



National Emergency  
Management Agency (NEMA)



Japan International  
Cooperation Agency (JICA)

# 2017 WHITE PAPER

## ON DISASTER RISK REDUCTION IN MONGOLIA

### SUMMARY

ULAANBAATAR  
2018



## CURRENT STATE, AND RESTRUCTURING, OF THE LEGAL ENVIRONMENT OF DISASTER RISK REDUCTION IN MONGOLIA

### MONGOLIAN DISASTER RISK REDUCTION LEGISLATION

DRR activities in Mongolia are being organized in accordance with the Mongolian Constitution, the Mongolian National Security Policy, the Law on Disaster Protection, the Law on Fire Protection, the Law on State Reserves and national policies and programs on disaster risk reduction. Major important Legislation are shown in below;

Name	Number	Statement, Purpose of Law and Legislation
The Constitution of Mongolia (1992)	Section 16.1.2	The right to live in a healthy, safe environment and to be protected from pollution and ecological imbalances
National Security Concept (2010)	Section 3.5.5.2	Strengthen the disaster management system, take actions at the national level to reduce vulnerabilities, create conditions to encourage participation in the efforts by central and local governments, specialized organizations, private entities and citizens and increase their capacities
The Amended Law on Disaster Protection (2017)		Rapidly and effectively organize DRR activities, and to regulate the organization, structure and activities of emergency and disaster management organizations

### DISASTER RISK REDUCTION POLICY AND FRAMEWORK

Policy and frameworks which emphasise current DRR in the country can be summarised as follows;

Name	Year	Purpose of Policy and Framework
State Policy on Disaster Protection, National Program for Strengthening DRR Capacity	2011	Strengthen the DRR management framework, reduce disaster vulnerabilities, ensure the participation of central and regional government organizations, professional organizations, the private sector and the public in DRR activities, strengthen the capacity of personnel and equipment and improve preparedness.
Policy for Sustainable Development in Mongolia-2030	2015	Disaster prevention and DRR activities in Mongolia are implemented in line with the "Sendai Framework for Disaster Risk Reduction 2015-2030" documents, the "The National Program of Community Participatory Disaster Risk Reduction" <sup>1</sup> , and the "Plan of Activities Related to Disaster Prevention, Search and Rescue, Mitigation and Emergency Recovery for People, Goods and Animals" <sup>2</sup> .

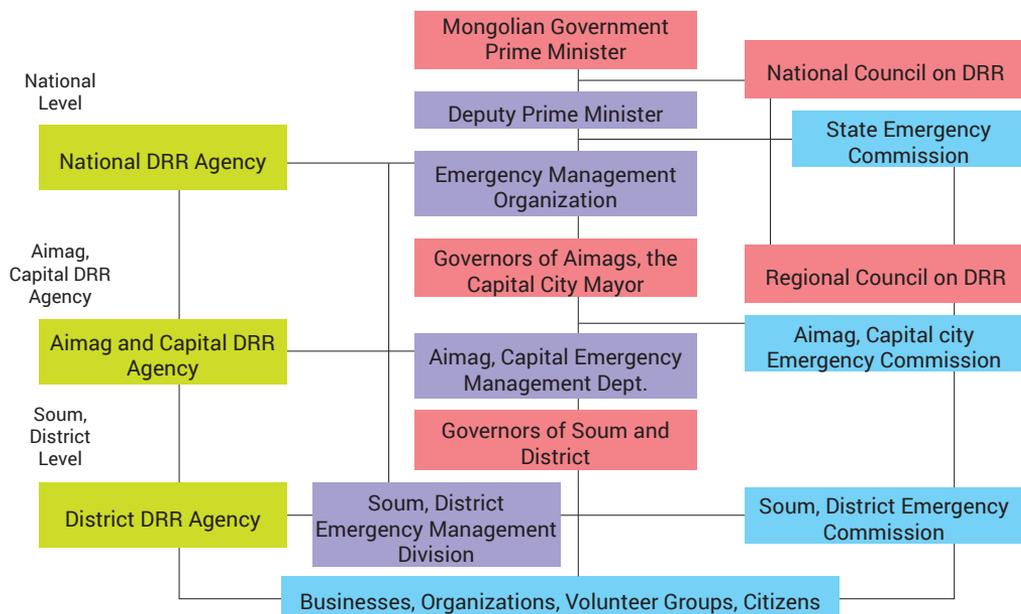
<sup>1</sup> Appendix to Parliament Resolution 303. Ulaanbaatar, 2015.

<sup>2</sup> Appendix to Parliament Resolution 416. Ulaanbaatar, 2015.

The National Program of Community Participatory Disaster Risk Reduction	2015	Reduce disaster risk by way of promoting the participation of citizens in training and activities related to preventing and combating disasters; improving their knowledge and skills; and strengthening their capacity in safety life skills, reducing potential risks and adapting to climate change.
Mid-Term Strategy to Implement the Sendai Framework for Disaster Risk Reduction in Mongolia (2017-2030)	2015	Gradually implement the Sendai Framework in Mongolia, reduce disaster risk at the national and regional levels, prevent new risks from arising and strengthening the national and regional capacity for DRR.

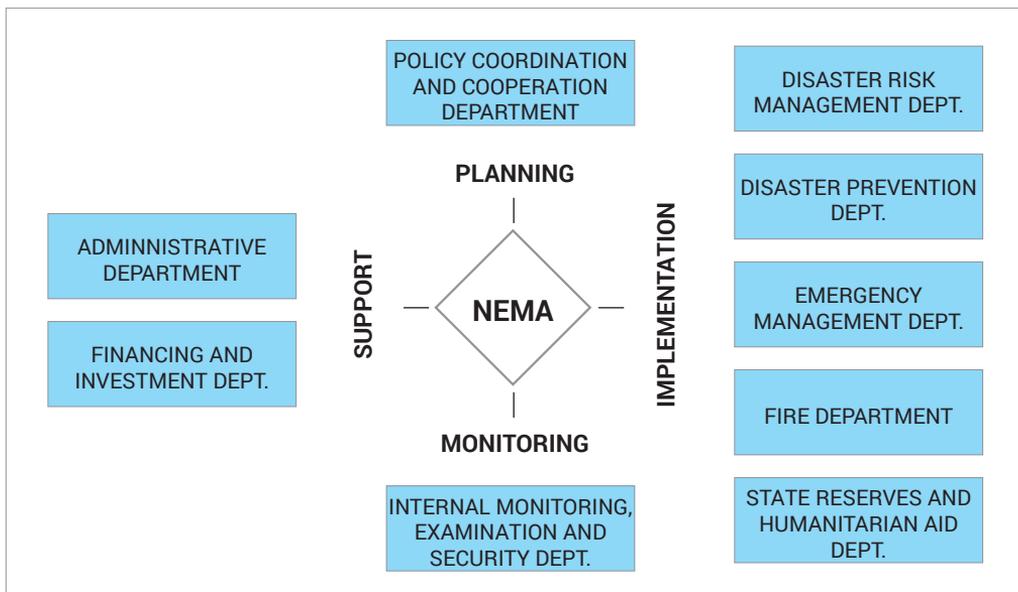
## STRUCTURE AND ORGANIZATION OF DISASTER RISK REDUCTION ACTIVITIES

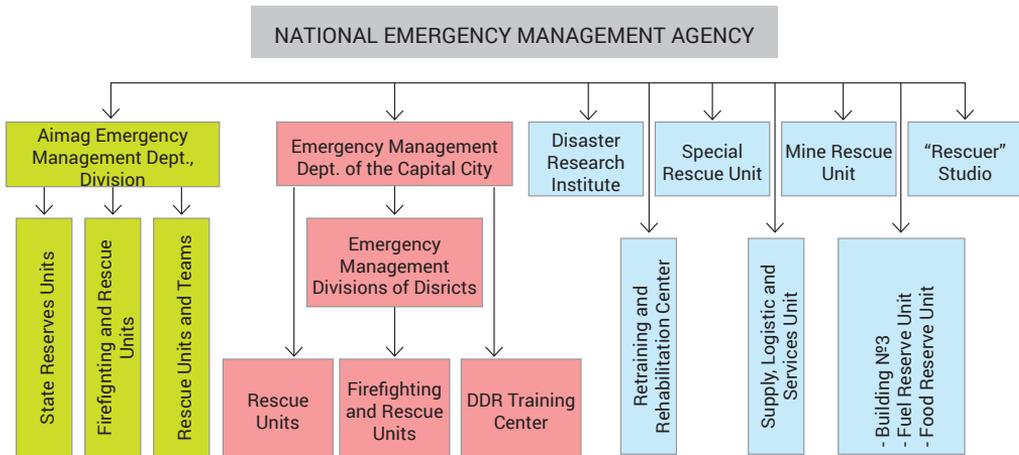
DRR activities at the national level are organized under the oversight of the Government member in charge of emergency matters by the head of the state administration on emergency matters; and such activities at the regional level are organized by the Governor of the administrative unit, state and municipal organizations and legal entities.



- **“State Emergency Commission”** tasked with promptly organizing DRR activities and coordinating and monitoring initial response actions shall be established by the Government; and emergency commissions at the Aimag, Capital, Soum and District level shall be established by the Governor of the relevant administrative unit.

- **“A National Council on Disaster Risk Reduction”** shall be established at the national level, Regional Councils shall be established at Aimags, the Capital and Districts under the amended Law on Disaster Protection states. The National and Regional Councils shall ensure the cooperation between the public and private sectors, intersectoral collaboration and citizen participation in disaster prevention activities, as well as issue policy recommendations.
- **National Emergency Management Agency** The mission of NEMA is to “Ensure national security, promote sustainable socio-economic development, and create the conditions for safe living for citizens by protecting the people, livestock, animals, goods, property, the environment and historical and cultural wealth of Mongolia from disasters; preventing potential disaster hazards; reducing disaster risk; ensuring public participation in disaster risk reduction activities; strengthening the capacity of personnel and equipment; expanding multilateral cooperation and developing disaster research activities”.





- **Standing Committee for Earthquake Disaster Prevention** “Plan to Strengthen the National Earthquake Disaster Risk Reduction Capacity” was approved by Government resolution 118 of 2014 with activities for 27 measures for prevention of earthquake disaster.

## DISASTER RISK REDUCTION ACTIVITIES

### EMERGENCIES, DISASTERS AND ACCIDENTS THAT HAVE OCCURRED IN MONGOLIA IN 2017

As of December 28, 2017, a total of 4,182 hazardous events and accidents have occurred in Mongolia; leading to 203 human deaths, 62 human injuries, 538.6 thousand livestock deaths and 96.7 billion tugriks in direct economic losses.

Table 1. Hazardous events and accidents occurred in 2017

No	Hazardous Event or Accident Occurred		Number of Occurrences		Affected		Rescued		Burned, Injured and Diseased People	Deceased People	Lost or Slaughtered Livestock	Vaccinated Livestock (thousand heads)	Burned Gers or Residences	Destroyed Gers or Residences	Burned Forest and Wildland Areas (hectares)	Economic Losses (million tugriks)	Mobilized Personnel and Equipment		Expenses (million tugriks)	
			Almag, Capital	Soum, district	People	Property (million tugriks)	Personnel	Equipment												
1	Fires	Forest and Wildland Fires	225	14	75								8		587489	77790.2	11619	1207	499.2	
2		Structure Fires	3635	22	170	770	21861.0	34	44	1310			1597			11959.8	15034	3085	105.8	
3	Water and Climatic Hazards	Harsh Winters	1	18	138					515649									8300.0	
4		Heavy Winds	23	16	66	189		2	4	1320			392			2797.4	1171	302	262.7	
5		Floods	17	11	18	29				3	1877			120		897.8	396	80	1560.3	
6		Lightning	13	10	13			1	1	606			1			11.6	67	17		
7	Geological	Earthquakes	39	15	33									4			24	4		
8	Biological Hazards	Marmot Plague	1	1	1			1									42	10		
9		Sheeppox	49	8	35					6683	2088.9					65.3	457	118	47.8	
10		Foot-and-Mouth Disease	67	10	44					10081	5550.3					9.96	842	200	3561.5	
11		Insanity	64	12	39			1		462	18.2					16.2	230	57	3.8	
12		Cattle Plague	5	5	6						487	16.2				3100.0	189	22	167.1	
13		Cow-Pox	8	4	8			1		128	13.5					8.0	87	23	4.7	
14		Blood-Borne Diseases	1	1	1						6							2	1	
15		Mucosal Diseases	1	1	1						1							14	3	
16		"Audible" Tumors	1	1	1						14	749						12	2	
17	Accidents due to Human Error	Explosions	2	2	2			6										12	2	
18		Chemical Substances	4	3	3				3	3								75	23	
19		Firearms Discharged	6	4	6													49	13	
20		Water Accidents	94	17	64	6				112	53							1460	270	6.0
21		Mountain Accidents	2	2	2				1	17								252	39	
22		Mining Accidents	23	6	9	32			12	19								240	42	0.1
Total			4182	183	736	1026	21861.0	62	203	538677	8436.1	1606	516	587489	96656.3	32274	5520	14519.0		

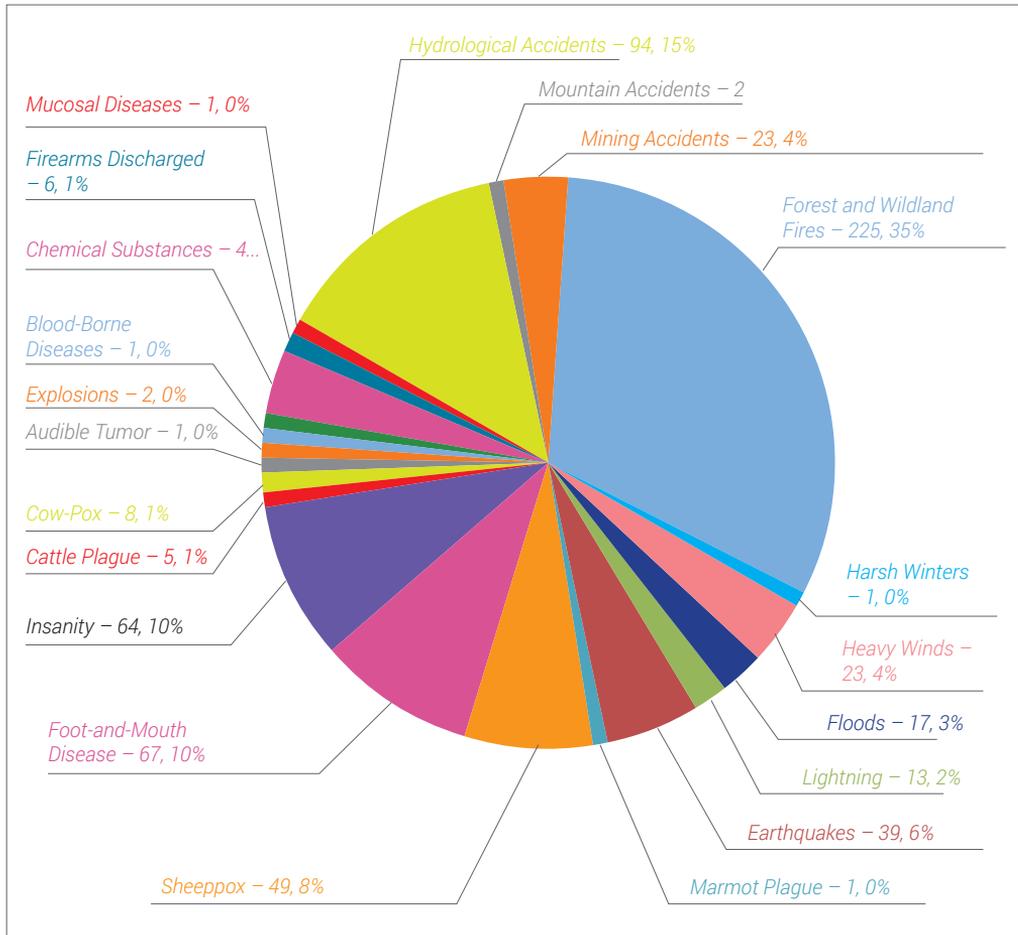


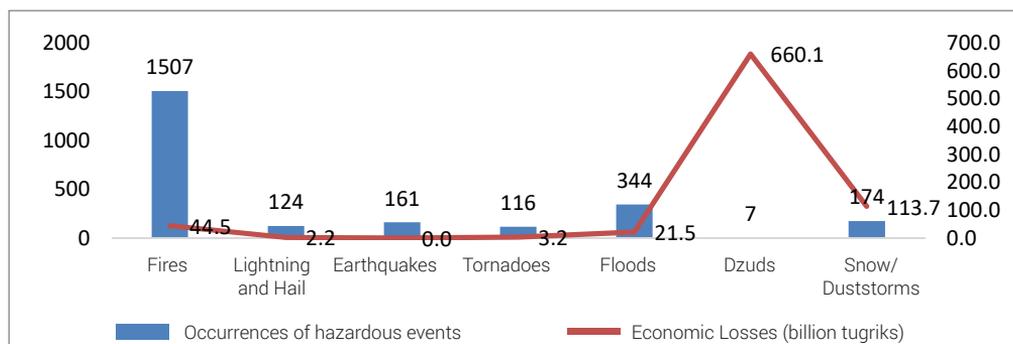
Figure 4. Hazardous Events and Accidents that Occurred in 2017 (by rate percentage)

## DISASTER RISK REDUCTION AND DISASTER PREVENTION ACTIVITIES

From observing the loss coefficients of natural hazards prevalent in Mongolia, we see that dzuds, snowstorms, droughts, cold rain and heavy rain are the hazardous events that cause the most losses. (Table 2)

*Degree of treat of meterological events<sup>3</sup>*

Type of Hazardous Event	Dzud	Snow storm	Drought	Heavy Snowfall	Cold Rain	Flash Floods	Hail	Atmospheric Icing	Dust Storms	Thunder and Lightning	Cold Waves	Heat Waves
Coefficient	6	5	4	3	3	2	2	1.5	1	0.9	0.7	0.6



*Occurrences and Losses of Disasters (by Disaster Type)<sup>4</sup>*

Disasters that have occurred in Mongolia in the last 10 years have caused a minimum total economic loss of 845.2 billion tugriks. The losses of the last 10 years amount to around 1 percent of GDP. However, economic losses resulting from dzud in 2009-2010 have reached 4 percent of GDP and was equal to 75 percent of total losses that have occurred between 2004-2013<sup>5</sup>.

As a result of summer heat waves in Mongolia, the frequency of heavy rain, flash floods, katabatic winds, hail and lightning disasters have significantly increased; constituting 53.3 percent of atmospheric hazards and disasters, of which 41.1 percent are attributed to heavy rain and flash floods<sup>6</sup>.

<sup>3</sup> L. Natsagdorj, 2015.

<sup>4</sup> Sh. Munkhtseren, "Case Study on National Data Collecting Activities, and the Measures Taken and Compensation Provided by the State In Response to Disasters" Final Report, Ulaanbaatar, 2015. Pg. 21.

<sup>5</sup> Final Report of the Same Case Study, Ulaanbaatar, 2015. Pg. 35.

<sup>6</sup> National Agency of Meteorology and Environmental Monitoring, 2015.

*Measures against the major disaster*

Disaster Type	Condition (2015 - 2017)	Prevention Measures
Dzud	Developing dzud risk heat maps in fall 2015 and providing information to the emergency management organization and DRR authorities.	The risk heat maps are developed by a Geographic Information System on the basis of 15 factors. The results of the dzud risk evaluation will be used to reduce dzud risks, develop strategies to combat dzuds and to help make better decisions. However, dzud risk reduction activities and strategies to combat dzuds may differ depending on dzud tolerance.
Livestock Diseases	Outbreaks of foot-and-mouth disease in 12 soums; activities to enhance actions against livestock epidemics, and to provide management and coordination to national and regional DRR authorities were organized.	Activities to examine the casualties of the disease, the slaughtering points for diseased livestock and surveillance points; as well as emergency measures to provide on-site solutions to the issues being faced in the region were conducted.
Spring Flood	In Ulaangom Soum of Uvs Aimag, the embankment along national highway A-1702 between Ulaangom-Khandgait has overflowed; households, businesses and organizations in the area were submerged, and material risks to their goods and property have arisen.	Conducting on-site assessment for disaster prevention purposes and developing recommendations for further actions; and coordinating the activities of DRR authorities and the relevant organizations, and providing management.

## DISASTER RISK REDUCTION TRAINING AND AWARENESS-RAISING

The Disaster Prevention Department of NEMA plans, manages and provides policies and guidelines for DRR training and awareness-raising activities at a national level through the Center for Disaster Prevention Training, Awareness-Raising and Public Relations.

Example: The “Gobi Wolf” training for earthquake disaster response measures is organized on annual basis in cooperation with the United States Pacific Command, the Alaska Army National Guard, and the Federal Emergency Management Agency (FEMA). In 2017, the 6th “Gobi Wolf” training was organized in Umnugovi Aimag, the center of the Mongolian southern regions. In 2018, “Gobi Wolf” will be organized in Khovd Aimag, the center of the western regions.



*"Gobi Wolf" International Training. Umnugovi Aimag. 2017.*

In cooperation with the media outlets such as 29 central TV stations, 21 newspapers, 35 webpages and 9 FM radio stations, over 1600 disaster prevention-related information items are disseminated to citizens and the public. Furthermore, 20-30 public service announcements related to preventing natural disasters, hazards and accidents are disseminated over 600 times a year through public media outlets.

### ***Ensuring Disaster Preparedness***

Activities for developing DRR plans are developed consistly of the introduction, the preparedness of DRR personnel, equipment and reserves, and the action plans for each disaster type.

### ***Evaluating Disaster Risk and Vulnerabilities***

The foundation of a substantive DRR plan is disaster risk and vulnerability evaluation. Disaster risk and vulnerability evaluation shall be conducted by the authorized professional organization according to the Law on Disaster Protection.

### ***Developing Action Plans for Each Disaster Type***

The action plan for each hazardous event and accident type shall be divided into 3 stages, namely: prevention, pre-disaster loss mitigation and post-disaster recovery; and information on what activities shall be conducted by who, when and how shall be specified in detail.

### ***Disaster Alerts and Emergency Management***

Disaster alerts shall be transmitted on a national and regional basis, and the state administration on emergency-related matters shall conduct national drills at 16:00 hour on the Thursday in the 4th week of March of every year.

### ***Disaster Risk Reduction Personnel and Equipment***

The emergency management organization, DRR authorities, administrative units, as well as state and regional organizations are responsible for counting, mobilizing and ensuring the preparedness of DRR personnel and equipment in the event of disasters,

hazardous events and accidents; and coordinating their activities. Volunteer groups may participate in activities such as providing support to search and rescue operations with help from specialized units, providing first aid, helping lost family members find each other, working at evacuation points, providing financial and material support, providing information to citizens, and supervising the protection of handicapped citizens, elderly citizens, women and children.

### *Disaster Risk Reduction Training*

DRR training shall be classified as 'comprehensive' and 'command staff', and shall be further categorized into 'planned', 'examinatory' and 'experimental' types.

Sample of experimental training: DRR management and coordination, implementing DRR rules, regulations and guidelines and testing state-of-the-art technology and technical equipment.

Phase I.

Operating according to the "Emergency Gathering" alarm.



Phase II.

Staff Training.



Phase III.  
Guided Training.



Phase IV.  
Testing the Physical and Mental Fitness of Executives.



Phase V.  
Training Evaluation.

## MULTILATERAL COOPERATION IN DISASTER RISK REDUCTION

### INTERNATIONAL COOPERATION IN DISASTER RISK REDUCTION

Currently, NEMA is cooperating with corresponding organizations from around 10 nations including the Ministry of Emergency Situations of the Russian Federation; the Ministry of Civil Affairs, the State Forestry Administration and the Earthquake Administration of the People's Republic of China; the National Directorate General for Disaster Management of Hungary; the Army Pacific and the Alaska Army National Guard of the United States of America; the Department of Civil Defense and Emergency Preparedness of France and the National Fire Service of the Republic of Korea.

In order to strengthen the capacity of DRR activities and equipment, international projects and programs in cooperation with the Republic of Austria, UNDP, UNISDR, ADB, World Bank, JICA and the Asian Disaster Preparedness Center are being implemented.



*Picture.3.1. Asia Partnership Meeting for Disaster Risk Reduction.  
Ulaanbaatar, 2017.04.05-07*

In order to further develop bilateral and multilateral relations, cooperative activities are being prepared with the Democratic People's Republic of Korea, the Republic of Belarus, the Republic of India, the Socialist Republic of Vietnam and the Republic of Colombia.

### *Coordination of Disaster Risk Reduction Authorities*

Government resolution 158 of 2005 established 11 DRR authorities, resolution 186 of 2012 established 13 authorities, resolution 81 of 2015 established 12 authorities and Government resolution 97 of 2016 established 12 authorities. According to the Law on the Structure of the Government, these authorities are comprised of 8 ministries, 3 agencies and 1 public organization.

### *Participation of Non-Governmental Organizations, Community-Based Organizations and Citizens in Disaster Risk Reduction Activities*

For example, in order to improve community-based disaster management, the Disaster Research Institute of NEMA has established a Memorandum of Cooperation with the “National Emergency Center” NGO. The following main activities were implemented between 2013-2015 for developing community-based DRR within the framework of the UNDP project. The “National Sub-Program for Community-Based Disaster Risk Reduction” was approved through decree 35 of 2013 by the Deputy Prime Minister, and within the scope of its implementation, 167 instructors were trained in cooperation with World Vision Mongolia and through these instructors, around 301,912 people in 114 Bags and Khoroos in 297 Soums of 21 Aimags were trained.

## **STATE RESERVES AND HUMANITARIAN AID**

### *Acts on State Reserves and Humanitarian Aid*

Provision 29.1.9 of Article 29 includes “organisation and control of delivery, transportation and distribution of the goods and materials and foreign and domestic humanitarian aid to the necessary locations” in the functions of the governmental administrative institutions in charge of emergency issues and Provision 38 of Chapter 8 provides for “Domestic humanitarian aid” whereas a procedure is being drafted.

### *State Reserves and Humanitarian Aid Work*

The State Reserves and Humanitarian Aid Department has been working in accordance to the Law on Disaster Protection, Law on State Reserves, Law on Procurement of Goods and Services with State and Local Funds of 2017. In connection with the winter conditions of 2016-2017, UNFPA, Red Cross Mongolia and State Bank handed over donations and aid materials via the NEMA for the herders and population of the Aimags with worsened winter conditions and the work for reception of the donations, transportation and distribution was organised.

## **EARTHQUAKE DISASTER PREVENTION WORK**

### *Acts on Intensification of Activities in Prevention of Earthquake Disaster*

The National Programme on Reduction of earthquake disaster risks and Action plan for implementation of the programme were approved under Government Resolution 157 of 27 May 2009 “On approval of Programme”<sup>7</sup>.

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<sup>7</sup> Government Resolution on Actions of protection from earthquake disaster hazards, 29 June 2011.

Government Resolution 76 of 24 March 2010 on “Approval of general plan for earthquake disaster”<sup>8</sup>, in addition to the approval of the action plan, also tasked the relevant officials and institutions to organise work for enhancement of coordination of the activities between the agencies in charge of establishment of the exploitation level of the currently utilized buildings and facilities and issuance of passports together with fulfilment of the earthquake norms and rules for construction of buildings and facilities, allocation of costs of procurement of earthquake alert and information reception and transmission equipment in the national budget and development and implementation of standards and curricula for formal and non-formal education on earthquake hazard rescue and protection as well as organisation of training and awareness building campaigns.

Government Resolution 282 of 3 November 2010 provided for detailed studies in the seismically active zones around city Ulaanbaatar, establishment of seismological observation points on the active faults and resourcing funds for procurement of equipment and tools required during earthquake disasters from the Government Reserve Fund or by allocation in the National Budget.

Government Resolution of 29 July 2011 on “Activities for earthquake disaster protection”<sup>9</sup> tasked relevant institutions and officials to source the costs required for earthquake early alert system, streamlining the early warning and alert system for major earthquake events around city Ulaanbaatar, and timely organisation of examination and assessment of earthquake strength of public and apartment buildings.

## **DISASTER RESEARCH AND DISASTER RISK REDUCTION RESEARCH ACTIVITIES**

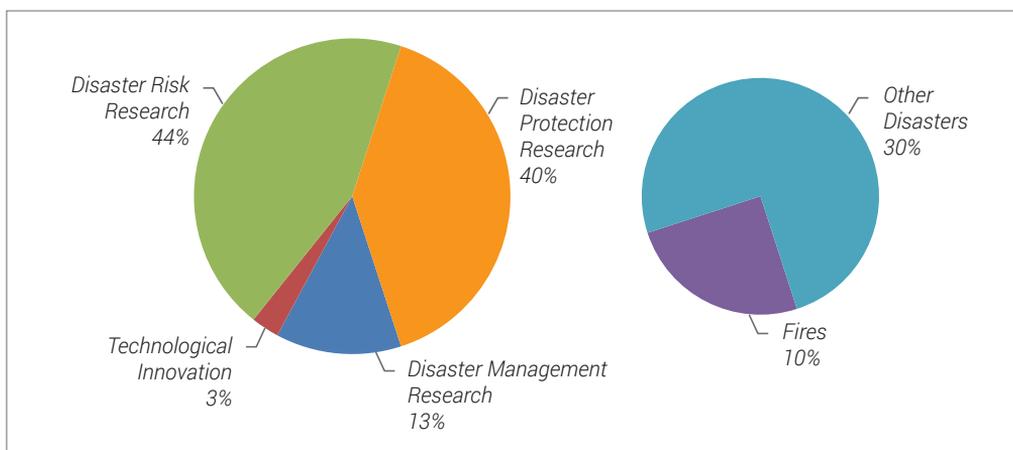
### *Research Activities of the Disaster Research Institute*

The scope of research activities of the Institute is expanding each year to include research on identifying the characteristics of disastrous events, as well as research activities starting from evaluating disaster risk levels to conducting national DRR management and organization, and developing DRR policies. Furthermore, more measures are being taken to introduce the latest DRR technologies and innovations.

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<sup>8</sup> Government Resolution 76 on Approval of general earthquake disaster plan, 24 March 2010.

<sup>9</sup> Government Resolution on Actions of protection from earthquake disaster hazards, 29 June 2011.



*Research Activities of the Disaster Research Institute (by share)<sup>10</sup>*

### **Disaster Risk Reduction Database**

Conducting research on the frequencies of occurrence and losses caused by hazardous events and accidents in Mongolia shall be helpful in obtaining data and information on the patterns, affected areas and climatic conditions of disasters as well as providing a scientific basis for accurately conducting DRR activities. In this sense, based on archived data on hazardous events and accidents that have occurred between 2000-2014 in Mongolia, the researchers at the Disaster Research Institute have put this data in a common format and published a compilation of statistical information (2010, 2014) per disaster type at Aimag, Capital, Soum and District levels in both English and Mongolian; and this compilation has become the first information book in its sector.

In the era of technological advance, nations around the world have implemented many activities for introducing geographic information systems (GIS), and systems for determining pre- and post-disaster conditions based on remote sensing disaster management activities. In order to implement these activities in Mongolia, cooperation agreements have been made with the Asian Disaster Preparedness Center, the Japanese Aerospace Exploration Agency (JAXA), UN-SCAP, UN-SPIDER, and APSCO; and 1 official was sent for training to the Indian Institute of Remote Sensing. The disaster remote sensing specialist has provided support to the DRR sector by developing 150-200 research studies and disaster spatio-temporal maps per year using GIS and remote sensing techniques.

<sup>10</sup> NEMA Disaster Research Institute. Ulaanbaatar, 2017.

## DISASTER RISK REDUCTION BUDGET AND INVESTMENT

### *Investments from the State Budget*

NEMA's 2017 budget implementation was conducted according to the "State Policy and Program for Disaster Risk Reduction" approved through the relevant legislation, rules and guidelines and the main indicators of the mid-term budget report as well as the mid-term budget policy.

*2014-2017 Budget of NEMA<sup>11</sup> (million tugriks)*

	Approved Budget			
	2014	2015	2016	2017
TOTAL	81,765.3	91,198.7	72,542.7	78,848.2
OPERATING EXPENDITURE	48,881.4	53,255.9	59,783.1	59,941.9
Wages and Incentives	35,881.9	38,953.0	42,488.0	43,589.9
Goods and Services Expenses	9,891.6	11,830.4	12,611.2	12,135.1
Grants and Transfers	3,107.9	2,472.5	4,683.9	4,216.9
CAPITAL EXPENDITURE	32,883.9	37,942.7	12,759.6	18,906.3
1. Internal Investments	19,579.9	25,513.0	3,659.1	6,435.0
Construction and Renovation	11,378.9	5,513.0	3,829.8	5,635.0
Equipment	8,201.0	20,000.0	850.0	800.0
2. Increasing Sources of State Reserves	13,304.0	12,429.7	8,079.7	12,471.3
FINANCING ACTIVITIES	81,765.3	91,198.7	72,542.7	78,848.2
State Budget	76,765.3	66,561.2	67,962.5	74,212.1
Development Bank	-	20,000.0	-	-
Operating Income	5,000.0	4,637.5	4,580.2	4,636.1
TOTAL EMPLOYEES	3921	3937	4169	4281
Administrative Staff	85	83	74	43
Executive Staff	3401	3430	3673	3680
Service Staff	212	207	203	338
Contractual	223	217	219	220

<sup>11</sup> National Emergency Management Agency

In 2017, 65,284.2 million tugriks were allocated to disaster prevention and combating activities. Breaking down the 2017 NEMA budget into its constituent activities yields the following<sup>12</sup>.

*NEMA 2017 Budget (by activities)*

Nº	Activities	Amount (million tugriks)
1	Operating Expenses	53,749.9
2	Commissioned Work and Services on a Contractual Basis	136.1
3	Information and Awareness-Raising Expenses	3.3
4	Fees for the Use of Communication Lines	140.8
5	Building Rental Services	5.5
6	Sports Competitions	84.0
7	Membership Fees of Foreign and International Organizations	55.6
8	Benefits for Veterans and Seniors	4.5
9	Employer's Benefits and Incentives	2,669.0
10	Benefits for the Families of Civil Servants	3.5
11	Compensations Provided on a Legal Basis	200.0
12	Monetary Aid for Civil Servants	1,284.3
13	Investments	6,435.0
14	Disaster Prevention Training and Awareness-Raising	512.7
	TOTAL	65,284.2

<sup>12</sup> National Emergency Management Agency

## Projects and Programs Being Implemented at the National Emergency Management Agency

Projects and Programs Implemented and Currently Being Implemented at NEMA with Financing from Foreign and International Organizations.

1. Completed Projects (2012-2017)						
Nº	Project Name	Implementation Period	Implementing Organization	Financing Organization	Total Costs	Responsible Unit at NEMA
1	Project to Strengthen the Capacity for Earthquake Disaster Prevention in Mongolian and Ulaanbaatar	2012-2013	JICA, UB City Administration	JICA		EMDC
2	Project for Leveraging Tradition and Science in Disaster Risk Reduction (LTS 1) AID-OFDA-G-13-00067	2013-2014	Mercy Corps Mongolia	USAID Office of Foreign Disaster Assistance	295,644 USD	Disaster Prevention
3	"Project for Strengthening the Capacity of Disaster Risk Reduction in Mongolia" P146081	2014-2016	World Bank	World Bank, Global Facility for Disaster Risk Reduction and Recovery (GFDRR)	1 million USD	
4	Project for Reducing Disaster Risks in Western Aimags AID-OFDA-G-14-00030	2014- 2015	World Vision Mongolia	USAID, World Vision US	250,000 USD – USAID, OFDA; 25,000 USD - WV US	EMDs of Uvs, Khovd and Bayan-Olgii aimags
5	Strengthening Schools' Capacity of Reducing Disaster Risk and Overcoming Disasters	2015-2016	World Vision Mongolia	USAID	250,000 USD	Disaster Prevention
6	Developing the Disaster Loss Database in Mongolia and Strengthening the Capacity of Disaster Analysis		Asian Disaster Preparedness Center	UNISDR		Disaster Prevention

7	Developing the Disaster Loss Database in Mongolia and Strengthening the Capacity of Disaster Analysis		UNESCO	UNESCO		Emergency Management
8	"Project for Strengthening the Capacity of Forest and Wildland Firefighting Equipment in Mongolia"	2014-2016	"ROSENBAUER" AG	Preferential Loan from the Austrian Government	5.2 million euros	Emergency Management
9	Strengthening the Capacity for Child Protection During Emergencies and Improving Child-Centered Preparedness	2014-2016	ChildFund Japan		170,000 USD	
10	"Project for Improving Regional Disaster Risk Reduction Management and Coordination" MON 13/301 (Phase IV)	2013-2016	UNDP	UNDP, Government of Luxembourg	1.5 million USD	

## 2. Currently Being Implemented

1	Emergency Management Capacity-Building Project Implemented by the Australian Volunteers for International Development (AVID)	Since 2012	Australian Red Cross Society-Scope Global	Government of Australia		Disaster Risk Management
2	Project for Leveraging Tradition and Science in Disaster Risk Reduction (LTS-2)	2015-2018	Mercy Corps Mongolia	USAID		Emergency Management
3	"Sustainable Artisanal Mining" Project	2015-2018	Swiss Agency for Development and Cooperation	Swiss Agency for Development and Cooperation, Mongolian Government	Total: SADC: 6,000,000 CHF, Mongolian Government: 1,040,000 CHF, For NEMA 2017: 100 million tugriks	Mine Rescue Unit

4	Projecting for Ensuring Disaster Preparedness and Strengthening Disaster Risk Reduction Capacity in Ulaanbaatar City	2016-2017	Mongolian Red Cross Society	European Union (600EU), Finnish Red Cross Society (105.9EU)	705.9 thousand euros	Disaster Prevention
5	Project to Supply Equipment to Firefighting Vehicles of the Capital City	2015-2017	JICA	Development Aid from the Government of Japan		Fire Department
6	Special Project for a Disaster-Resistant Ulaanbaatar	2016-2018	World Vision Mongolia	USAID	385.0 thousand USD	Disaster Risk Management
7	Project for Strengthening the National Capacity of Earthquake Disaster Protection and Prevention in Mongolia (Phase II)	2016-2019	JICA	Government of Japan (Technical Cooperation)		Disaster Prevention, Emergency Management
8	Strengthening the Public Capacity for Combating Dzuds and Wildland Fires	2017-2020	Asian Development Bank	Japan Fund of Poverty Reduction (Aid Package)	3 million USD	Policy Coordination and Cooperation
9	Strengthening the Capacity of Urban Search and Rescue Activities in Mongolia	2017-2018	Swiss Agency for Development and Cooperation	Swiss Agency for Development and Cooperation Humanitarian Aid	265'400.0 CHF	Emergency Management, Special Rescue Unit
10	Grass-Root Program	2017-2022	University of Nagoya	JICA		Disaster Research Institute, Foreign Cooperation Division of Policy Coordination and Cooperation Dept.

### *Compensation for Disaster Victims*

Most of the 212 billion tugriks donated to disaster victims by citizens, businesses, government organizations, international organizations and NGOs for loss mitigation and recovery activities in Mongolia were provided to victims of the 2009-2010 dzud. Most of these donations were disbursed for food, warm clothing, medicine, medical equipment, livestock fodder, livestock carrion disposal and constructing roads and bridges. Therefore, these can be included in disaster rescue and loss mitigation

activities. Dzuds continue for a long period of time, and the corresponding rescue and loss mitigation activities will continue for an equally long period of time.

## DISASTER RISK REDUCTION ACTIVITIES REPORT FOR 2017

In 2017, NEMA has conducted activities with the objective of refining the DRR legal environment and organizational standards, and improving the effectiveness of disaster prevention, as well as national monitoring and supervision activities; and matters related to NEMA's 2017 activities are presented in the White Paper in table as shown below.

### *NEMA Activities and its Description of Chapters and Sections of the "White Paper"*

NEMA Activities	Chapter and Section in White Paper	
1.1. Developing strategic policies, plans and projects; and ensuring their implementation	Chapter One. Current State, and Restructuring, of the Legal Environment of Disaster Risk Reduction in Mongolia	1.2. Disaster Risk Reduction Policy Documents
		1.3 Structure and Organization of Disaster Risk Reduction Activities
1.2. Developing DRR cooperation with foreign and international organizations	Chapter Three. Disaster Risk Reduction Cooperation	3.1. International Cooperation in Disaster Risk Reduction
3.1. Implementing and coordinating disaster prevention and risk reduction activities; organizing DRR supervision and conducting disaster risk evaluation	Chapter Two. Disaster Risk Reduction Activities	2.1. Disaster Risk Reduction and Prevention Activities
		2.2. Disaster Risk Reduction Training and Awareness-Raising
3.2. Planning, implementing, organizing and managing categorized DRR training		2.7. Disaster Risk Reduction Training;
3.3. DRR awareness-raising activities and public relations		2.3. Measures to Ensure Disaster Preparedness
4.1. Organizing pre-disaster activities, ensuring the preparedness of personnel and equipment, and providing integrated emergency management and coordination		2.6. Disaster Risk Reduction Personnel and Equipment

4.2. Ensuring the security and preparedness of disaster communications and information devices, ensuring the stable and continuous flow of information to emergency management officials and organizing disaster alerts at a national level		2.4. Disaster Alerts and Emergency Management
		2.5. Disaster Loss Mitigation Activities
5.1. Organizing national fire monitoring activities	Chapter Four. Fire Protection	4.1. Documents Related to Fire Protection
		4.2. Activities to Combat Fires
6.1. Organizing goods and materials from strategic reserves and humanitarian aid activities	Chapter Five. Strategic Reserves and Humanitarian Aid	5.1. Documents Related to Strategic Reserves and Humanitarian Aid
		5.2. Activities Related to Strategic Reserves and Humanitarian Aid
7.1. Ensuring the implementation of budgetary, financial and investment policies	Chapter Eight. Disaster Risk Reduction Budget and Investment	8.1. State Budget Investments
		8.2. Foreign Investments
		8.3. Projects and Programs Implemented at NEMA
		8.4. Compensation for Disaster Victims
		8.5. Measures Taken to Mitigate Losses Arising from Disasters

## AFTERWORD

Changes are rapidly being made to Mongolian state policies, legal environment, structure, organization and activities related to DRR within the scope of the amended Law on Disaster Protection approved by the Parliament in 2017.

Most important lessons learnt from the past huge disasters are, it becomes impossible to conduct emergency aid for disaster victims according to the DRR plan for lack of some resources, personnel and equipment. Even though the sophisticated plan, guideline and legislation has been prepared.

To avoid such circumstances, not only setting up a new cooperative relationship between the public and private sectors, developing memorandums of understanding with DRR organizations, government organizations and NGOs prior to disasters, but also strengthening risk-informed donor policies and programs, including financial support and loans from international financial institutions and having a special capital investment program would address the most pressing climate-related disasters in rural and urban areas.