs. With limited resources, Mongolia has to choose which hazards to address first, and the process of selecting specific hazards or components of hazards may not sufficiently address the underlying causes or break the cycles. Mongolia's disaster risk reduction programs and complementary external assistance should be planned in holistic ways that use the full range of capabilities and resources available to assess the range of contributing factors and connections between disasters and provide effective means to mitigate risks and break the hazard cycles.

**Finding #3:** Mongolia's disaster hazards contribute to population migrations that cause additional humanitarian and development concerns.

Mongolia has a long and culturally significant nomadic tradition that influences livelihoods, population dispersal, infrastructure development, economics, and other aspects of Mongolian life. Devastating effects of natural disasters in recent years have killed huge numbers of livestock on which nomads depend, pushing those populations to migrate to urban and peri-urban areas in search of food and economic stability. Growing migrations present a threat to traditional cultural and economics bases of Mongolian society, but of greater concern for humanitarian organizations is the trend of nomads setting up camps in their gers on the outskirts of cities where work, utilities, and necessities are scarce. As more families gather in these makeshift camps, the potential for unsanitary conditions and the spread of disease will grow.



# MONGOLIA

## Appendices

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# Appendices

## Disaster Statistics

Table 1: Statistical Disaster Information for Mongolia from 2003 to 2013 \*

Disaster type	Occurrence	Deaths	Total affected	Total damage (USD)
Drought	1	N/A	450,000	N/A
Epidemic	2	N/A	3,160	N/A
Extreme temperature	1	5	769,113	\$62,000,000
Flood	3	41	20,650	\$364,000
Storm	6	94	1,911,000	\$80,000,000
Transport Accident	2	24	8	N/A
<b>Total</b>	<b>15</b>	<b>164</b>	<b>3,153,931</b>	<b>\$142,364,000</b>

\* EM-DAT, The International, Disaster Database. <http://www.emdat.be/result-country-profile>



## Disaster Management Laws and Guidelines

The Parliament law of Mongolia on Disaster Protection is designed to regulate matters relating to the principles and full powers of disaster protection organizations and agencies. This law regulates organizations, activities, and outlines the rights and duties of the State, local authorities, enterprises, entities and individuals in relation to disaster protection.

This law deals with the implementation of disaster prevention, rescue, response and recovery measures except matters relating to war circumstances or to the impact of mass destruction weapons. The law has several components covering general provisions, disaster protection readiness guidelines, structure and management of disaster protection organizations, Powers of the State Administrative Organization and Officials on Disaster Protection, The Duties of Entity, Enterprise and Citizens on Disaster Protection, The Disaster Protection Serviceman, and Its Legal Status, and other categories.<sup>211</sup>

## Department of Defense DMHA Engagements in the Past Five Years (FY 2009-2013)

The following list contains US DoD engagements related to disaster management that involved Burma from 2009 to 2013.

**June 2012:** The United Nations (UN) Civil-Military Coordination (CIMIC) course took place June 2012 in Mongolia with participants from 9 countries. The purpose of the course was to prepare trained staff officers for service in UN Multinational headquarters or other PSO multinational headquarters. The training addressed civil-military coordination and the PSO environment. The course established basic staff skills necessary to operate within a UN, coalition, or regional peacekeeping force headquarters.

**April 2012:** The Mongolia Medical Logistics Subject Matter Expert Exchange (SMEE) was held in April 2012 in Ulaanbaatar, Mongolia at the Central Clinical Hospital of the Armed Forces of Mongolia. A team of four personnel deployed to Ulaanbaatar to conduct the operation in order to increase the capability of the Mongolian Military Medical Department to create and sustain a life cycle management system for their medical equipment.

**July 2011:** In 2011, Operation Pacific Angel was held from July 18-23 in Mongolia. Operation Pacific Angel is a joint and combined humanitarian assistance operation led by 13<sup>th</sup> Air Force. This engagement supports United States Pacific Command's capacity building efforts by partnering with other governments in the region to provide medical, dental, optometry, veterinary and engineering assistance to their citizens. Approximately 65 United States military members with members from the Mongolian Armed Forces and local non-governmental organizations conducted these activities for the event. Operation Pacific Angel is in its fourth year and helps to cultivate common bonds and foster goodwill between the United States and other regional nations by conducting multi-lateral and civic assistance operations.<sup>212</sup>

**2009-2011: Exercise Gobi Wolf:** Gobi Wolf, an annual bilateral disaster response exercise is designated to increase emergency response and management in Mongolia. The exercise tests every aspect of emergency response in the county and provided an invaluable opportunity to enhance partnership with Mongolia. It also provides a test of readiness to deal with situations that are very realistic to the people of Mongolia.<sup>213</sup> Gobi Wolf was designed to improve the Mongolian government's capacity to response and collaborate with other countries during natural and man-made disasters.

**March 2009:** The Mongolia Operations Subject Matter Expert Exchange (SMEE) focused on exchanging information on evacuation planning and execution, medical logistics and intel and physiological preparation for deployment. Lessons learned were also shared from both countries deployment.

## Annual HADR Exercises

**Khaan Quest:** Khaan Quest is an annual multilateral peacekeeping exercise hosted by the Mongolian Armed Forces which takes place at the Tavan Tolgoi (Five Hills) training area in Tuv Aimag. The 2013 exercise marked the ten year anniversary of the event which started in 2003 by the United States and Mongolia. This exercise brings together more than a dozen militaries from around the world with the goal of sharing best practices and

interoperability for multinational peacekeeping operations (PKO). Along with enhancing the Mongolian Armed Forces' peacekeeping operations, additional programs were added such as, water patrol, classes on surviving and suppressing the disorder. A joint healthcare in Songinonkhairkhan and a repair works in Altanbulag Sum of Tuv Aimag are also organized. The exercises helps work on PKO tactics, Khaan Quest remains a showcase for Mongolia to display its strategic ties with the United States and NATO. In 2012, NATO approved an Individual Partnership and Cooperation Programme with Mongolia marking the formalization of a relationship that has blossomed within the past decade due to contributions from the MAF in Kosovo, Sudan and Afghanistan.<sup>214</sup>

**MCIP:** The Multinational Communications Interoperability Program (MCIP) also known as "Pacific Endeavor" will bring nations together in the Asia-Pacific Region, allowing them to integrate their communications and information systems, test compatibility and interoperability, provide a forum for the professional discussion of interoperability issues, and aid the development of regional standards/common architecture in support of Humanitarian Assistance and Disaster Relief Operations, conduct communication systems interoperability assessment, and populate the Multinational Communications Interoperability Guide (MCIG).

**Mongolia Nursing SMEE:** The 18<sup>th</sup> Medical Command and Tripler Army Medical Center conducted Subject Matter Expert Exchange's (SMEEs) in Ulaanbaatar from 2010 to 2013. The objective of these exchanges was to share information between U.S. Army Nurse Corps and Mongolian Armed Forces Medical Nursing professionals. They also discussed similarities and differences in military nursing practices, and continue to build and strengthen a partnership between the U.S. Army nurses and the Mongolian military and civilian nurses which began in 2010.<sup>215</sup>

**Pacific Airlift Rally (PAR):** The Pacific Airlift Rally is a biennial, military airlift symposium sponsored by U.S. Pacific Air Forces for nations in the Indo-Pacific region since 1997. PAR advances military airlift interoperability and cooperation among the nations of the

Indo-Pacific region, and provides a venue to exchange humanitarian airlift, air-land and air delivery techniques specific to the Indo-Pacific region. Participating countries include: Bangladesh, Brunei, Cambodia, Canada, India, Indonesia, Laos, Maldives, Malaysia, Mongolia, Nepal, Papua New Guinea, Philippines, Singapore, Sri Lanka, Thailand, Tonga, United States and Vietnam.

### **National Guard's State Partnership Program (SPP)**

The State Partnership Program (SPP) is a Department of Defense (DoD) security cooperation program run by the National Guard. The program began in 1992, and nearly every state National Guard participates along with the National Guard of Guam, Puerto Rico, the U.S. Virgin Islands, and the District of Columbia. The SPP serves as a training mechanism for National Guard personnel, and improves the capabilities of partner nations to protect their citizens and strengthen relationships with partners to facilitate cooperation.<sup>216</sup>

In 2003, the National Guard's State Partnership Program (SPP) partnered Alaska and Mongolia because the two share similar regions and resemble each other in size, terrain, natural disasters and similar challenges, with many of their citizens living in rural areas. Alaska and Mongolia engage annually during joint exercises and send delegates to each country to learn more about each other's programs and policies while continuing a long-term relationship with mutual support.<sup>217</sup>

Delegates from Mongolia have attended the annual two-week Operation Artic Care mission where government and military medical specialists from all over the U.S. converge on remote Alaskan villages. This provided a unique opportunity for the Mongolian delegate to see the technologies used in a unique setting to treat patients. Operation Artic Care began in 1995 as a way to provide military participants increased readiness and training in working in a joint environment.<sup>218</sup>

In 2013, the Alaska National Guard (AKARNG) executed exchanges with the National Emergency Management Agency (NEMA) and the Mongolian Armed Forces. These exchanges helped build capacity within each of the respective organizations and further strengthened their partnership. The AKARNG has deployed around 15 officers and noncommissioned officers to serve with Mongolians in Afghanistan.<sup>219</sup>

In August 2009, the First Responder Hazmat Subject Matter Expert Exchange (SMEE) was held and is an exchange of procedures and methods for HAZMAT first responders including: hot zone/cordon, communications, ICS, unified command, risk assessment, HAZCOM, consequence management, etc. The Alaska National Guard and the Mongolia National Emergency Management Agency compared and demonstrated techniques and evaluated capacity to respond. In March 2009, the Asia Foundation-Mongolia in partnership with the Alaska National Guard State Partnership Program with elements from the Mongolian Government put on the Emergency Preparedness Risk Reduction Workshop, Transport Sector Hazmat and Mass Casualty Event.

## Disaster Management Partners in Mongolia

The following contact list is included with the intent to provide planners and deploying personnel initial contacts for disaster management-related organizations in Mongolia. Out of consideration for privacy concerns, this list does not contain individual contact information, but instead has email addresses and telephone numbers for offices.

Org.	Office	Email	Phone	Description	Logo
Adventist Development and Relief Agency Mongolia	Country Office	Admin-officer@adra.org.mn	976 11 450732	ADRA is an international non-profit and has been active in Mongolia since 1994. There four main focus areas are: youth and education, food security, disaster management, and micro economic development. They work in partnership with Mongolian individuals and families regardless of any age, race, gender or religious affiliation. <sup>220</sup>	
Asia Development Bank	Resident Mission	adbmnrm@adb.org	976 11 313440	Mongolia joined the Asia Development Bank in 1991. They have been Mongolia's largest source of multilateral official development assistance, playing a key role in the country's transformation to a market economy. ADB helped rebuild and reorient the country's human, physical, and institutional infrastructure. <sup>221</sup>	
Asian Disaster Preparedness Center	Head Office – Bangkok	adpc@adpc.net	66 2 298 0681	ADPC brings technical expertise to Mongolia in order to contribute to reducing disaster risks and supporting the national disaster risk reduction agenda. They will also develop a community-based framework for Mongolia and help develop its linkages with the local level development planning process. <sup>222</sup>	
Australian Aid	Country Office		97 6 711 8250	AusAID opened its Mongolia Office in 2013 to manage its growing and increasingly complex program. Their work in Mongolia involves providing assistance in areas of need, such as delivering water and sanitation facilities for disadvantaged communities and strengthening governance and environmental safeguards in the mining sector. <sup>223</sup>	
European Commission Humanitarian Aid and Civil Protection	Regional Support Office – Bangkok		66 2 255 1036	The EU has been providing humanitarian aid to Mongolia since 1994. ECHO has focused on ensuring shelter, psychosocial support and non-food items such as blankets and warm clothing to those most in need, providing them also with additional fodder supplies. <sup>224</sup>	
European Union	Technical Office	eu_office@magicnet.mn	976 11 312863	The EU Technical Office opened in Ulaanbaatar in 2006. The EU-Mongolia strategy aims to help improve living conditions in the countryside and slow down the rural exodus. Its main objective is to support poverty alleviation by allocating 80 percent of the cooperation budget to sustainable rural development. <sup>225</sup>	

Food and Agriculture Organization	Liaison Office	FAO-MN@fao.org	976 11 310248	Mongolia became a member of the FAO in 1974 and was accredited through the representative office in China. FAO has provided assistance for the formulation of the National Food Security Programme. In the last five years, FAO programmes and projects have dramatically increased, focusing on forestry and the livestock sector with active collaboration of government counterparts. <sup>226</sup>	
German Development Cooperation	Country Office	giz-mon-golei@giz.de	976 11 315340	GIZ established its office in 1998. They are working in the following areas: support for sustainable mineral resource management, biodiversity, and energy efficiency. <sup>227</sup>	
Global Facility for Disaster Reduction and Recovery	Washington D.C. Office		202 458 4529	GFDRR supports Mongolia in its efforts to move away from traditional disaster response towards approaches of pre-disaster risk management and resilience-building. <sup>228</sup>	
International Organization for Migration	Country Office	IOMU-lanbator@iom.int	976 70 14 31 00	Mongolia became a member of IOM in 2008 and opened its Mongolia country office in 2011. IOM has supported Mongolians abroad through its Assisted Voluntary Returns programme and assisted victims of trafficking. In 2013, they launched a broad technical cooperation project on migration governance addressing border management and labor migration. <sup>229</sup>	
International Federation of Red Cross	Mongolian Red Cross Society	redcross@magicnet.mn	976 11 32 94 33	The Mongolian Red Cross Society is the largest humanitarian organization in Mongolia. It was established in 1939 and is support to the Government. It serves vulnerable Mongolians through a volunteer-based network which promotes humanitarianism values and the principles of the Red Cross. It has 33 midlevel branches and over 800 primary level branches across the country. <sup>230</sup>	
Japan International Cooperation Agency	Country Office		976 11 325939	JICA began assisting Mongolia in 1990 then opened an office in 1997. Their policy is to achieve National Development Plan through three target categories with five development sectors. They support development of the mining sector, assisting inclusive growth, and enhancement of the capacity and function of Ulaanbaatar as an urban center. <sup>231</sup>	
Korea International Cooperation Agency	Branch Office	mongolia@koica.go.kr	976 11 31 1774	KOICA opened its Mongolia office in 1995. Currently, they are implementing assistance programs, such as Project Aid, Training Program, World Friends Korea Program and Partnership with NGOs, with the four strategies being based on the MDGs to ensure them effective implementation. <sup>232</sup>	
Mercy Corps	Country Office	contactus@mn.mercy corps.org	976 11 461145	Mercy Corps Mongolia works to achieve sustainable change in three strategic, inter-related program areas that continue to contribute to the Agency's overall country goal: Inclusive Growth, Good Governance, and Environmental Stewardship. Currently Mercy Corps works on five projects in 15 aimags. <sup>233</sup>	

Peace Corps	Country Office	its@mn.peacecorps.gov	976 11 311518	Volunteers have served in Mongolia since 1991. They presently work in the majority of provinces, serving a variety of jobs. Volunteers learn Mongolian language and customs and share in the daily life of their communities. Projects include: Teaching English as a Foreign Language, Health, Community and Youth Development, Community Economic Development, and Life Skills. <sup>234</sup>	
Save the Children UK	Country Office			Save the Children started working in Mongolia in 1994 with an office in Ulaanbaatar and a branch in Dornod Province. Their main programme areas are education and child protection. They work towards protecting vulnerable children from violence, abuse, neglect and exploitation. <sup>235</sup>	
The Asia Foundation	Country Office	generalmg@asiafound.org	976 11 330 524	The Asia Foundation marks its 20 year anniversary in Mongolia. They currently work with the central and local government, academics, civil society, citizens, and the private sector on governance, environmental protection, urban services improvement, citizen participation, women's empowerment, anti-trafficking and education. <sup>236</sup>	
Swiss Agency for Development and Cooperation	Cooperation Office	Ulaanbaatar@sdsc.net	976 11 331422	SDC opened its cooperation office in 2004. In their Swiss Cooperation Strategy with Mongolia (2013-2016), SDC has prioritized the following: agricultural development ensuring food security and better livelihoods, involvement in vocational education and skills training, and strengthening good governance and civil society development. <sup>237</sup>	
United Nations Children's Fund	Country Office	ulaanbaatar@unicef.org	976 11 312217	UNICEF opened its Mongolia office in 1991. They are currently implementing the country programme which supports the four strategic UN Development Assistance Framework outcomes, facilitate the efforts of the Government on child related Millennium Development Goals in the National Development Strategy 2015 and support the National Programme of Action for the Development and Protection of Children. <sup>238</sup>	
United Nations Development Programme	Country Office	registry.n@undp.org	976 11 327585	UNDP opened its office in 1973. They have worked for equitable and sustainable development for the benefit of all Mongolians. UNDP is committed to helping the Government and the people of Mongolia achieve its nine national Millennium Development Goals as well as other national development priorities through capacity development, knowledge sharing, partnerships, and policy dialogue.	
United Nations Environment Programme	Regional Office for Asia Pacific – Bangkok	un-proap@un.org	66 2 288 2314	Mongolia is one of the first countries to be a part of a UNEP initiative called the Partnership for Action on the Green Economy. It's a new initiative to assist the global transition to a green economy. Mongolia is developing policies on sustainable mining, renewable energy and ecotourism that will place it on a green development path. <sup>239</sup>	

United Nations Human Settlements Programme	Country Office	ubgusip@gmail.com	976 11 322711	UN-HABITAT has been working in Mongolia since 2006. They have been addressing the larger issues of human settlements and urbanization particularly focusing on Ger area development through integrated and community-led approaches with close cooperation of national and local governments. <sup>240</sup>	
United Nations Office for Disaster Risk Reduction	Asia and Pacific Office – Bangkok		66 022 882894	UNISDR supports on-going disaster risk reducing actions of people, governments, UN Country Teams, regional and international organizations, and many stakeholders exposed to various hazards and risks. Their major focal point for Mongolia is the Hyogo Framework for Action with the National Emergency Management Agency. <sup>241</sup>	
United Nations Population Fund	Country Office	contact@unfpa.org.mn	976 11 353501	UNFPA began its support to the Mongolian government in the late 1970's. They opened an office in 2002 and a regional sub office in Khovd. Currently they are supporting the Millennium Development Goals, primarily MDG 3, 5, and 6. Main areas of cooperation are reproductive health and population and development and gender. <sup>242</sup>	
United States Agency for International Development	Country Office		976 7007 6001	USAID began its partnership with Mongolia in 1991. The total assistance provided to Mongolia has exceeded \$200 million, all of it in grant form. The current USAID strategy in Mongolia links the two main themes of good governance and private sector-led economic growth. <sup>243</sup>	
The World Bank	Country Office	eastasia-pacific@world-bank.org	976 7007 8200	Mongolia became a member of the World Bank in 1991. And to date, the Bank cumulative lending to Mongolia is more than \$777 million for 72 projects. As of April 2014, there are 15 active Bank-supported projects in Mongolia. The majority of the projects support infrastructure development, economic governance and institutional strengthening of the mining sector. <sup>244</sup>	
World Health Organization	Representative Office	who.mog@wpro.who.int	976 11 327870	The WHO Mongolia works closely with the Ministry of Health and other partners to improve the health and wellbeing of the Mongolian people, especially those who are poor and vulnerable and live in rural and remote areas. Their main focus is on the public health and their goal is to improve the life expectancy and quality of life of the people by preventing diseases, promoting health, treating those who are sick and rehabilitating those who are disabled. <sup>245</sup>	
World Vision	National Office		976 701 55323	World Vision began emergency relief work in Mongolia in 1993. World Vision Mongolia implements its projects through 32 Area Development Programmes in Ulaanbaatar and 17 rural communities across the country. Their programs focus on healthy living, child and family well-being, economic resilience, environmental improvement and child sponsorship, with the aim of achieving transformational development. <sup>246</sup>	

## Force Protection/Pre-Deployment information

The following information is provided for pre-deployment planning and preparations. Visit [www.travel.state.gov](http://www.travel.state.gov) prior to deployments for further up-to-date information.

### Passport/Visa

You must have a passport valid for at least six months beyond the date of your intended arrival in Mongolia. An entry/exit visa is not required if you are visiting for fewer than 90 days; however, if you plan to stay in Mongolia for more than 30 days, you must register with the Office of Immigration, Naturalization, and Foreign Citizens in Ulaanbaatar within seven days of arriving in Mongolia and obtain a residency permit card. For the most up-to-date visa information, visit <http://mongolianembassy.us/visa-information-for-us-citizen-only/#.UyZZtMl6cdU>.

### Airport Fees

- None

### Emergency Contact Information

For U.S. Citizens, contact the U.S. Embassy in Ulaanbaatar:

- 11 micro district, Big Ring Road, Ulaanbaatar-13, POB 1021, Mongolia
- Telephone: +976-11-329-095
- Emergency Telephone: +976-9911-4168
- Embassy Fax Number: +976-11-353-788

### Currency Information

The currency in Mongolia is the Mongolian Tögrög

### Additional Information

- Before visiting Burma, the CDC advises travelers get the following vaccinations:
  - Standard routine vaccinations (all travelers)
  - Hepatitis A (most travelers)
  - Typhoid (most travelers)
  - Hepatitis B (some travelers)
  - Rabies (some travelers)
- Mongolia: +976 (1)
- Mongolia Time Zone is UTC/GMT +8 hours

### Mongolia Characteristics

- **Official Name:** Mongolia
- **Government:** Parliamentary



- **Language:** Khalkha Mongol
- **Geography:** Mongolia has an area of 1,564,116 sq km, which makes it slightly smaller than Alaska. The Capital of Mongolia is Ulaanbaatar.
- **People:** There are around 2.9 million people living in Mongolia. Mongolia has a variety of ethnic groups including: Khalkh 81.9%, Kazak 3.8%, Dorvod 2.7%, Bayad 2.1%, Buryat-Bouriates 1.7%, Zakhchin 1.2%, Dariganga 1%, Uriankhai 1%, other 4.6%. The country's primary religious groups include: Buddhist 53%, Muslim 3%, Christian 2.2%, Shamanist 2.9%, other 0.4%, none 38.6%.
- **Climate:** desert; continental (large daily and seasonal temperature ranges).
- **Military Branches:** Mongolian Armed Forces (Mongol ulsyn zevsegt huchin): Mongolian Army (includes Mongolian Air and Air Defense, which is to become a separate service in 2015); there is no navy (2013).

## Risks and vulnerabilities

Street crime is common in Mongolia, particularly in Ulaanbaatar, the capital. Most of the street crime is non-violent, but violent incidents do occur regularly. The most common crimes against foreigners are pickpocketing and bag snatching. There are reports of organized groups operating in open areas, usually after dark, surrounding, grabbing, and choking an individual in order to search his or her pockets. Thieves have also cut victims' bag straps and clothing in attempts to reach wallets, cell phones, and other valuables. If you detect pickpocket attempts, you should not confront the thieves, since they may become violent. It is best not to walk alone through Ulaanbaatar after dark.<sup>247</sup>

## Culture and Customs

- Mongolians are very tolerant people and most will not take offence when a foreigner is unfamiliar with local customs. It is not possible or even expected of you to know all the customs of the Mongols in the course of a short trip. However, Mongolians are always happy and appreciative when a foreign visitor takes the time to learn some of their customs and shows this during greetings or visits.
- Use both hands, and the right hand, to offer or to take something.
- During formal celebrations or occasions, food, tea or vodka should be given and received with the right hand extended and the left hand supporting the right elbow.
- It is not polite to say no when the host offers tea, food or dairy products. You should accept it and taste (or pretend to) before placing it on the table.
- It is impolite to put your feet or shoes on chairs or tables. To show the bottoms of your feet when sitting in close proximity to another is offensive.

## Health Information

### Medicines/Items:

- **The prescription medicines.** Have enough to last during the trip. Keep them in their original prescription bottles and always in carry-on luggage.
- **Medicine for diarrhea,** usually over-the-counter.

- Iodine tablets and portable water filters to purify water if bottled water is not available.
- Antibacterial hand wipes or alcohol-based hand sanitizer containing at least 60% alcohol.
- To prevent insect/mosquito bites, bring:
- Lightweight long-sleeved shirts, long pants, and a hat to wear outside, whenever possible.
  - Flying-insect spray to help clear rooms of mosquitoes.

### During the Trip:

Many diseases, like malaria and dengue, are spread through insect bites. One of the best protections is to prevent insect bites by:

- Using insect repellent (bug spray) with 30%-50% DEET. Picaridin, available in 7% and 15% concentrations, needs more frequent application.
- Wearing long-sleeved shirts, long pants, and a hat outdoors.
- Remaining indoors in a screened or air-conditioned area during the peak biting period for malaria (dusk and dawn).

### Food and Water:

Diseases from food and water are the leading cause of illness in travelers. Follow these tips for safe eating and drinking:

- Wash hands often with soap and water, especially before eating. If soap and water are not available, use an alcohol-based hand gel (with at least 60% alcohol).
- Drink only bottled or boiled water, or carbonated (bubbly) drinks in cans or bottles. Avoid tap water, fountain drinks, and ice cubes. If this is not possible, learn how to make water safer to drink.
- Do not eat food purchased from street vendors.
- Make sure food is fully cooked.
- Avoid dairy products, unless they have been

pasteurized.

- Check bottles for cracked seals.

### Traveling with Medications

When medications are necessary for travel, it is important to remember the following:

- **Original containers:** All medications should be carried in their original containers with clear labels, so the contents are easily identified. Although many travelers like placing medications into small containers or packing them in the daily-dose containers, officials at ports of entry may require proper identification of medications.
- **Prescriptions:** Travelers should carry copies of all prescriptions, including their generic names.
- **Physician notes:** For controlled substances and injectable medications, travelers are advised to carry a note from the prescribing physician on letterhead stationery.
- **Restricted medications:** Travelers should be aware that certain medications are not permitted in certain countries. If there is a question about these restrictions, particularly with controlled substances, travelers are recommended to contact the embassy or consulate of the destination country.

## Acronyms and Abbreviations

Acronym	Definition
AADC	Air and Air Defense Command
ADB	Asian Development Bank
ADPC	Asia Disaster Preparedness Center
ADRA	Adventist Development and Relief Agency
ATFM	Air Traffic Flow Management
ASEAN	Association of Southeast Asian Nations
BASA	Bilateral Air Service Agreements
CAAM	Civil Aviation Authority of Mongolia
CAREC	Central Asia Regional Economic Cooperation
CES	Central Energy System
CHP	Combined Heat and Power
CIMIC	Civil-Military Coordination
CPI	Corruption Perception Index
DFID	Department for International Development
DoD	Department of Defense
DOPS	Department of Physical Culture and Sports
DRR	Disaster Risk Reduction
DSCA	Defense Support to Civil Authorities
ECPS	Essential and Complementary Package of Services
ERT	Emergency Response Team
EU	European Union
FAO	Food and Agriculture Organization
FCO	Foreign and Commonwealth Office
FGPS	Family Group Practice System
GASI	General Agency for Specialised Inspection
GDP	Gross Domestic Product
GFDRR	Global Facility for Disaster Reduction and Recovery
GHG	Greenhouse Gas
GNI	Gross National Income
HAZMAT	Hazardous Materials
HCT	Humanitarian Country Team
HDC	Health Development Center
HDI	Human Development Index
HDR	Human Development Report
HFA	Hyogo Framework for Action
HOB	Heat-only Boilers
ICAO	International Civil Aviation Organization
ICT	Information and Communications Technology

<b>Acronym</b>	<b>Definition</b>
IFRC	International Federation of Red Cross and Red Crescent Societies
IMH	Institute of Meteorology and Hydrology
INCOTERMS	International Commerce Terms
IOM	International Organization for Migration
JICA	Japan International Cooperation Agency
KOICA	Korea International Cooperation Agency
MAF	Mongolian Armed Forces
MAP21	Mongolia Action Programme for the 21st Century
MCAA	Civil Aviation Authority of Mongolia
MCIG	Multinational Communications Interoperability Guide
MCIP	Multinational Communications Interoperability Program
MCR	Making Cities Resilient
MDG	Millennium Development Goal
MOECS	Ministry of Education, Culture, and Science
MOF	Ministry of Finance
MOH	Ministry of Health
MOHDSW	Ministry of Human Development and Social Welfare
NAMHEM	National Agency for Meteorology, Hydrology and Environmental Monitoring
NAPCC	National Action Plan on Climate Change
NATO	North Atlantic Treaty Organization
NCC	National Climate Committee
NCCD	National Center for Communicable Diseases
NCZD	National Center of Zoonotic Diseases
NDRT	National Disaster Response Team
NEA	Northeast Asia
NEMA	National Emergency Management Agency
NGO	Non-Governmental Organization
NSO	National Statistical Office
OCHA	Office for the Coordination of Humanitarian Affairs
PAR	Pacific Airlift Rally
PKO	Peacekeeping Operations
PSMFL	Provision of Safe Drinking Water to the Population of Mongolia
RDTC	Regional Diagnostic and Treatment Center
SAR	Search and Rescue
SAREX	Search and Rescue Exercise
SEC	State Emergency Commission
SMEE	Subject Matter Expert Exchange
SPEC	State Permanent Emergency Commission
SPP	State Partnership Program

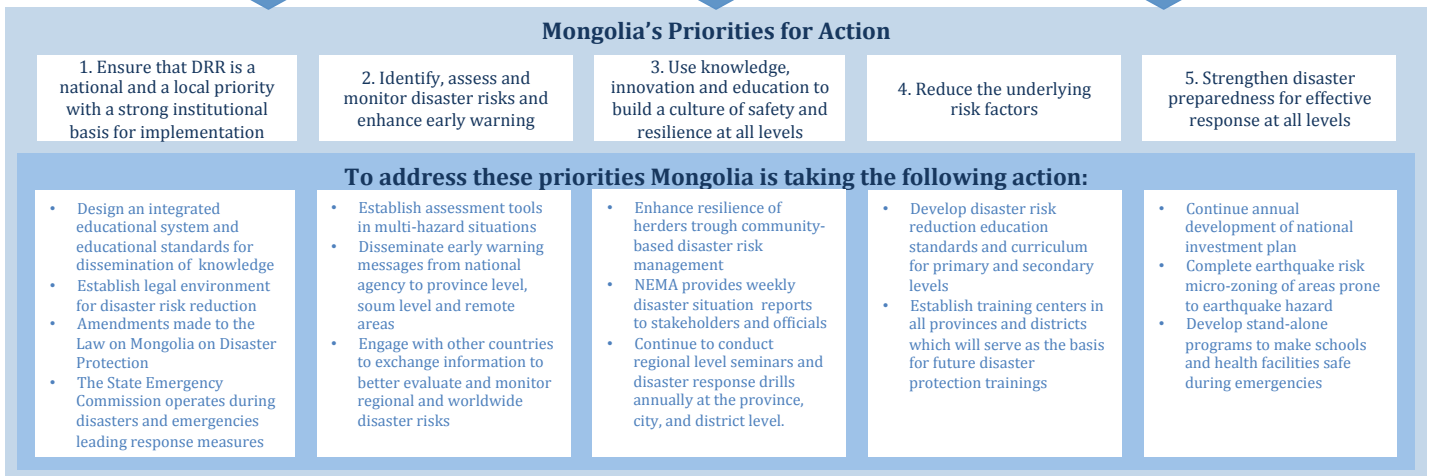
<b>Acronym</b>	<b>Definition</b>
UN	United Nations
UNDAC	United Nations Disaster Assessment and Coordination
UNDP	United Nations Development Programme
UNEP	United Nations Environmental Programme
UNFCCC	United Nations Framework Convention on Climate Change
UNFPA	United Nations Population Fund
UNICEF	United Nations International Children's Fund
UNISDR	United Nations International Strategy for Disaster Reduction
UNRC	United Nations Resident Coordinator
USAID	United States Agency for International Development
USD	United States Dollars
USG	United States Government
USUG	Ulaanbaatar Water and Sewage Authority
VSAT	Very Small Aperture Terminal
WASH	Water, Sanitation, and Hygiene
WHO	World Health Organization

## HFA Country Progress Report

The Hyogo Framework for Action (HFA) was adopted as a guideline to reduce vulnerabilities to natural hazards. The HFA assists the efforts of these countries to become more resilient to, and manage better the hazards that threaten their development. Below is a summarization of the 2009-2011 results of the HFA for Mongolia. The full report is available at [http://www.preventionweb.net/files/18911\\_mng\\_NationalHFAprogress\\_2009-11.pdf](http://www.preventionweb.net/files/18911_mng_NationalHFAprogress_2009-11.pdf).



### Mongolia's Summary of the Hyogo Framework for Action (2009- 2011): Building the Resilience of Nations and Communities to Disasters (Hyogo Framework)



**Mongolia's lessons learned in implementing the HFA:**

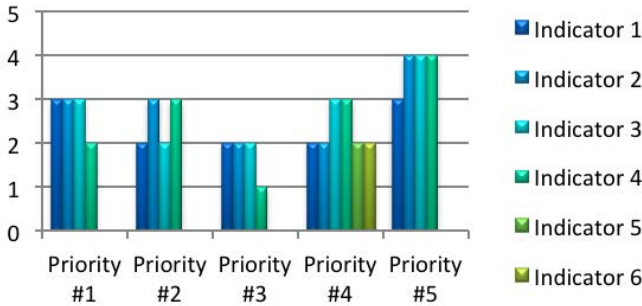
Major success factors driving progress of the implementation of the HFA in Mongolia include: Development of the National Disaster Preparedness Plan; Implementation of the project "Establishment of Special Communication Infrastructure"; NEMA developed fundamental policy documents as a step closer towards disaster risk reduction

# Summarization of the Mongolia National Progress Report on the Implementation of Hyogo Framework for Action (2009-2011)

The Hyogo Framework for Action (HFA) was adopted as a guideline to reduce vulnerabilities to natural hazards. The HFA assists the efforts of these countries to become more resilient to, and manage better the hazards that threaten their development. Below is a summarization of the 2009-2011 results of the HFA for Mongolia. The full report is available at [http://www.preventionweb.net/files/18911\\_mng\\_NationalHFAprogress\\_2009-11.pdf](http://www.preventionweb.net/files/18911_mng_NationalHFAprogress_2009-11.pdf).

Overall, the level of HFA progress reported Mongolia matched or exceeded most of the regional averages for Asia-Pacific. Mongolia scored above the regional average on having preparedness and effective response. The areas where Mongolia scored below the regional average were education, information and public awareness.

**Level of Progress\* Achieved for HFA Priorities**



<b>Future Outlook Area 1: <i>Integration of disaster risk considerations into sustainable development policies, planning and programming at all levels.</i></b>	
Challenges:	Budgetary constraints for disaster prevention and risk reduction measures.
Future Outlook Priorities:	Measures are taken to protect from disasters the livestock sector, which accounts for a big share in the national economy; Availability of well-trained human resources is key to disaster preparedness.
<b>Future Outlook Area 2: <i>Development and strengthening of institutions, mechanisms, and capacities at all levels to build resilience to hazards.</i></b>	
Challenges:	Establishment of a favorable legal environment at all levels is vital for strengthening the national disaster resilience.
Future Outlook Priorities:	Legal environment for disaster recovery and reconstruction is relatively well established. However, there is a need for national policies and strategies, and structures responsible for disaster risk reduction and preparedness measures.
<b>Future Outlook Area 3: <i>Incorporation of risk reduction approaches in the preparedness, response, and recovery programs during the reconstruction of affected communities.</i></b>	
Challenges:	Process is facing slowdowns due to Parliament members, which have the ultimate legislative mandate, seem to under-appreciate the importance of a legal environment conducive to effective disaster risk reduction.
Future Outlook Priorities:	Establish a national platform for partnership among governmental, non-governmental and professional organizations, the private sector, and the people.

## Mongolia National Progress Report on the Implementation of Hyogo Framework for Action (2009-2011)

Many countries around the world are committed to taking action to reduce disaster risk. The Hyogo Framework for Action (HFA) was adopted as a guideline to reduce vulnerabilities to natural hazards. The HFA assists the efforts of these countries to become more resilient to, and manage better the hazards that threaten their development. Below are the 2009-2011 results of the HFA for Mongolia:

<b>Priority for Action #1: Making disaster risk reduction a policy priority, institutional strengthening</b>			
<b>Core Indicator</b>	<b>Indicator Description</b>	<b>Level of Progress Achieved*</b>	<b>Regional Average Score</b>
1	National policy and legal framework for disaster risk reduction exists with decentralized responsibilities and capacities at all levels.	3	3.48
2	Dedicated and adequate resources are available to implement disaster risk reduction plans and activities at all administrative levels	3	3.03
3	Community Participation and decentralization is ensured through the delegation of authority and resources to local levels	3	3.11
4	A national multi sectoral platform for disaster risk reduction is functioning.	2	3.11
<b>Priority for Action #2: Risk assessment and early warning systems</b>			
1	National and local risk assessments based on hazard data and vulnerability information are available and include risk assessments for key sectors.	2	3.14
2	Systems are in place to monitor, archive and disseminate data on key hazards and vulnerabilities.	3	3.07
3	Early warning systems are in place for all major hazards, with outreach to communities.	2	3.29
4	National and local risk assessments take account of regional / trans-boundary risks, with a view to regional cooperation on risk reduction.	3	3.29
<b>Priority for Action #3: Education, information and public awareness</b>			
1	Relevant information on disasters is available and accessible at all levels, to all stakeholders (through networks, development of information sharing systems etc).		3.03
2	School curricula, education material and relevant trainings include disaster risk reduction and recovery concepts and practices.	2	3.03
3	Research methods and tools for multi-risk assessments and cost benefit analysis are developed and strengthened.	2	2.55
4	Countrywide public awareness strategy exists to stimulate a culture of disaster resilience, with outreach to urban and rural communities.	2	3.44
<b>Priority for Action #4: Reducing underlying risk factors</b>			
1	Disaster risk reduction is an integral objective of environment related policies and plans, including for land use natural resource management and adaptation to climate change.	2	3.14
2	Social development policies and plans are being implemented to reduce the vulnerability of populations most at risk.	2	2.74
3	Economic and productive sectorial policies and plans have been implemented to reduce the vulnerability of economic activities.	3	2.88



4	Planning and management of human settlements incorporate disaster risk reduction elements, including enforcement of building codes.	3	2.84
5	Disaster risk reduction measures are integrated into post disaster recovery and rehabilitation processes.	2	3.0
6	Procedures are in place to assess the disaster risk impacts of major development projects, especially infrastructure.	2	2.73
<b>Priority for Action #5: Preparedness for effective response</b>			
1	Strong policy, technical and institutional capacities and mechanisms for disaster risk management, with a disaster risk reduction perspective are in place.	3	3.29
2	Disaster preparedness plans and contingency plans are in place at all administrative levels, and regular training drills and rehearsals are held to test and develop disaster response programs.	4	3.42
3	Financial reserves and contingency mechanisms are in place to support effective response and recovery when required.	4	3.33
4	Procedures are in place to exchange relevant information during hazard events and disasters, and to undertake post-event reviews.	4	3.34

**\*Level of Progress:**

- 1 – Minor progress with few signs of forward action in plans or policy
- 2 – Some progress, but without systematic policy and/ or institutional commitment
- 3 – Institutional commitment attained, but achievements are neither comprehensive nor substantial
- 4 – Substantial achievement attained but with recognized limitations in key aspects, such as financial resources and/ or operational capacities
- 5 – Comprehensive achievement with sustained commitment and capacities at all levels

## Country Profile

Sourced directly from: *Central Intelligence Agency World Factbook*.<sup>248</sup>

### Introduction: Mongolia

**Background:** The Mongols gained fame in the 13th century when under Chinggis KHAAN they established a huge Eurasian empire through conquest. After his death the empire was divided into several powerful Mongol states, but these broke apart in the 14th century. The Mongols eventually retired to their original steppe homelands and in the late 17th century came under Chinese rule. Mongolia won its independence in 1921 with Soviet backing and a communist regime was installed in 1924. The modern country of Mongolia, however, represents only part of the Mongols' historical homeland; more ethnic Mongolians live in the Inner Mongolia Autonomous Region in the People's Republic of China than in Mongolia. Following a peaceful democratic revolution, the ex-communist Mongolian People's Revolutionary Party (MPRP) won elections in 1990 and 1992, but was defeated by the Democratic Union Coalition (DUC) in the 1996 parliamentary election. The MPRP won an overwhelming majority in the 2000 parliamentary election, but the party lost seats in the 2004 election and shared power with democratic coalition parties from 2004-08. The MPRP regained a solid majority in the 2008 parliamentary elections but nevertheless formed a coalition government with the Democratic Party that lasted until January 2012. In 2009, current President ELBEGDORJ of the Democratic Party was elected to office and was re-elected for his second term in June 2013. In 2010, the MPRP voted to retake the name of the Mongolian People's Party (MPP), a name it used in the early 1920s. Shortly thereafter, a new party was formed by former president ENKH-BAYAR, which adopted the MPRP name. In the 2012 Parliamentary elections, a coalition of four political parties led by the Democratic Party, gained control of the Parliament.

### Geography: mongolia

**Location:** Northern Asia, between China and Russia

**Geographic coordinates:** 46 00 N, 105 00 E

**Map references:** Asia

### Area:

Total: 1,564,116 sq km

Country comparison to the world: 19

Land: 1,553,556 sq km

Water: 10,560 sq km

**Area - comparative:** Slightly smaller than Alaska

**Land boundaries:** Total: 8,220 km

**Border countries:** China 4,677 km, Russia 3,543 km

**Coastline:** 0 km (landlocked)

**Maritime claims:** None (landlocked)

**Climate:** Desert; continental (large daily and seasonal temperature ranges)

**Terrain:** Vast semidesert and desert plains, grassy steppe, mountains in west and southwest; Gobi Desert in south-central

**Elevation extremes:** Lowest point: Hoh Nuur 560 m

**Highest point:** Nayramadlin Orgil (Huyten Orgil) 4,374 m

**Natural resources:** Oil, coal, copper, molybdenum, tungsten, phosphates, tin, nickel, zinc, fluorspar, gold, silver, iron

### Land use:

Arable land: 0.39%

Permanent crops: 0%

Other: 99.61% (2011)

**Irrigated land:** 843 sq km (2003)

**Total renewable water resources:** 34.8 cu km (2011)

### Freshwater withdrawal (domestic/industrial/agricultural):

Total: 0.55 cu km/yr (13%/43%/44%)

Per capita: 196.8 cu m/yr (2009)

**Natural hazards:** Dust storms; grassland and forest fires; drought; "zud," which is harsh winter conditions

## Environment - current issues:

Limited natural freshwater resources in some areas; the policies of former Communist regimes promoted rapid urbanization and industrial growth that had negative effects on the environment; the burning of soft coal in power plants and the lack of enforcement of environmental laws severely polluted the air in Ulaanbaatar; deforestation, overgrazing, and the converting of virgin land to agricultural production increased soil erosion from wind and rain; desertification and mining activities had a deleterious effect on the environment

## Environment - international agreements:

Party to: Biodiversity, Climate Change, Climate Change-Kyoto Protocol, Desertification, Endangered Species, Environmental Modification, Hazardous Wastes, Law of the Sea, Ozone Layer Protection, Ship Pollution, Wetlands, Whaling

Signed, but not ratified: none of the selected agreements

**Geography - note:** Landlocked; strategic location between China and Russia

## People and Society: mongolia

**Nationality:** Noun: Mongolian(s)

Adjective: Mongolian

**Ethnic groups:** Khalkh 81.9%, Kazak 3.8%, Dorvod 2.7%, Bayad 2.1%, Buryat-Bouriates 1.7%, Zakhchin 1.2%, Dariganga 1%, Uriankhai 1%, other 4.6% (2010 est.)

**Languages:** Khalkha Mongol 90% (official), Turkic, Russian (1999)

**Religions:** Buddhist 53%, Muslim 3%, Christian 2.2%, Shamanist 2.9%, other 0.4%, none 38.6% (2010 est.)

**Population:** 2,953,190 (July 2014 est.)

Country comparison to the world: 139

### Age structure:

0-14 years: 26.8% (male 404,051/female 388,546)

15-24 years: 18.7% (male 278,912/female 273,167)

25-54 years: 44.5% (male 636,799/female 677,236)

55-64 years: 4.1% (male 80,267/female 94,021)

65 years and over: 4% (male 49,314/female 70,877) (2014 est.)

Population pyramid:

### Dependency ratios:

Total dependency ratio: 45.1 %

Youth dependency ratio: 39.6 %

Elderly dependency ratio: 5.5 %

Potential support ratio: 18.1 (2013)

### Median age:

Total: 27.1 years

Male: 26.3 years

Female: 27.8 years (2014 est.)

### Population growth rate:

1.37% (2014 est.)

Country comparison to the world: 89

### Birth rate:

20.88 births/1,000 population (2014 est.)

Country comparison to the world: 81

### Death rate:

6.38 deaths/1,000 population (2014 est.)

Country comparison to the world: 156

### Net migration rate:

0.85 migrant(s)/1,000 population (2014 est.)

Country comparison to the world: 145

### Urbanization:

Urban population: 68.5% of total population (2011)

Rate of urbanization: 2.81% annual rate of change (2010-15 est.)

**Major urban areas - population:**

ULAANBAATAR (capital) 949,000 (2009)

**Sex ratio:**

- At birth: 1.05 male(s)/female
- 0-14 years: 1.04 male(s)/female
- 15-24 years: 1.02 male(s)/female
- 25-54 years: 0.94 male(s)/female
- 55-64 years: 0.96 male(s)/female
- 65 years and over: 0.77 male(s)/female
- Total population: 1 male(s)/female (2014 est.)

**Maternal mortality rate:**

- 63 deaths/100,000 live births (2010)
- Country comparison to the world: 97

**Infant mortality rate:**

- Total: 23.15 deaths/1,000 live births
- Country comparison to the world: 79
- Male: 26.4 deaths/1,000 live births
- Female: 19.75 deaths/1,000 live births (2014 est.)

**Life expectancy at birth:**

- Total population: 68.98 years
- Country comparison to the world: 158
- Male: 64.72 years
- Female: 73.45 years (2014est.)

**Total fertility rate:**

- 2.22 children born/woman (2014 est.)
- Country comparison to the world: 100

**Contraceptive prevalence rate:** 55% (2010)

**Health expenditures:** 5.3% of GDP (2011)

Country comparison to the world: 129

**Physicians density:** 2.76 physicians/1,000 population (2008)

**Hospital bed density:** 6.8 beds/1,000 population

(2011)

**Drinking water source:**

Improved:

- Urban: 100% of population
- Rural: 53.1% of population
- Total: 85.3% of population

Unimproved:

- Urban: 0% of population
- Rural: 46.9% of population
- Total: 14.7% of population (2011 est.)

**Sanitation facility access:**

Improved:

- Urban: 64% of population
- Rural: 29.1% of population
- Total: 53% of population

Unimproved:

- Urban: 36% of population
- Rural: 70.9% of population
- Total: 47% of population (2011 est.)

**HIV/AIDS - adult prevalence rate:**

- Less than 0.1% (2012)
- Country comparison to the world: 161

**HIV/AIDS - people living with HIV/AIDS:**

- Fewer than 500 (2012)
- Country comparison to the world: 160

**HIV/AIDS - deaths:**

- Fewer than 100 (2012)
- Country comparison to the world: 146

**Obesity - adult prevalence rate:**

- 14.4% (2008)
- Country comparison to the world: 122

**Children under the age of 5 years under-weight:**

5.3% (2005)

Country comparison to the world: 88

**Education expenditures:**

5.5% of GDP (2011)

Country comparison to the world: 58

**Literacy:**

Definition: age 15 and over can read and write

Total population: 97.4%

Male: 96.8%

Female: 97.9% (2011 est.)

**School life expectancy (primary to tertiary education):**

Total: 15 years

Male: 14 years

Female: 16 years (2012)

**Child labor – children ages 5-14:**

Total number: 106,203

Percentage: 18 % (2005 est.)

**Unemployment, youth ages 15-24:**

Total: 11.9%

Country comparison to the world: 100

Male: 10.7%

Female: 13.2% (2011)

**Government: mongolia****Country name:**

Conventional long form: none

Conventional short form: Mongolia

Local long form: none

Local short form: Mongol Uls

Former: Outer Mongolia

**Government type:** Parliamentary

**Capital:** Name: Ulaanbaatar

Geographic coordinates: 47 55 N, 106 55 E

Time difference: UTC+8 (13 hours ahead of Washington, DC during Standard Time)

**Administrative divisions:** 21 provinces (aymguud, singular - aymag) and 1 municipality\* (singular - hot); Arhangay, Bayanhongor, Bayan-Olgii, Bulgan, Darhan-Uul, Dornod, Dornogovi, Dundgovi, Dzavhan (Zavkhan), Govi-Altay, Govisumber, Hentiy, Hovd, Hovsgol, Omnogovi, Orhon, Ovorhangay, Selenge, Suhbaatar, Tov, Ulaanbaatar\*, Uvs

**Independence:** 11 July 1921 (from China)

**National holiday:**

Independence Day/Revolution Day, 11 July (1921)

**Constitution:** Several previous; latest adopted 13 January 1992, effective 12 February 1992; amended 1999, 2001 (2011)

**Legal system:** Civil law system influenced by Soviet and Romano-Germanic legal systems; constitution ambiguous on judicial review of legislative acts

**International law organization participation:** Has not submitted an ICJ jurisdiction declaration; accepts ICCT jurisdiction

**Suffrage:** 18 years of age; universal

**Executive Branch:**

Chief of state: President Tsakhia ELBEGDORJ (since 18 June 2009)

Head of government: Prime Minister Norov ALTANKHUYAG (since 9 August 2012); Deputy Prime Minister Dendev TERBISHDAGVA (since 20 August 2012)

Cabinet: Cabinet nominated by the prime minister in consultation with the president and confirmed by the State Great Hural (parliament)

(For more information visit the World Leaders website )

Elections: presidential candidates nominated by political parties represented in State Great Hural and elected by popular vote for a four-year term

(eligible for a second term); election last held on 26 June 2013 (next to be held in June 2017); following legislative elections, leaders of the majority party or a majority coalition usually elect the prime minister of the State Great Hural

Election results: in elections in June 2013, Tsakhia ELBEGDORJ elected president; percent of vote - Tsakhia ELBEGDORJ 50.2%, Badmaanyambuu BAT-ERDENE 42%, Natsag UDVAL 6.5%, others 1.3%

### Legislative Branch:

Unicameral State Great Hural (76 seats; of which 48 members are directly elected from 26 electoral districts, while 28 members are proportionally elected based on a party's share of the total votes; all serve four-year terms)

Elections: last held on 28 June 2012 (next to be held in June 2016)

Election results: percent of vote by party - NA; seats by party - DP 33, MPP 25, Justice Coalition 11, others 5, vacant 2

### Judicial Branch:

Highest court(s): Supreme Court (consists of the Chief Justice and 16 judges organized into civil, criminal, and administrative chambers); Constitutional Court or Tssets (consists of a chairman and 8 members)

Judge selection and term of office: Supreme Court chief justice and judges appointed by the president upon recommendation to the State Great Hural by the General Council of Courts; term of appointment is for life; chairman of the Constitutional Court elected from among its members; members appointed by the State Great Hural upon nominations - 3 each by the president, the State Great Hural, and the Supreme Court; term of appointment is 6 years; chairmanship limited to a single renewable 3-year term

Subordinate courts: aimag (provincial) and capital city appellate courts; soum, inter-soum, and district courts; Administrative Cases Courts (established in 2004)

### Political parties and leaders:

Civil Will-Green Party or CWGP [Sanjaasuren OYUN]

Democratic Party or DP [Norov ALTANHUY-

AG]

Justice Coalition (includes MPRP and MNDP)

Mongolian National Democratic Party or MNDP [Mendsaikhan ENKHSAIKHAN]

Mongolian People's Party or MPP [Miyegombo ENKHBOLD]

Mongolian People's Revolutionary Party or MPRP [Nambar ENKHBAYAR]

### Political pressure groups and leaders:

Other: human rights groups; women's groups

### International organization participation:

ADB, ARF, CD, CICA, CP, EBRD, EITI (compliant country), FAO, G-77, IAEA, IBRD, ICAO, ICC (NGOs), ICRM, IDA, IFAD, IFC, IFRCs, ILO, IMF, IMO, IMSO, Interpol, IOC, IOM, IPU, ISO, ITSO, ITU, ITUC, MIGA, MINURSO, MONUSCO, NAM, OPCW, OSCE, SCO (observer), UN, UNAMID, UNCTAD, UNESCO, UNIDO, UNISFA, UNMISS, UNWTO, UPU, WCO, WHO, WIPO, WMO, WTO

### Diplomatic representation in the US:

Chief of mission: Ambassador Bulgaa ALTANGEREL (since 8 January 2013)

Chancery: 2833 M Street NW, Washington, DC 20007

Telephone: [1] (202) 333-7117

FAX: [1] (202) 298-9227

Consulate(s) general: New York, San Francisco

### Diplomatic representation from the US:

Chief of mission: Ambassador Piper Anne Wind CAMPBELL (since 6 August 2012)

Embassy: Denver Street #3, 11th Micro Region, Big Ring Road, Ulaanbaatar, 14190 Mongolia

Mailing address: PSC 461, Box 300, FPO AP 96521-0002; P.O. Box 341, Ulaanbaatar-14192

Telephone: [976] 7007-6001

FAX: [976] 7007-6016

### Flag description:

Three equal, vertical bands of red (hoist side),

blue, and red; centered on the hoist-side red band in yellow is the national emblem ("soyombo" - a columnar arrangement of abstract and geometric representation for fire, sun, moon, earth, water, and the yin-yang symbol); blue represents the sky, red symbolizes progress and prosperity

**National symbol(s):** Soyombo emblem

**National anthem:** Name: "Mongol ulsyn toriin duulal" (National Anthem of Mongolia)

Lyrics/music: Tsendiin DAMDINSUREN/Bilegiin DAMDINSUREN and Luvsanjamts MURJORJ

*Note:* music adopted 1950, lyrics adopted 2006; the anthem's lyrics have been altered on numerous occasions

## **Economy: mongolia**

**Economy - overview:** Mongolia's extensive mineral deposits and attendant growth in mining-sector activities have transformed Mongolia's economy, which traditionally has been dependent on herding and agriculture. Mongolia's copper, gold, coal, molybdenum, fluorspar, uranium, tin, and tungsten deposits, among others, have attracted foreign direct investment. Soviet assistance, at its height one-third of GDP, disappeared almost overnight in 1990 and 1991 at the time of the dismantlement of the USSR. The following decade saw Mongolia endure both deep recession, because of political inaction and natural disasters, as well as economic growth, because of reform-embracing, free-market economics and extensive privatization of the formerly state-run economy. The country opened a fledgling stock exchange in 1991. Mongolia joined the World Trade Organization in 1997 and seeks to expand its participation in regional economic and trade regimes. Growth averaged nearly 9% per year in 2004-08 largely because of high copper prices globally and new gold production. By late 2008, Mongolia was hit hard by the global financial crisis. Slower global economic growth hurt the country's exports, notably copper, and slashed government revenues. As a result, Mongolia's real economy contracted 1.3% in 2009. In early 2009, the International Monetary Fund reached a \$236 million Stand-by Arrangement with Mongolia and the country has largely emerged from the crisis with better regulations and closer supervision. The banking sector strengthened but weaknesses remain. In October 2009, Mongolia passed

long-awaited legislation on an investment agreement to develop the Oyu Tolgoi mine, considered to be among the world's largest untapped copper-gold deposits. Mongolia's ongoing dispute with a foreign investor over Oyu Tolgoi, however, has called into question the attractiveness of Mongolia as a destination for foreign direct investment. Negotiations to develop the massive Tavan Tolgoi coal field also have stalled. The economy has grown more than 10% per year since 2010, largely on the strength of commodity exports to nearby countries and high government spending domestically. Mongolia's economy, however, faces near-term economic risks from the government's loose fiscal and monetary policies, which are contributing to high inflation, and from uncertainties in foreign demand for Mongolian exports. Trade with China represents more than half of Mongolia's total external trade - China receives more than 90% of Mongolia's exports and is Mongolia's largest supplier. Mongolia has relied on Russia for energy supplies, leaving it vulnerable to price increases; in the first 11 months of 2013, Mongolia purchased 76% of its gasoline and diesel fuel and a substantial amount of electric power from Russia. A drop in foreign direct investment and a decrease in Chinese demand for Mongolia's mineral exports are putting pressure on Mongolia's balance of payments. Remittances from Mongolians working abroad, particularly in South Korea, are significant.

### **GDP (purchasing power parity):**

\$17.03 billion (2013 est.)

Country comparison to the world: 140

\$15.23 billion (2012 est.)

\$13.57 billion (2011 est.)

*Note:* data are in 2013 US dollars

### **GDP (official exchange rate):**

\$11.14 billion (2013 est.)

### **GDP - real growth rate:**

11.8% (2013 est.)

Country comparison to the world: 5

12.3% (2012 est.)

17.5% (2011 est.)

### **GDP - per capita (PPP):**

\$5,900 (2013 est.)

Country comparison to the world: 152

\$5,400 (2012 est.)

\$4,900 (2011 est.)

*Note:* data are in 2013 US dollars

### **GDP - composition, by end use:**

Household consumption: 58.5%

Government consumption: 14.9%

Investment in fixed capital: 55.8%

Investment in inventories: 0%

Exports of goods and services: 50%

Imports of goods and services: -79.2%

(2013 est.)

### **GDP - composition, by sector of origin:**

Agriculture: 16.5%

Industry: 32.6%

Services: 50.9% (2013 est.)

**Agriculture - products:** Wheat, barley, vegetables, forage crops; sheep, goats, cattle, camels, horses

**Industries:** Construction and construction materials; mining (coal, copper, molybdenum, fluorspar, tin, tungsten, and gold); oil; food and beverages; processing of animal products, cashmere and natural fiber manufacturing

### **Industrial production growth rate:**

11% (2013 est.)

Country comparison to the world: 8

### **Labor force:**

1.037 million (2011 est.)

Country comparison to the world: 141

### **Labor force - by occupation:**

Agriculture: 33%

Industry: 10.6%

Services: 56.4% (2011)

### **Unemployment rate:**

9% (2011 est.)

Country comparison to the world: 99

13% (2010)

### **Population below poverty line:**

29.8% (2011 est.)

### **Household income or consumption by percentage share:**

Lowest 10%: 3%

Highest 10%: 28.4% (2008)

Distribution of family income – gini index:

36.5 (2008)

Country comparison to the world: 82

32.8 (2002)

### **Budget:**

Revenues: \$3.462 billion

Expenditures: \$4.36 billion (2013 est.)

### **Taxes and other revenues:**

31.1% of GDP (2013 est.)

Country comparison to the world: 87\_

### **Budget surplus (+) or deficit (-):**

8.1% of GDP (2013 est.)

Country comparison to the world: 197\_

### **Fiscal year:** Calendar year

### **Inflation rate (consumer prices):**

8.2% (2013 est.)

Country comparison to the world: 193

15% (2012 est.)

### **Central bank discount rate:**

13.25% (31 December 2012)

Country comparison to the world: 15



12.25% (31 December 2011 est.)

**Commercial bank prime lending rate:**

17.5% (31 December 2013 est.)

Country comparison to the world: 25

18.2% (31 December 2012 est.)

**Stock of narrow money:**

\$1.219 billion (31 December 2013 est.)

Country comparison to the world: 145\_

\$1.318 billion (31 December 2012 est.)

**Stock of Broad Money:**

\$6.329 billion (31 December 2013 est.)

Country comparison to the world: 120\_

\$5.472 billion (31 December 2012 est.)

**Stock of domestic credit:**

\$3.297 billion (31 December 2013 est.)

Country comparison to the world: 124

\$3.09 billion (31 December 2012 est.)

**Market value of publicly traded shares:**

\$1.293 billion (31 December 2012 est.)

Country comparison to the world: 100

\$1.579 billion (31 December 2011)

\$1.093 billion (31 December 2010 est.)

**Current account balance:**

\$3.639 billion (2013 est.)

Country comparison to the world: 162\_

\$3.362 billion (2012 est.)

**Exports:**

\$4.294 billion (2013 est.)

Country comparison to the world: 115

\$4.382 billion (2012 est.)

**Exports - commodities:** Copper, apparel, live-stock, animal products, cashmere, wool, hides, fluorspar, other nonferrous metals, coal, crude oil

**Exports - partners:** China 89%, Canada 4.1% (2012)

**Imports:** \$5.696 billion (2013 est.)

Country comparison to the world: 121

\$5.934 billion (2012 est.)

**Imports - commodities:** Machinery and equipment, fuel, cars, food products, industrial consumer goods, chemicals, building materials, cigarettes and tobacco, appliances, soap and detergent

**Imports - partners:** China 37.5%, Russia 25.6%, US 9.4%, South Korea 6.1%, Japan 4.9% (2012)

**Debt – external:**

\$4.954 billion (31 December 2013 est.)

Country comparison to the world: 122

\$4.669 billion (31 December 2012 est.)

**Stock of direct foreign investment – at home:**

\$1.69 billion (31 December 2013 est.)

Country comparison to the world: 98

\$4.452 billion (31 December 2012 est.)

**Stock of direct foreign investment – abroad:**

\$NA (31 December 2013 est.)

\$44 million (31 December 2012 est.)

**Exchange rates:**

Togrog/tugriks (MNT) per US dollar -

1,444.3 (2013 est.)

1,357.6 (2012 est.)

1,357.1 (2010 est.)

1,442.8 (2009)

1,170 (2007)

**Energy: mongolia**

**Electricity - production:**

4.48 billion kWh (2010 est.)

Country comparison to the world: 120

**Electricity - consumption:**

3.951 billion kWh (2010 est.)

Country comparison to the world: 122

**Electricity - exports:**

22 million kWh (2010 est.)

Country comparison to the world: 86

**Electricity - imports:**

263 million kWh (2010 est.)

Country comparison to the world: 81

**Electricity - installed generating capacity:**

833,200 kW (2010 est.)

Country comparison to the world: 127

**Electricity - from fossil fuels:**

99.9% of total installed capacity (2010 est.)

Country comparison to the world: 44

**Electricity - from nuclear fuels:**

0% of total installed capacity (2010 est.)

Country comparison to the world: 133\_

**Electricity - from hydroelectric plants:**

0% of total installed capacity (2010 est.)

Country comparison to the world: 182

**Electricity - from other renewable sources:**

0.1% of total installed capacity (2010 est.)

Country comparison to the world: 100

**Crude oil - production:**

9,935 bbl/day (2012 est.)

Country comparison to the world: 91\_

**Crude oil - exports:**

5,680 bbl/day (2010 est.)

Country comparison to the world: 64

**Crude oil - imports:**

0 bbl/day (2010 est.)

Country comparison to the world: 88

**Crude oil - proved reserves:**

NA bbl

**Refined petroleum products - production:**

0 bbl/day (2010 est.)

Country comparison to the world: 169

**Refined petroleum products - consumption:**

21,610 bbl/day (2011 est.)

Country comparison to the world: 126

**Refined petroleum products - exports:**

0 bbl/day (2010 est.)

Country comparison to the world: 194

**Refined petroleum products - imports:**

17,360 bbl/day (2010 est.)

Country comparison to the world: 108

**Natural gas - production:**

0 cu m (2011 est.)

Country comparison to the world: 161

**Natural gas - consumption:**

0 cu m (2010 est.)

Country comparison to the world: 167

**Natural gas - exports:**

0 cu m (2011 est.)

Country comparison to the world: 142

**Natural gas - imports:**

0 cu m (2011 est.)

Country comparison to the world: 92\_

**Natural gas - proved reserves:**

0 cu m (1 January 2013 es)

Country comparison to the world: 165

## **Carbon dioxide emissions from consumption of energy:**

10.21 million Mt (2011 est.)

Country comparison to the world: 100\_

## **Communications: mongolia**

### **Telephones - main lines in use:**

176,700 (2012)

Country comparison to the world: 129

### **Telephones - mobile cellular:**

3.375 million (2012)

Country comparison to the world: 126

**Telephone system:** General assessment: network is improving with international direct dialing available in many areas; a fiber-optic network has been installed that is improving broadband and communication services between major urban centers with multiple companies providing inter-city fiber-optic cable services

Domestic: very low fixed-line teledensity; there are multiple mobile-cellular providers and subscribership is increasing

International: country code - 976; satellite earth stations - 7 (2011)

**Broadcast media:** Following a law passed in 2005, Mongolia's state-run radio and TV provider converted to a public service provider; also available are private radio and TV broadcasters, as well as multi-channel satellite and cable TV providers; more than 100 radio stations, including some 20 via repeaters for the public broadcaster; transmissions of multiple international broadcasters are available (2008)

**Internet country code:** .mn

**Internet hosts:** 20,084 (2012)

Country comparison to the world: 118\_

**Internet users:** 330,000 (2008)

Country comparison to the world: 125

## **Transportation: mongolia**

**Airports:** 44 (2013)

Country comparison to the world: 98

**Airports - with paved runways:** Total: 15

Over 3,047 m: 2

2,438 to 3,047 m: 10

1,524 to 2,437 m: 3 (2013)

**Airports - with unpaved runways:** Total: 29

Over 3,047 m: 2

2,438 to 3,047 m: 2

1,524 to 2,437 m: 24

Under 914 m:

1 (2013)

**Heliports:** 1 (2013)

**Railways:** Total: 1,908 km

Country comparison to the world: 73

Broad gauge: 1,908 km 1.520-m gauge

*Note:* the railway is 50 percent owned by the Russian State Railway (2010)

### **Roadways:**

Total: 49,249 km

Country comparison to the world: 78\_

Paved: 4,800 km

Unpaved: 44,449 km (2013)

**Waterways:** 580 km (the only waterway in operation is Lake Hovsgol (135 km); Selenge River (270 km) and Orhon River (175 km) are navigable but carry little traffic; lakes and rivers freeze in winter, they are open from May to September) (2010)

Country comparison to the world: 82\_

**Merchant marine:** Total: 57

Country comparison to the world: 68

By type: bulk carrier 21, cargo 25, chemical tanker 1, container 2, liquefied gas 2, passenger/cargo 2, roll on/roll off 3, vehicle carrier 1

Foreign-owned: 44 (Indonesia 2, Japan 2, North Korea 1, Russia 2, Singapore 3, Ukraine 1, Viet-

nam 33) (2010)

## **Military: mongolia**

**Military branches:** Mongolian Armed Forces (Mongol ulsyn zevsegt huchin): Mongolian Army (includes Mongolian Air and Air Defense, which is to become a separate service in 2015); there is no navy (2013)

**Military service age and obligation:** 18-25 years of age for compulsory and voluntary military service; conscript service obligation is 12 months in land or air defense forces or police; a small portion of Mongolian land forces (2.5 percent) is comprised of contract soldiers; women cannot be deployed overseas for military operations (2012)

### **Manpower available for military service:**

Males age 16-49: 898,546

Females age 16-49: 891,192 (2010 est.)

### **Manpower fit for military service:**

Males age 16-49: 726,199

Females age 16-49: 756,628 (2010 est.)

### **Manpower reaching militarily significant age annually:**

Male: 30,829

Female: 29,648 (2010 est.)

### **Military expenditures:** 1.12% of GDP (2012)

### **Country comparison to the world:** 93

0.99% of GDP (2011)

1.12% of GDP (2010)

## **Transnational Issues: mongolia**

**Disputes - international:** None

### **Refugees and internally displaced persons:**

Stateless persons: 220 (2012)

# Mongolia Indices

## Health

- In 2000, the World Health Organization ranked Mongolia's health system 145 out of 191.<sup>249</sup>
- Mongolia's per capita health expenditure per capita ranks 128<sup>th</sup> out of 192 countries.
- Mongolia's health index ranking is 108/187.<sup>250</sup>
- Mongolia's ranking for life expectancy at birth is 124/180.<sup>251</sup>
- Regarding mortality under the age of five, Mongolia ranks 76<sup>th</sup> out of 193 countries.<sup>252</sup>

## Government

- According to transparency.org, Mongolia's Corruption Perceptions Index is 83/177.<sup>253</sup>

## Education

- Mongolia has one of the highest literacy rates in the world, 97% in 2005-2010.<sup>254</sup>

## Other

- Mongolia placed 56<sup>th</sup> out of 148 countries ranked for gender inequality.<sup>255</sup>
- According to the Human Development Index, which measures longevity, education, and standard of living, Mongolia ranked 108<sup>th</sup>.<sup>256</sup>
- When considering exposure, vulnerability, susceptibility, coping capabilities, and adaptive capabilities, the World Risk Index places Mongolia at number 147.<sup>257</sup>

## End Notes

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