



ОНЦГОЙ БАЙДЛЫН ЕРӨНХИЙ ГАЗАР

DZUD IN MONGOLIA

Dr. Tsogtbaatar GANZORIG
Colonel, Deputy Chief
National Emergency Management Agency
(NEMA) of Mongolia



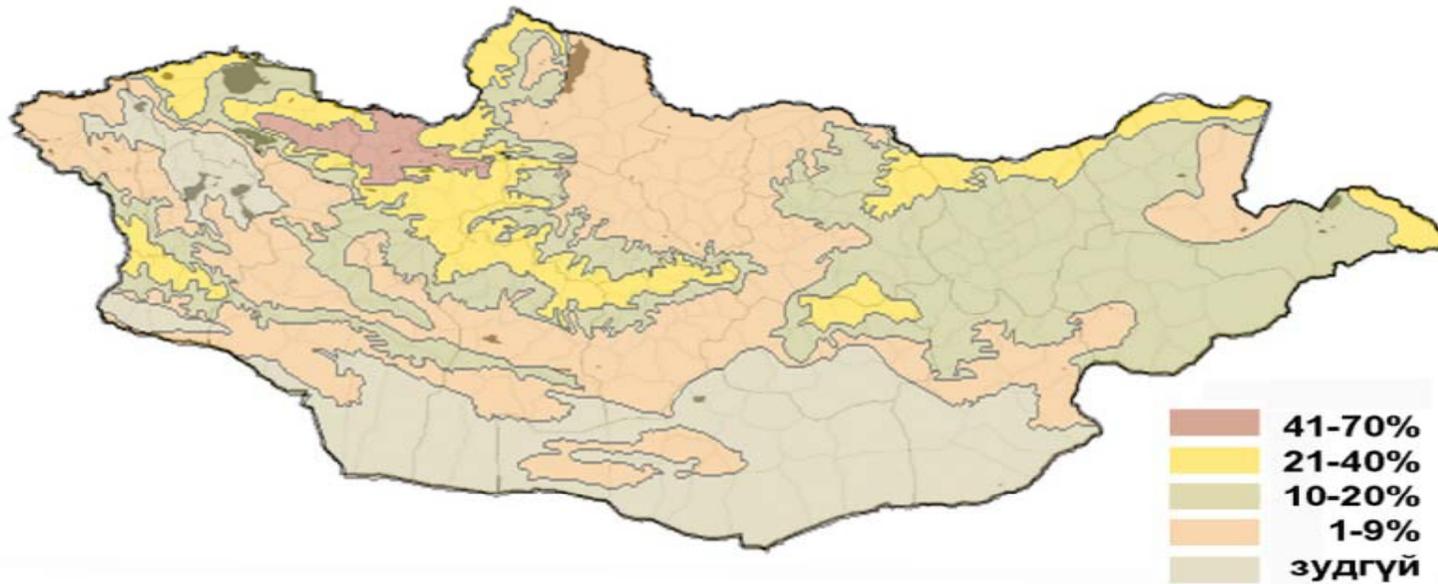
In the zone of Forest and Steppe in Mongolia, the snowpack covers about 20th of November and it melts down in the middle of March. However, in the Steppe Zone, snowpack covers at the end of November, and at the Altai Mountains and Gobi Zone this process starts at the middle of November. The snowpack is removed about 20th of January and in the Gobi Zone at the beginning of February. The stable snowpack is not covered in the Gobi Zone.

Since over the 40s of last century, the total territory of Mongolia was affected by the Dzud in 1944-1945, and more that 3 of 4 was affected in 1954-1955, 2000-2001, 2002-2003 and 2009-2010. The severe Dzud which covers more that 50 percent of total territory has been experinced at 1956-1957, 1967-1968, 1999-2000, 2001-2002 and 2004-2005.

In Mongolian language the term "Dzud" describes a natural disaster that occurs in winter and spring season and represents risks to human /local livestock herders/ and livestock /domesticated animal/ population. Dzud is a complex phenomena that is mainly caused by natural elements which reduce access to grazing, thus negatively impacting the food security of livestock and human populations.



DZUD FREQUENCY MAP



Geographic Spread of the White Dzud [Natsagdorj Dulamsuren 2001]

According to this Dzud Frequency Map the Dzud occurs at the Tes River Valley once an every 2 years, at the highland areas of Khangai, Khentii, Khankhökhi, Kharkhiraа and Turgen once an every 3 years, and Altai, Khangai, Khuvsgul and Khentii Mountains and Dornod steppe area once to twice an every 10 years.



The main reasons of 2009-2010 "Dzud" are as follows:

Drought (approximately 70 percent of all the territory was dominated by the Drought)

Heavy Snowfall

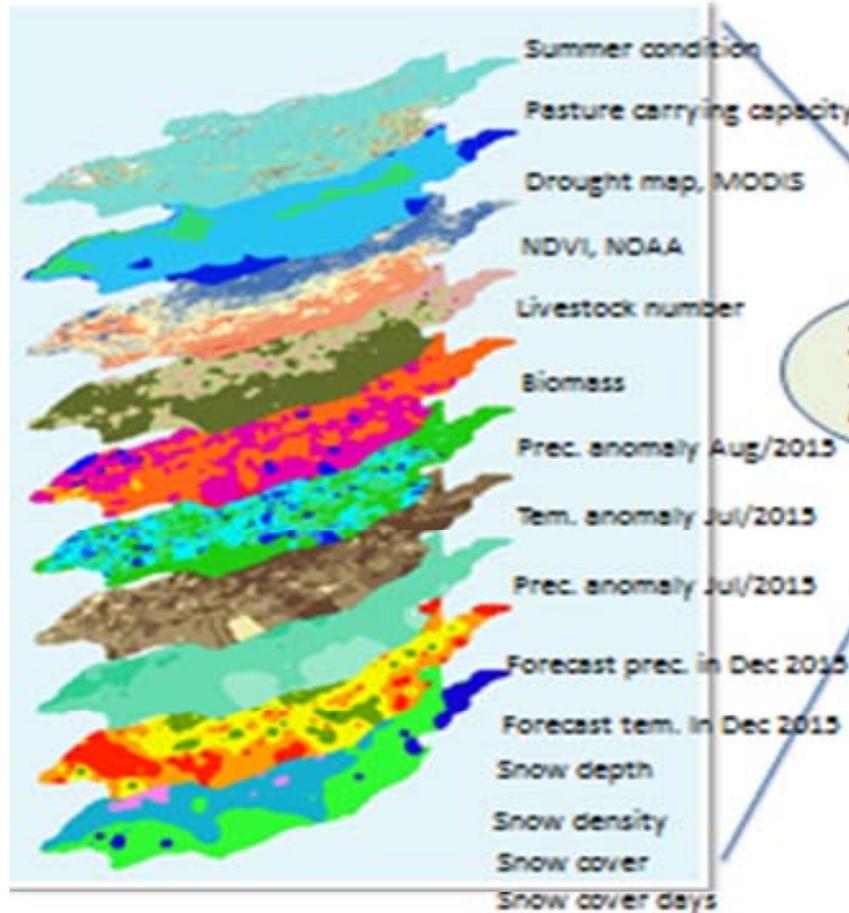
Extremely Low Temperature

Strong Wind



IRIMHE: Early warning for Zud

Input parameters

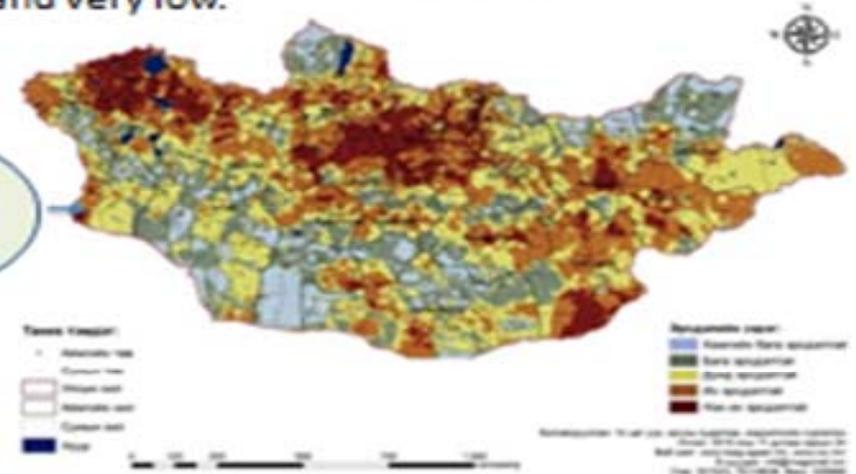


Data processing

-Standardization
 -weighting
 -Spatial analysis...

Risk map Nov 20, 2015

- Produced on 20 Jun, 10 Aug, 20 Sep, 20 Nov, 10 Jan, and 20 Mar using ground observation data and remote sensing data
- Risk classification: very high, high, medium, low, and very low.



This map was presented to the Government, Parliament standing committee on food and agriculture, Special committees, and some donor organizations in Mongolia at UNDP's request. A lot of early preparation work was done this year based on this map.



PREPARATION AND PREPAREDNESS

- The Emergency Management Service of Mongolia carry out the Search and Rescue Operations with 24 Rescue Units which is located at the local areas and the capital city of Ulaanbaatar as well as 460 professional rescuers. The technical capacity of these unit are 57 off road vehicles, 27 Satellite Iridium Mobile Phones, 407 low frequency mobile radios and 104 GPSs.





2009-2010 DZUD ASSESSMENT



Severe Disaster

- 80 soums of 15 aimags



Dzud

- 86 soums of 14 aimags



Nearly Dzud

- 75 soums of 11 aimags





THE ACTIVITIES CONDUCTED

GOM

- Government of Mongolia 6.813.600.000

Foreign countries

- Russia, China, Turkey, Japan 27.659.000.000

UN

- International Inter Governmental Organizations and United Nations Agencies 10.950.000.000

Donation

- From the foreign countries 9.500.000
- Form civilians and private companies 818.200.000



DZUD LOSS



95,500 herder households of 175 soums from 18 aimags, was affected by the Dzud.



Approximately 90 percent of total livestock was affected by the Dzud.



At the national level the total number of livestock was reduced 9.7 million and the total loss amount is 526 trillion togrogs.



GOVERNMENT RESOLUTION NUMBER 286

“White
Dzud”

“White
Nearly
Dzud”

“Black Dzud”

“Black
Nearly
Dzud”

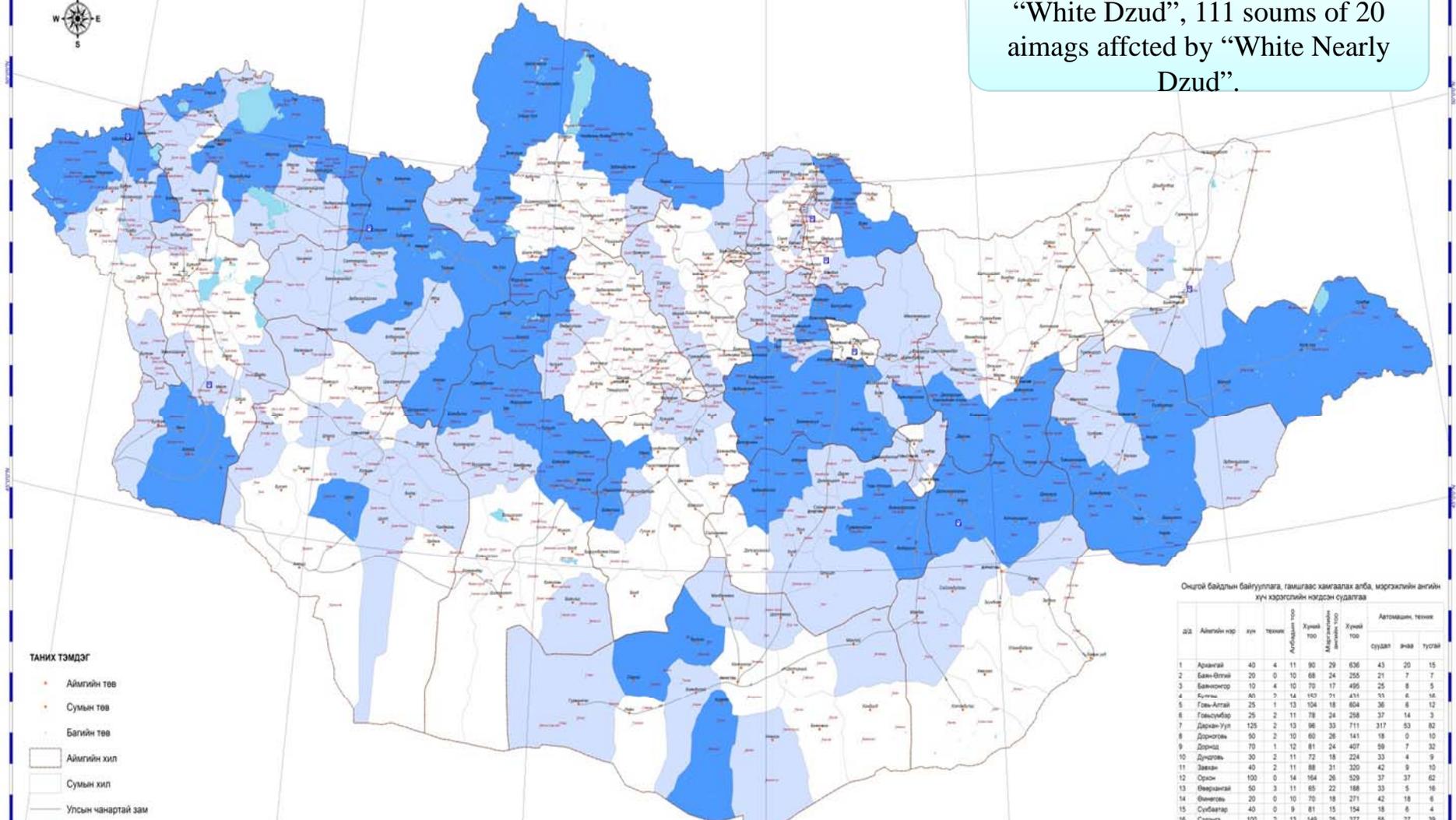
“Iron and Ice
Dzud”

МОНГОЛ УЛСЫН ӨВӨЛЖИЛТИЙН НӨХЦӨЛ БАЙДАЛ

2016 оны 01 дүгээр сарын 20-ны өдрийн байдлаар

98 soums of 18 aimags affected by “White Dzud”, 111 soums of 20 aimags affected by “White Nearly Dzud”.

МОНГОЛ УЛСЫН ӨВӨЛЖИЛТИЙН НӨХЦӨЛ БАЙДАЛ



ТАНИХ ТЭМДЭГ

- Аймгийн төв
- Сумын төв
- Багийн төв
- Аймгийн хил
- Сумын хил
- Улсын чанартай зам
- Нуур
- Шатахууны нөөц
- Хүнсний нөөц

Зудын байдал

■ Цагаан зуд ■ Цагаанаар зудархуу

Онцгой байдлын байгууллага, гамшигас хамгаалах алба, мэргэжлийн ангийн хүч хэрэгслийн нэгдсэн судалгаа

ДЭ	Аймгийн нэр	хүн	техник	Хүний 100		Автомашин, техник				
				Ихэнхийн 100	Мэргэжлийн ангийн 100	судал	инав	тусгай		
1	Архангай	40	4	11	90	29	636	43	20	15
2	Баян-Өлгий	20	0	10	68	24	255	21	7	7
3	Баянхонгор	10	4	10	70	17	495	25	8	5
4	Булган	80	5	14	140	71	471	53	6	16
5	Говь-Алтай	25	1	13	104	18	804	36	6	12
6	Говьсүмбэр	25	2	11	78	24	258	37	14	3
7	Дархан-Уул	125	2	13	96	33	711	317	53	82
8	Дорноговь	50	2	10	60	26	141	18	0	10
9	Дорнод	70	1	12	81	24	407	59	7	32
10	Дундговь	30	2	11	72	18	224	33	4	9
11	Завхан	40	2	11	88	31	320	42	9	10
12	Орхон	100	0	14	164	26	529	37	37	62
13	Өвөрхангай	50	3	11	65	22	188	33	5	16
14	Өвөрговь	20	0	10	70	18	271	42	18	6
15	Сүхбаатар	40	0	9	81	15	154	18	8	4
16	Сэлэнгэ	100	2	13	149	25	377	55	27	39
17	Төв	35	2	12	229	25	343	108	8	13
18	Увс	30	4	13	91	25	252	18	7	11
19	Ховд	60	1	12	110	17	245	40	4	13
20	Хөвсгөл	40	1	9	186	15	309	27	9	4
21	Хэнтий	90	1	10	59	13	133	29	0	10
22	Улаанбаатар	14	126	38	5570	81	223	161		
23	АТА	96	2							
Мийн		1176	38	253	2289	504	12963	1150	478	540



DZUD ASSESSMENT



“White Dzud”

- 50 soums of 16 aimags



“White Nearly Dzud”

- 120 soums of 20 aimags



“White Dzud”

98 soums of 18 aimags



“White Nearly Dzud”

111 soums of 20 aimags



DZUD RISK ASSESSMENT

No	Name of Aimag	Total Soums	The number of Soums affected by Nearly Dzud	Total number of herder households	The total number of livestock	The number of people who are living in the areas with heavy snowfall					
						Herder Households	Pregnant Women	The children aged under 0-5	Disabilities	Extremely Poor Households	Number of Livestock
TOTALLY 21 AIMAGS		339	209	149735	55,957,6	62719	3340	28290	6004	5009	23783





Government Resolution number 480, 2015

Vehicles



2.681.155.000 togrogs

Hay and Forage



Socials Welfare Service



1.800.000.000 togrogs

Totally 4.481.155.000 togrogs



***THANK YOU FOR YOUR
ATTENTION***