ANTICIPATION OF DZUD ('COLDWAVE') IN MONGOLIA — ALERT 783

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SUMMARY — ANTICIPATION OF 'DZUD' COLDWAVE — MONGOLIA

The Dzud risk map produced by the National Agency for Meteorology and Environmental Monitoring (NAMEM), in December 2023, showed 90 percent of the country's territory at high risk of Dzud or "extreme cold wave". These perilous conditions posed a threat to human life and livelihoods, especially to Herder communities, due to thick snow and ice cover making pastureland inaccessible. Early actions by World Vision provided assistance at a critical time before the peak of the Dzud, slowing down livestock mortality rates and protecting livelihoods. Multi-purpose cash disbursements and livestock fodder was distributed to the most vulnerable households in high-risk areas. This provided supplementary feeding for weakened animals, stopping families going into debt attempting to save their herd. This ensured that the cash transfers were put towards critical family needs such as food security, healthcare, emergency communication, and other essentials. Psychological First Aid (PFA) training was provided for seventy-two community leaders, including teachers, dormitory staff and specialists from emergency management, education, child welfare, and social policy departments. As a result they were equipped to provide timely and effective psychological support to children residing in dormitories, who experience increased levels of psychological distress, feelings of loneliness and isolation during these harsh months of dzud.

"'The support we received from the project team was truly life-saving. What made it different was that the assistance—fodder for our livestock and cash support—came just in time before the worst of the dzud hit. This early support allowed us to save our animals and even set aside money to buy hay and food for our family. It wasn't just a response to a crisis; it felt like someone anticipating our needs and stepping in before we reached a breaking point.

-Herder - Adiyasuren.Sh, Sukhbaatar province

1,240 Households
RECEIVED CASH TO ENABLE BASIC NEEDS TO BE MET

10,445 PEOPLE
RECEIVED ANIMAL FODDER TO PROTECT LIVELIHOODS

100% PARTICPANTS RECEIVED SUPPORT BEFORE THE PEAK OF THE CRISIS

96% EXPRESSED SATISFACTION WITH PROJECT IMPLEMENTATION

4,987 CHILDREN
RECEIVED PSYCHOLOGICAL FIRST AID SUPPORT

72 COMMUNITY LEADERS RECEIVED PSYCHOLOGICAL FIRST AID TRAINING

Animal Fodder distributed to 1,240 households (10,445 people) to reduce livestock mortality rates.

Cash disbursement for 1,240 households (10,445 people) to enable basic food needs to be met.

Psychological First Aid training provided for 72 community leaders, benefitting 4,987 children.

Awareness raising through distributing a PFA leaflet (9,500 copies) outlining symptoms and self-management techniques.

100% of beneficiaries received support before the peak of the crisis.

97% of beneficiaries expressed satisfaction with the project implementation.

Alert No 783	Hazard Cold wave; Extreme cold	Onset Rapid
Country Mongolia	**Region** Provinces of Gobi-Altai, Uvs, Zavkhan, Sukhbaatar and Dornod	**Location** Soums/ Villages: Ikh-Uul, Tosontsengel, Numrug, Khukhmort, Bayan-Uul, Yusunbulag, Salgil, Khyrgas, Malchin, Matad, Khalkh gol, Gurvanzagal Baruun-Urt, Bayandelger, Sukhbaatar
Date of Alert decision 29/01/2024	**Early Action window** 30 days (to anticipated peak)	**Budget** £300K
Beneficiaries 1,240 Households (10,445 people)	**Sectors** Food security and livelihoods, Cash, Protection	**Convening Agency** World Vision Mongolia

BACKGROUND

According to the Dzud risk map produced by the National Agency for Meteorology and Environmental Monitoring (NAMEM), in December 2023, 90 percent of the country's territory was at high risk of Dzud or "extreme cold" with the country under a significant layer of snow, up to 50-60 cm thick, in some regions. In the last 30 years, Dzuds have become more frequent in Mongolia, moving from one every 5-10 years to an almost annual occurrence. This change in climate, coupled with an increase in the livestock population and overgrazing of pasture lead to the impacts being felt more severely.

ANTICIPATED HUMANITARIAN SITUATION

Extreme conditions, such as low temperatures and heavy cover of snow and ice, can lead to reduced accessibility to pastures for cattle and present perilous conditions for human life. The dzud experienced the previous year in 2022/2023 adversely affected over a million herders. Many lost their only income source as 3.2 million livestock perished and herders faced challenges in breeding management, unable to generate offspring to replenish their herds. Consequently, herders were compelled to butcher and sell remaining livestock in the market. These same herders once again faced extreme weather and a similar humanitarian situation arising. According to a Government assessment in early January 2024, the Dzud was classed as "an iron or glass dzud" in 15 soums (settlements) in 7 provinces.
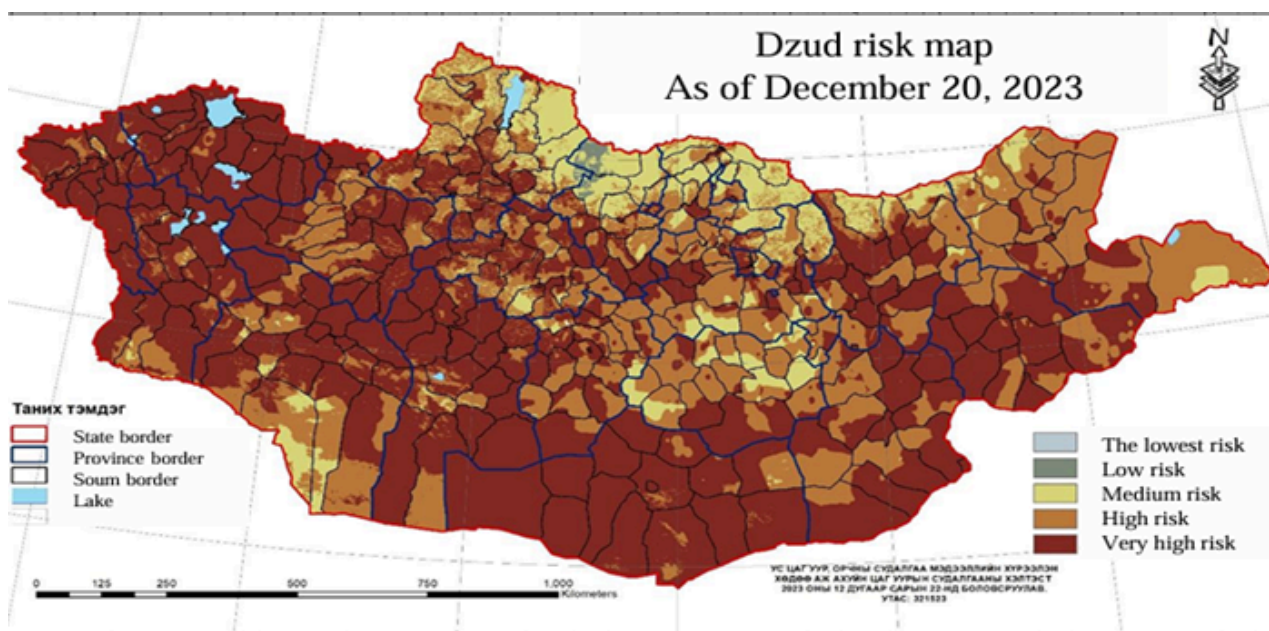
This refers to a condition where the ground has thawed and then refrozen, in which the livestock cannot graze. The population most at risk were herder Households (HH) with 100-400 livestock who resided in non-mining and non-cropping areas with no other source of income. These were most at risk of losing their livelihood and therefore their access to basic needs such as food. In addition, vulnerable groups (children under five, pregnant and lactating women, people with disabilities, elderly people and people with a chronic underlying disease) are known to be less able to withstand the extreme cold. The early actions prioritized saving the lives of livestock and safeguarding livelihoods, thereby preventing the exacerbation of socio-economic hardships for herder families.

WHAT IS A DZUD?

A dzud is a Mongolian term that describes 'severe winter conditions' or an 'extended coldwave'. It is a cold-season disaster in which climatic conditions, such as heavy snow, severe cold and ice, lead to lack of pasture for animals and a scarcity of food for humans. Additionally temperatures can be so low as to pose a risk to human life. The main criteria for assessing the dzud disaster, includes the growth status of the plants from the previous summer, the average thickness and density of the pasture snow measured at the end of the ten days and months, the average air temperature of the ten days and the month compared to the long-term average, and the auxiliary criteria are determined based on the lowest air temperature of the day and the number of windy days.

START FUNDS' DECISION TO FUND

The allocation committee unanimously decided to activate the anticipation alert. The committee highlighted that although the harsh winter conditions had already started to materialise, the alerting agencies did well at outlining the population needs and how the impacts could be mitigated. Given that these dzud events were becoming more frequent they recommended that post response, better preparedness occurs, and ordinary programming is adapted so that communities are better able to cope with these conditions in future. They decided to allocate the requested amount of £300,000.

PURPOSE AND EARLY ACTIONS OF THE ANTICIPATORY RESPONSE

The purpose of the early actions was to provide assistance at a critical time to isolated communities, before the peak of the Dzud, to slow down and prevent livestock mortality rate (60,000 deaths had already been registered between December 2023 and January 2024) and protect the livelihood of herders. From past experience, Herders were most likely to deplete family financial resources in order to purchase animal fodder and hay in an attempt to preserve their main source of income (livestock herding). This leads to diminished food security for family members. Providing animal feed whilst also providing basic needs for families helped them withstand and recover from the crisis. With the peak period estimated between 28 February 2024 and 1 April 2024, this allowed an optimal anticipatory response window of approximately 30 days (29 January 2024 to 28 February 2024) before the onset of the harshest conditions.

EARLY ACTIONS

EARLY ACTIONS	PURPOSE
Livelihoods: livestock fodder distributed to 1,240 Households (between 160 kg to 200 kg per HH).	To preposition livestock food for distribution, for when pastures are inaccessible and protect livestock from perishing.
Cash: Multi-purpose cash distributed to 1,240 households (between £118 to £151 to per HH).	To enable households to cover basic needs such as food/ warm clothes/ fuel.
Health: Training 72 community leaders in psychological first aid (PFA) training, providing support to 4,987 children.	To help community leaders recognise the signs of psychological distress in children and help them develop coping strategies, supporting 4,987 children.
Awareness raising: Distributing 9,500 copies of a leaflet introducing PFA, outlining symptoms and self-management techniques.	To help the wider community and recognise and respond to psychological distress.

DETAILS OF ACTION

Multi-purpose cash disbursements and livestock fodder were distributed to the most vulnerable households in high-risk areas before the peak of the crisis. By implementing these activities in advance, the project protected Herder's livelihoods, mitigating the risk of livestock loss, their primary income source. Planning and preparatory tasks commenced on 1st of February, with the distribution of fodder and cash transfers beginning on 17th of February. The intervention targeted fifteen settlements (called soums) – 3 in each of the five provinces selected for intervention - benefiting a total of 1,240 households (10,445 people). Each target soum had a dedicated community-led project committee responsible for selecting beneficiaries in need of support. The convening agency supported Dornard and Sukhbaatar provinces and the partner agency supported Gobi-Altai, Zavkhan and Uvs. Peoples' primary concern was the loss of livestock and livelihood. Identified households received between 160 - 200 kg of livestock fodder which enabled supplementary feeding for weakened animals, for a period of 7-21 days. This ensured that the multi-purpose cash transfers (of between 118-151 GBP) were put towards critical family needs such as food security, healthcare, emergency communication, and other essentials.

Psychological First Aid (PFA) training was provided for 72 community leaders, including teachers, dormitory staff and specialists from emergency management, education, child welfare, and social policy departments, across 51 soums in Gobi-Altai, Uvs, and Zavkhan provinces. The training ensured that these professionals were well-equipped to provide timely and effective psychological support to children residing in dormitories away from home, before and throughout the peak period of dzud. Teachers were trained to train others through the Training of Trainers (ToT) methodology. As a result, 4,987 herder children received PFA support. Children who are separated from their parents during these winter months, have increased levels of psychological distress, feelings of loneliness and isolation.

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A Memorandum of Understanding (MOU) was established with the provincial government, Citizens' Khural (Assembly), LEMA and Health Department to outline the responsibilities of each party in the identification and verification of beneficiary households, distribution and monitoring. This proactive anticipatory intervention not only strengthened the immediate preparedness capabilities of the communities but also left a legacy of resilience building, mental health awareness, and community-based support systems.

OPERATIONAL CHALLENGES AND LEARNING

Anticipating a slow-onset dzud is complicated: it involves monitoring climatic indicators such as summer droughts, reduced pasture growth, early snowfalls and prolonged cold spells. Data from meteorological services, remote sensing, and community-based verification of information need to be integrated to identify high-risk areas. It is important that all communities have access to this information and are able to interpret and act upon it. Identifying predefined trigger thresholds for anticipatory action will be useful in future, such as extreme weather patterns or critical fodder shortages. This will enable timely anticipation interventions to be triggered to mitigate the impact on herders and their livelihoods.

Dzud are becoming more frequent: The population had faced two dzuds within 2 years and had not recovered from the dzud in 2023. This led to high stress levels within the community and a lowered resilience to face the impending crisis. There is clearly a need to adapt programming to these new climatic realities and carry out more disaster risk reduction activities well in advance of each winter season. For example, discussing solutions with communities, such as renovating small shelters to protect livestock from the extreme weather and better feeding regimes, fodder production and storage, prior to the winter season.

Community led programming is more effective: It is important to liaise with communities about emerging issues and needs. In previous responses when animal feed had not been distributed, herders had depleted assets in an attempt to keep livestock alive and where it had been distributed, they were given the wrong type and were reluctant to use it. Involving those affected in decision making helps to ensure that assistance is most effective and appropriate at meeting community needs to withstand the dzud.

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