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Country presentation of Mongolia
ADRC Visiting researcher programme FY 2013A
Chinbaatar LKHAMJAV
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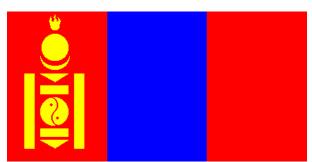
**Presentation Outline** 

- 1. Mongolia: general Information
- 2. Natural Hazards
- 3. Disaster Management System
- 4. Disaster management Strategy, Policy & Plan
- 5. Budget Size on National Level
- 6. Progress of the Implementation of Hyogo Framework for Action (HFA)
- 7. Recent major projects
- 8. Organization name & contact information

#### 1. General Information



Flag of Mongolia



- •Latitudes 41° and 52° N
- •Longitudes 87° and 120° E

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## 1-1 Geographical Data

• Mongolia is a landlocked country in Central Asia, strategically located between China and Russia. The terrain is one of mountains and rolling plateaus, with a high degree of relief. Overall, the land slopes from the high Altay Mountains of the west and the north to plains and depressions in the east and the south. The western Mongolia on the Chinese border is the highest point (4,374 metres). The lowest is 518 metres, an otherwise undistinguished spot in the eastern Mongolian plain. The country has an average elevation of 1,580 metres.

#### 1-2. Climate information

Mongolia is high, cold, and dry. It has an extreme continental climate with long, cold winters and short summers, during which most precipitation falls. The country averages 257 cloudless days a year, and it is usually at the centre of a region of high atmospheric pressure. Precipitation is highest in the north, which averages 200 to 350 millimetres (7.9 to 13.8 in) per year, and lowest in the south, which receives 100 to 200 millimeters (3.9 to 7.9 in).

Average temperatures over most of the country are below freezing from November through March and are about freezing in April and October. January and February averages of -20 ° C (-4 ° F) are common, with winter nights of -40 ° C (-40 ° F) occurring most years. Summer extremes reach as high as 38 ° C (100.4 ° F) in the southern Gobi region and 33 ° C (91.4 ° F) in Ulaanbaatar.

## 1-3. Democraphic information

Population	3,179,997 (July 2012 est.)
Age structure	0-14 years: 27.1% (male 439,504/female 421,838) 15-24 years: 19.7% (male 318,111/female 309,492) 25-54 years: 44% (male 697,741/female 700,558) 55-64 years: 5.2% (male 79,221/female 86,324) 65 years and over: 4% (male 55,274/female 71,934) (2012 est.)
Median age	total: 26.6 years male: 26.2 years female: 27 years (2012 est.)
Population growth rate	1.469% (2012 est.)
Birth rate	20.7 births/1,000 population (2012 est.)
Death rate	6.01 deaths/1,000 population (July 2012 est.)
Urbanization	urban population: 62% of total population (2010) rate of urbanization: 1.9% annual rate of change (2010-15 est.)
Sex ratio	at birth: 1.05 male(s)/female under 15 years: 1.04 male(s)/female 15-64 years: 1 male(s)/female 65 years and over: 0.77 male(s)/female total population: 1 male(s)/female (2011 est.)

Mongolia is divided into 22 major administrative units comprising of 21 aimags and the capital city of <u>Ulaanbaatar</u>. All are governed by 'Khurals', or elected bodies. Aimag populations range between 12,500 and 122,000 people. They also vary in size with the largest covering as much as 165.4 square kilometres of territory. An aimag consists of up to 27 'soums', including the aimag centre. Soums in turn are comprised of 'baghs'. In Mongolia there are 331 soums and 1550 baghs. Also the capital city, <u>Ulaanbaatar</u>, is subdivided into 121 districts called 'khoroos'.



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### **Ulaanbaatar city**



•The capital city is located along the River Tuul trimmed by Bogd Khan Mountain in the south and surrounded by three other mountain ranges.

•It is the home for the quarter of the nation's population.

## 2. Natural hazards in Mongolia

- Drought and Dzud
- Heavy snow and extreme cold
- Forest and steppe Fire
- Diseases

- •Flood
- Earthquake
- Desertification

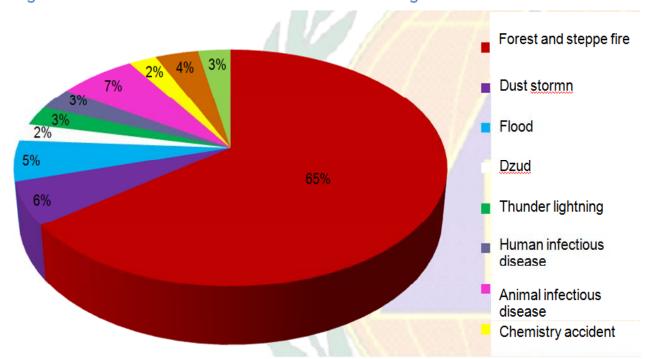


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natural disaster is natural a phenomenon or phenomena occurred covering relatively large territories and leading to human casualties or substantial damages to property causing thereby serious obstacles to smooth operation of the society. That whether this or that phenomenon is a natural disaster or not depends upon not only its intensity but more upon its socio-economic and much ecological consequences. In view of this, the issue of natural disaster shall be considered in association with the social economic situation at the level of a given country's development, people's styles, infrastructure the life development, etc.



Figure 1: Natural hazards have been occurred in Mongolia



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#### Hazards in Mongolia /2012/

Have been 4040 time hazards occurred, 237 human dead, 100 human injured.

13017 animals dead, 94482.6 million tugrugs damage.

Relief measures worked 33179 human, 6371 transport.

Rescued 685 human, 25726.5 million tugrugs In relief measures to spent 758.19 million tugrugs.

## 1. Forest and steppe fire



		Affected						
Year	Number of case	Aimag	Soum	Dead people	Injured people	Perished livestock	Ablaze square steppe and forest fire	Damage /mln MNT/
2012	229	19	103	4	8	3135	5	84019.4

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#### 2. Natural and Climatic Hazardous Phenomena



Year	Affected		Dead	Perished	Damage
leai	Aimag	Soum	people	livestock	/mln MNT/
2012	12	33	1	7	280.4

#### 3. Thunderstorms and flood



Year	Number A		cted	Dead	Perished	Damage
	of case	Aimag	Soum	people		/mln MNT/
2012	53	27	53	17	8432	158.7

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#### 4. Animal infectious disease



Year	Number	Affected		Dead	Perished	Damage
		Aimag	Soum	people		/mln MNT/
2012	56	25	37	-	332	6.02

#### 5. Explosives



Year	Detected		Dead	Injured	Damage
Teal	Aimag	Soum	people	people	/mln MNT/
2012	6	11	3	7	4.8

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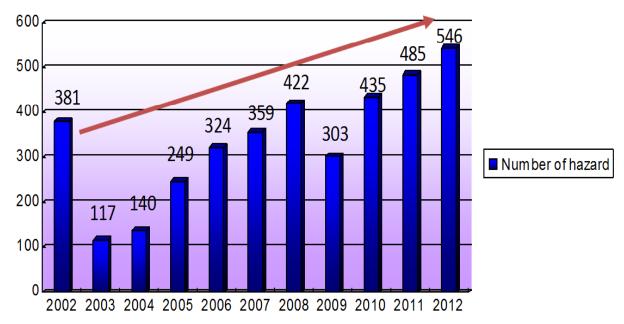
# 2-1. Natural hazards likely to affect

The global warming and climate changes are possibly to become the following negative influence:

- Decrease the rainfall and increase the air temperature
- Summer rainfall types(cloudburst, gentle and continuous rain etc.) changes slowly
- The overheat will be occur during the summer season
- land degradation, increase of water evaporation
- Glaciersmelts could cause and increase the sudden floods danger

Mongolian most populated provinces that situated nearthe bigger river blanks and also the nomads that move frequently around the 4 seasons, especially in fall and summer season on the mount gap, dry pebbles, valley, nearby river are causing and increasing in the flood risk.

The natural hazard occurrence has been increasing in Mongolia. Natural hazards occurrence in Mongolia during the last eleven years is shown on **Figure 2** 







## 3. Disaster management system

- The Law on Disaster Protection was approved by the Parliament of Mongolia on 20 June, 2003.
- Following the Law on Disaster Protection, Mongolian Government established the National Emergency Management Agency (NEMA) on 7 January, 2004.
- According to the Law on Disaster Protection, NEMA is responsible for implementation of the State disaster protection policy and legislation, as well as for the professional organization of nation wide activities.



#### **Disaster management**

Management before disaster

#### Management during disaster

Management after disaster

# Disaster Risk management

- •Assess disaster risk and vulnerability
- Prevent
- •Reduce risk and vulnerability
- Provide preparedness

#### **Rescue operation**

- Search and rescue
- •Humanitarian assistance
- •Infrastructure recovery
- Damage assessment

#### **Recovery**

- Disaster reduction
- Reconstruction
- Rehabilitation

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### 3-1. Administrative system

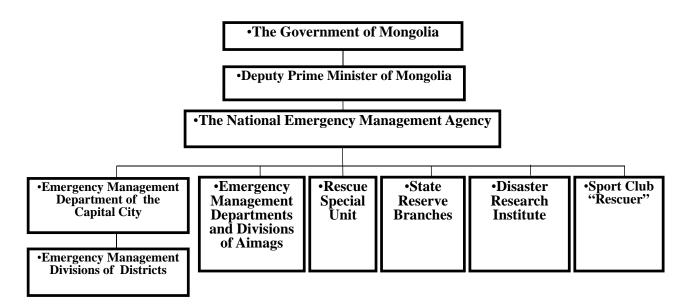
The state administrative organization in charge of disaster protection is the organization responsible for the implementation of the state disaster protection policy and the legislation on disaster protection and the organization of nation-wide disaster protection activities and provision with professional management.

The disaster protection resources shall be emergency management institution, disaster protection state services, entities and enterprises and specialized units and volunteers (from the Law on Disaster Protection).

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#### **Structure of Emergency Management Service**

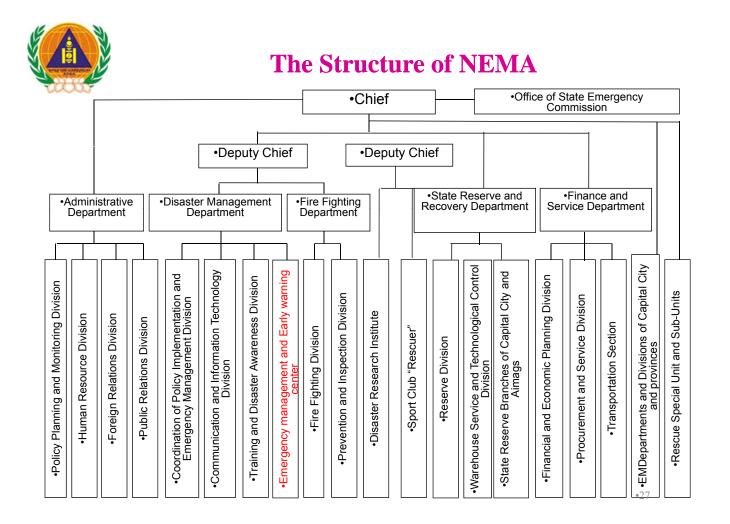


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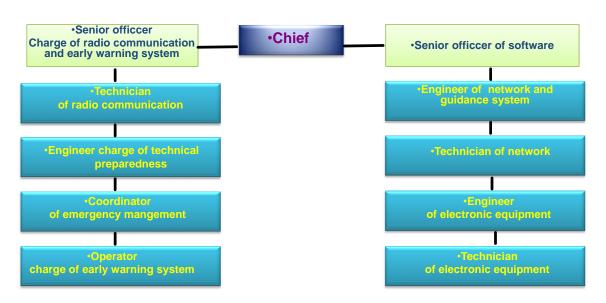
# Emergency resources National emergency management agency

- Totally 3299 emergency personnel (rescuers and firefighters) nationwide working in a local emergency management divisions or departments.
- On duty Emergency Motor Depot where the emergency trucks are dispatched and repaired.
- Rescue Special Unit (SAR team's and Firefighters)
- Firefighting stations in each area
- Additional resources possibly mobilized by the Armed force in accordance with the mutual agreements.



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# Emergency management and Early warning center



All 20 staff



# General duty Of Emergency management and Early warning center

- 1. Gathering hazard's information in national level.
- 2. Receive weather, earthquake's information from Meteorological and Observatory.
- 3. Forecast dissemination to public TV, radio, mobile.
- 4. For real time information quick dissemination to public TV, radio, mobile, loudspeaker, alarm.

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# Disaster protection complex training

**Trainings** 

- Disaster protection command staff training
- •Disaster protection preparedness inspection











#### Joint Training and Exercises

- "International Fire Forum" organized in cooperation with NEMA and FDMA, Japan in 2011
- "Incident Command System" training organized by the USA Forest Service in 2012.
- NEMA and Forest Unit joint training "Accident management system" in Bulgan province in 2013.
- "10th Meeting on Regional Consultative Committee on Disaster Management" organized in 2013 in cooperation with NEMA and ADPC



### **Foreign Relations and Cooperation**

- Ministry of the Russian Federation for Affairs of Civil Defence,
   Emergency and Disaster Relief; The Federation Reserve Agency,
   Russian Federation
- Ministry of Civil Affairs, the People's Republic of China
- Disaster Management Agency, Republic of Hungary
- National Emergency Management Agency, Republic of Korea
- Alaska National Guard, Center of Excellence for Disaster Management and Humanitarian Assistance, APCSS, USA
- Ministry of Emergency, Republic of Kazakhstan
- Federal Office of Civil Protection and Disaster Assistance, the Federal Republic of Germany
- Fire and Disaster Management Agency, Japan
- Bournemouth University Disaster Management Centre, the United Kingdom and the Northern Ireland



# 4.Disaster management strategy, policy and plan

- Government adopted resolution about Disaster protection strategy, policy and plan /in 2012-2020/.
- This plan included 5 groups:
  - 1. Community Participation in Disaster Risk Mitigation
  - 2. Risk assessment, analysis and disaster risk mitigation
  - 3. Legal system upgrade
  - 4. Early warning system upgrade
  - 5. Disaster protection capacity strengthen
- National second plan for Community Participation in Disaster Risk Mitigation
- Government adopted to reform Disaster protection national 13 services in 2012.

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#### **Disaster Protection Service**

	Name of State Services	Leading State Administrative Organization
1.	Natural and chemical danger assessment and information service	Ministry of Nature and Tourism
2.	Health protection service	Ministry of Health
3.	Food and agriculture service	Ministry of Food, Agriculture and Light industry
4.	Fuel and power service	Ministry of Fuel and Power
5.	Radiation protection service	Nuclear Energy Agency
6.	Road and transportation service	Ministry of Road, Transportation, Construction and Urban Development
7	Construction and urban development service	Ministry of Road, Transportation, Construction and Urban Development



#### **Disaster Protection Service**

8.	Professional inspection service	State General Professional Inspection Agency
9.	Information and communication service	Information, Communications Technology and Post Authority
10.	Order service	General Police Agency
11.	Public awareness service	Chief of Government Press Office
12.	Mining service	Mining Agency
13.	Population and social protection service	Population and Social Protection Agency

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## 5. Budget Size in 2011 -2013

Year	MNT /million/	USD /million/	JPN /million/
2011	3.304	5.144.328	59.472
2012	4.630	7.208.910	83.340
2013	5.223	8.132.211	94.014

As of 22 Aug 2013 in Mongolia: 1 USD = 1557 MNT 1 JPN = 16 MNT



# Further international cooperation in the field of disaster management

- Since no disaster is confined to the territory of one state, it is important to cooperate regionally and share experiences and research materials.
- International disaster relief is essential for disaster affected communities, but more attention to be paid for disaster preparedness and prevention.
- The high priority should be given to promoting cooperation in the field of disaster prevention, preparedness and warning

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# 6. Implementation of Hyogo Framework for Action

- 1.NEMA of Mongolia developed National Platform for Strengthening Disaster Protection Capacity of Mongolia 2006-2015 cohered with the Hyogo Framework for Action 2005-2015.
- 2.NEMA of Mongolia pays attention to define and assess disaster risk, monitor and improve early warning system. Besides, we developed Procedure on Disaster assessment and approved it by the Government of Mongolia.
- 3.Legislative environment of the coordination for capacity activity was created. According to the resolution of the Government of Mongolia, ministries and agencies, which have main roles using the professions and support in the possible disaster period or disaster period, were appointed.



# Implementation of Hyogo Framework for Action

- 4. Some amendments were included in the Disaster Preparedness Plan in order to make disaster response immediately. All levels of the local preparedness plans were renovated and they have revision plans.
- 5. We take into account increasing community participation in the disaster protection activity. The understanding of the word "Volunteer" was defined in the Law on Disaster Protection. NEMA is implementing the UNDP Project "Strengthening the Disaster mitigation and management system in Mongolia" and in the framework of the project, the commencement of the developing disaster management on the base of local community for supporting community initiative was made.
- 6. We carry the policy to be included risk into the insurance. We have begun developing the draft of the Law on Disaster Insurance with the Insurance organization.



# 7. Major projects

- UN specialized agencies
- International Civil Defence Organization ICDO
- Asian Disaster Reduction Center ADRC
- Asian Disaster Preparedness Center ADPC
- International Atomic Energy Agency IAEA
- International Fire Chiefs' Association of Asia
   IFCAA
- The International Association of Fire Chiefs
- KOICA, JICA, TICA, SDC
- "Korea Telecom" company project "Earthquake early warning system"







