Rapid Needs Assessment
Summary Report
Mongolian Dzud, 2015-2016

January 25th – February 2nd, 2016
1. Background

In 2011, Mongolia was one of the fastest growing economies in the world with 17.5% growth - due largely the expansion of the mining sector. However, its growth has since decelerated considerably due to a sharp downturn in international mineral markets. Economic growth is projected to bottom out at 2.3% for 2015 by the World Bank. The poverty rate remains high in rural and peri-urban areas, and income inequality within and between regions is widening. One in five people (21.6%) lives below the national poverty line and in some rural regions one in every three people (31.4%) lives in poverty. Mineral commodities account for over 90% of Mongolia’s exports, and mining provides 40% of total government revenues. Due to the lack of economic diversification, excessive dependence on mining revenues makes the Mongolian economy more vulnerable to global commodity price fluctuation.

Animal husbandry however remains the main source of both food consumption and raw materials for the national economy, contributing 13% of the total GDP.Livestock workers make up around 27% of the total labour force. A total of 51.9 million livestock were reported in 2014, with 213,400 households owning livestock (of which 149,700 are classified as herder households). The majority of herder household (47.6%) own less than 200 livestock while, 4.5% of the herder households own more than 1,000 livestock. The estimated average annual income of herder households with 200 livestock is 2,500 USD.

Herder households periodically suffer from what is locally known as a dzud - a cyclical, slow-onset disaster unique to Mongolia. It consists of a summer drought followed by heavy winter snow (10 to 350 cm) and extreme cold (down to -40°C) which results in insufficient hay stockpiles and access to pasture in the winter months. This creates significant challenges for many basic services - such as transportation, health and education – and in the long run may lead to the collapse of livelihoods in vulnerable herder communities. In the 2010 dzud 217,000 households, or 769,000 individuals (28% of population) were affected. Of those affected, 43,555 households lost their entire herd with an additional 163,780 households losing at least half.

In response to current warning signs about another potential dzud in 2016, Save the Children Mongolia organised a rapid needs assessment from January 25th through February 2nd 2016. A summary of the key findings is presented below.

2. Methodology

In order to better understand the severity of the current situation – especially in terms of the impact on the most vulnerable households – as well as the level of preparedness of both government and herder households and priority needs through the spring, the following approaches were used:

- A desk review was conducted in order to examine underlying issues with the pastoralist livelihood system, issues related to poverty and vulnerability in rural Mongolia, as well as assessments and other actions underway or planned by the government or the humanitarian community.

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2 Mongolian Mining Sector Overview, Purple Book, 2013
5 http://www.unocha.org/cap/appeals/mongolia-dzud-appeal-2010
Key informant interviews were conducted with a variety of stakeholders – including aimag and soum governors, the National Emergency Management Agency (NEMA) on both a national and provincial level, provincial level line-ministries including representatives from the Ministry of Industry and Agriculture, the Ministry of Education, Culture and Science, the Ministry of Health and Sports, and the Ministry of Population Development and Social Protection. A variety of international humanitarian agencies including World Vision, the ICRC, VSF and UN agencies were also consulted.

Seven focus group discussions were conducted with bagh governors (totalling 32 participants).

Five focus group discussions were conducted with boys and girls ages 11 – 16 (totalling 25 participants) living in dormitories. Discussions were also held with teachers, social workers and other education professionals at the soum and aimag level.

Seven household interviews were conducted with herder families and their children.

Market trader interviews were also conducted in order to better understand key food, non-food and animal feed markets.

6 soums in 3 aimags – Arkhangai, Zavkhan, Bayankhongor – were assessed:

- Tariat (Arkhangai)
- Khangai (Arkhangai)
- Tosontsengel (Zavkhan)
- Otgon (Zavkhan)
- Gurvanbulag (Bayankhongor)
- Zag (Bayankhongor)

The main limitations of the assessment were the limited time, vast distances travelled as well as the road conditions which resulted in a limited number of focus group discussions and household interviews.
3. Key Findings

3.1 Child protection

Due to the mobile nature of pastoralist households, children – from ages 6 to 18 - are often separated from their parents in order to access education and other services in aimag or soum centres as their parents tend to herds in remote areas in the countryside where commuting to school is not an option. Separated children living in these centres may be categorized as follows:

- Children staying in dormitories;
- Children staying with adult relatives (grandparents, aunts/uncles, etc.);
- Children staying with their older siblings (who are themselves children aged less than 18) with minimal adult supervision and care.

Prolonged separation from their parents greatly effects the mental health of children in terms of loneliness and feelings of isolation – especially during episodes of severe weather (blizzards, cold spells, etc.) when children are particularly worried about their families. Feelings of isolation may be particularly acute for some of the younger children living in dormitories or with older siblings.

Many herder families have provided cell phones to their children in order for them to remain in touch; with many children speaking with their parents several times a week (even daily in some cases). However, the poorest families are often unable to provide this means of communication for their children who are left to ask friends or relatives to use theirs.

While the government does provide a monthly child allowance of 20,000 Tugriks (approximately 10 USD) per child which would presumably cover communication and other costs essential to child well-being, many herder households instead allocate the majority of this money to their livestock; a trend which is likely to increase if and when the weather deteriorates.

Additionally, many children also worry about specific animals in their family herds which they have developed personal attachments to. According to some social workers and teachers, large-scale livestock losses, such as those experienced during the dzud of 2009-2010, can also have a significant impact on child well-being. It should be noted however that while the mental health of many children is a concern – especially if the weather deteriorates moving forward - no serious cases of mental disorder were encountered during the assessment.

For children living with older siblings in soum or aimag centres, the situation is especially concerning. While school social workers, teachers, police officers, parents (usually mothers) and other relatives acknowledge the risks and visit these children regularly, they still lack adequate care on a day to day basis. Specific issues may include injuries, engagement in petty crime (linked to financial difficulties, widespread unemployment in soum and aimag centres and not limited to herder children) as well as some concerns linked to nutrition issues due to financial access to food as well as the knowledge and behaviour of teenage children responsible for their younger siblings.

For children who are not attending school and remain with their parents in the countryside, or for those who have returned to the countryside during school vacation - the need for care givers to tend to their herds often results in young children being left home alone for extended periods. Additionally, older children are often responsible for labour activities linked to herding. Risks to these children include burns due to the wood stoves used for heating gers and other work related injuries, such as frost bite due to very low temperatures. In some cases, teenage children have raised the fact that they often spend the day outside, alone working with their family’s livestock.
3.2 Education

Among the many challenges with the education sector that are directly related to the current winter conditions, difficulties with heating dormitories and school buildings is likely to have the most immediate impact on education outcomes. Especially in older buildings with heating systems running below capacity and some with significant drafts, children often need to wear outdoor clothing (coats, hats, etc.) in order to stay warm during their studies and at night.

A significant complicating factor with the education sector in general, which is partially linked to a overall economic slowdown in Mongolia over the past several months, is the budget restrictions that many schools are now facing – something that many key informants were adamant about. Difficulties with education budgets include delays and/or reduced transfers of funding - with 10% of the heating budget cut in one instance.

Reduced budgets coupled with increased heating costs are creating significant difficulties for many schools and dormitories to continue normal activities. Increased heating costs will likely have longer term budget implications for schools who receive coal on credit from mining companies, to be paid back at a later date. Some key informants in the education sector stated that education activities were actually suspended during the last dzud in 2009-2010 due to similar budget restrictions.

Not only is education performance threatened from institutional budgets, but family budgets and difficult decisions linked to prioritising expenditure on a household level also pose a risk for many children. Financial stresses due to the dzud will mean that many families will likely struggle to provide transportation for their children to and from soum centres during holidays (enhancing the feelings of loneliness described above) and pay for other school related expenses (stationary, books, uniforms, etc.) in the fall – which may be as high as 500,000 Tugriks (250 USD); highlighting the long term impact of harsh winter conditions across many thematic sectors. As stated above, the child stipend provided by the government rarely goes towards child specific expenses and is often used to maintain livelihoods, especially among the poorest households. One of the most immediate impacts of this situation for school children is likely to be a lack of appropriate clothing for winter weather.

Another concern is the upcoming birthing season, which traditionally sees some children from herder households being pulled from school in order to assist their families with the labour intensive activities during the spring. While there is a school holiday which coincides with the birthing season, many households do not send their children back to school in order to maintain adequate labour in the countryside. This trend usually increases during dzud years and is especially pronounced for the poorest families and single parent households which enhances the education gap for many children.

According to a key informant from education sector, school scores for herder children is generally lower than those of other children. Many also claimed that scores for other children also fall during dzud years.

Despite the issues with education, as well as child protection, outlined above schools do employ social workers and mechanisms for peer support amongst students do exist. These positive aspects for coping which should be strengthened with any humanitarian intervention.
3.3 Food Security and Livelihoods

In terms of livestock losses - as of February 1st, 2016 the situation has not yet reached crisis levels. According to figures provided by soum and bagh governors, as well as herder households, none of the assessed areas has lost more than 0.2% of their total herd\(^6\). Losses thus far are generally limited to young or otherwise weak animals. However, moving into the spring birthing season (from the end of February onwards) many key informants expect livestock losses to dramatically increase.

One of the main determinants of animal survival moving forward is the severity of the drought during the past summer and subsequent impact on pasture production has had a three-fold impact in terms of: 1) animals had more difficulty grazing during summer and autumn and are therefore weaker than they would normally be at this point in the winter; 2) many herders were unable to stock sufficient supplies of hay for the winter months, and; 3) there is very little pasture beneath the snow to support livestock grazing - both now as well as when snows melt later in the spring. Estimates vary, however according to bagh governors and herder households the majority of herders have little more than a few weeks of hay left at most and as little as only a matter of days some cases\(^7\).

Due to the drought and other early warning signs of a potential dzud, migration is among the preparedness actions that both government and herder households have taken. Coordination between certain soum administrations – involving agreements for herders to not settle permanently and return to their areas of origin in spring, certain fees to be paid by herders as well as arrangements for health care provision – has resulted in increased (though relatively coordinated) migration since November, 2015. However, this temporary relocation entails certain transportation and other costs which limit the ability of the most vulnerable households to migrate. While many of the migrations have been planned since autumn other more recent migrations are sporadic and in reaction to the current situation. Additional migration leads to an increased pressure on already depleted pasture resources in many areas - increasing the risk for disputes amongst herder households.

While government officials have been able to mobilise state reserves and provide free hay as well as fodder sold at reduced prices (at a 50% discount), the amounts that have been made available at the household level are extremely small compared to the level of need. According to herder households, the amounts would only cover approximately 2-3 days of feeding for even the smallest herds; even with targeted feeding of sick, young or pregnant animals. At present state reserves of hay and fodder at the soum and aimag levels are close to depleted and plans remain unclear as to the timeline and quantities available for restocking. Regardless of the amounts – it is clear that they are nowhere near the amounts needed to meet the level of need.

Index based livestock insurance is available and offers some level of protection against livestock losses for certain households. Many herders however - especially the most vulnerable - are unable or unwilling to pay into the scheme as the threshold for pay-outs, set at 6% of livestock losses on the soum level, is too high to make regular payments worth it for many households\(^8\).

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\(^6\) Generally, in a normal year the national herd may expect between 1-2% losses. The 2009-2010 dzud resulted in 20% losses of the national herd.

\(^7\) What little hay and fodder that remains at the household level is being saved for the crucial birthing season over the next few months.

\(^8\) As a normal year would see 1-2% losses of the national herd setting the threshold at 3-6 times that amount on a yearly basis does not align with herder rationale.
Lack of purchasing power amongst herder households is perhaps the strongest determinant of the potential severity of the crisis on a household level (not only in terms of livestock losses). Financial stress is particularly acute for herder households due to: 1) a general slowdown in the Mongolian economy (as described above); 2) difficulties for herders to sell meat and animals on international markets due to their inability to meet internationally accepted quality standards; 3) a saturation of the local meat and animal markets following government messaging around the need to destock during November and December (which coincides with the normal seasonal slaughter of weak animals heading into the winter months) reducing this seasonal income source\(^9\). All key informants were unanimous in highlighting the severity of the financial stress for herder households at present. Additionally, debt levels are putting additional stress on herder households. According to the Mongol Bank, over 80% of herder households currently have bank loan with annual interest rates as high as 30%.

Despite the issues outlined above, food consumption was found to be normal for this time of the year. Most households had a few weeks of wheat flour stocked, as well as ample supplies of meat which was taken from their own livestock in the autumn. Most households eat 2 full meals per day, with dinner being the main meal and consisting of meat and wheat flour. Breakfast is usually quite light, consisting of milk tea and bread (as well as dairy products for some households). Lunch is often skipped for adults who are too busy tending to livestock. Children were found to eat the same things as adults (which has longer-term implications for nutrition as described below). However, considering the lack of purchasing power at the household level, compromises on food consumption are highly likely moving forwards if the situation worsens – especially for the most vulnerable.

In addition to reduced food intake (either in quantity or in quality) the main negative coping strategies that herder households will likely employ in order to focus financial and other resources on their remaining livestock will include reductions in expenditure on children including appropriate clothing, routing medical care, as well as transportation and communication costs (as outlined above). These shifts in household expenditure are likely to be much more drastic for the most vulnerable households.

### 3.4 Markets

Markets were assessed at the aimag and soum levels\(^{10}\). While more detailed market analysis is imperative, a summary of the initial findings include:

- At the aimag level markets are large, integrated and competitive with several active traders selling a variety of commodities - including essential food, NFI’s and livestock feed.
- At the soum level there are a handful of active traders selling essential food and NFI’s (most notably clothing). However, aside from state reserves livestock feed traders are rare (likely due to a lack of steady demand). When needed, many herders arrange for hay and fodder to be transported from aimag centres.
- State reserves (aimag and soum levels) are a significant market actor to consider for fodder (selling at a 50% discount) – though the amounts available remain unclear.
- Prices for hay and fodder are actually lower when compared to the same time last year due to 1) the lack of purchasing power within herder households leading to reduced demand and 2) an export ban placed on animal feed by the government.

\(^9\) The next major seasonal spike in income for herder households will come in April when cashmere is taken from goat herds.

\(^{10}\) See annexes for food basket and minimum expenditure basket calculations, including livestock feed.
• Fodder generally comes from wholesalers in Ulaanbaatar, wheat flour factories in the east of the country, other neighbouring aimags (Host, etc.) which import it from Russia, etc. Hay is usually locally sourced but is being brought in from other aimags (especially in the east) due to the drought.

• Traders cited increased fuel/transportation costs effecting some food commodities and NFIs.

• Traders cited an increased demand from herders to purchase on credit.

While this assessment focused on child protection, education and FSL, certain observations on nutrition, health and WASH were also noted by the assessment team and are summarised below.

3.5 Nutrition

A normal herder diet is composed mainly of wheat flour and substantial amounts of meat and dairy. While this diet allows most families to cover their basic kilocalorie needs and is high in animal protein, diet diversity remains low. A chronic lack of fruit and vegetables leads to a variety of micronutrient deficiencies for many herder children – especially iron, vitamin D and vitamin A – and stunting is an issue for the poorest households (as high as 20% in rural areas of Mongolia\textsuperscript{11}). However, according to health care workers, breast feeding rates are high in rural Mongolia and health workers provide nutrition supplements to children 6 – 14 months of age during their outreach visits. While acute forms of malnutrition are not an immediate concern, negative coping strategies moving forward will likely involve compromises on food consumption and malnutrition may become a more prominent issue moving into the spring.

3.6 Health

The most common health issues affecting children and their families at present are more or less normal seasonal increases in the flu, sore throats, fever and minor chest/respiratory infections linked to the cold weather. There was a suspected case of measles reported in Tosontsengel soum, however the case was a boy who had travelled from Ulaanbaatar to visit his family and he was subsequently quarantined; no further cases were reported\textsuperscript{12}. While the assessed health facilities were found to be adequately staffed\textsuperscript{13} and with sufficient medical stocks to cover basic health needs within the soum – health care for many herder households is more problematic due to their isolation, transportation costs as well as lower levels of health seeking behaviour in general. Many soum centres are able to treat many common illnesses and conduct basic surgeries, with more complicated cases referred to larger soums or aimag centres. Quarterly outreach activities (including vaccination campaigns) as well as emergency house-calls are also conducted, however the costs of fuel as well as the current road conditions greatly complicate these activities.

3.7 WASH

The most remarkable aspect of WASH that was noted during the assessment was the lack of quality sanitation facilities in schools and kindergartens. Latrines were available in all assessed schools however many were quite far from the school itself and were in very poor condition – with a lack of doors for privacy as well as very poor quality substructure. For herder households themselves, hygiene practices are generally weak - especially considering the environmental hygiene issues linked to young animals staying inside of the gers in many cases in order to avoid the cold. Reduced

\textsuperscript{11} UNICEF: Analysis of the Situation of Children, 2014.
\textsuperscript{12} All other soums reported no cases of measles since the early 1990’s.
\textsuperscript{13} Many bagh centres also have health care professionals who can cover routine medical needs.
purchasing of hygiene items is likely to be among the negative coping strategies used by herder households in order to redirect limited financial resources to their livestock should the situation continue to get worse. In terms of water access for humans – the majority of herder households melt snow or ice from rivers and springs (bringing it to a boil). While this increases the consumption of firewood and other combustibles, there is not major issue with access to clean water at this time.

4. Comparisons with the 2009-2010 Dzud

Key informants as well as herder households were asked to make a comparison of the current winter conditions and risks to livestock with the dzud of 2010. While answers varied significantly, especially in terms of the levels of snow fall, temperatures and related risks to livestock – which highlighted the localised nature of the current crisis - certain similarities did emerge.

The main overall difference in regards to 2010 is the timeline of weather events and related risks to livestock.

In 2010, many areas experienced early snows which melted by warmer weather in late autumn, only to rapidly freeze again shortly thereafter creating a sheet of ice upon which more snowfall accumulated. The layer of snow and ice greatly reduced livestock’s access to pasture. The difficulty accessing pasture – and perhaps more importantly a lack of preparation on the part of government and herdiers alike - resulted in high livestock mortality much earlier in the winter (numbering in the millions by January, 2010). While high livestock mortality continued into the birthing season, death rates did stabilise later as snow and ice melted and animals could once again access pasture.

This year however, the main difference according to many is the severity of the summer drought (perhaps due to the global impact of El Nino). The sequence of snowfall followed by a quick thaw and subsequent refreezing has not happened this year in most areas\(^\text{14}\) – which partially explains the lower level of livestock mortality at this point. While there was a greater effort by many herder households in terms of preparation, the drought has reduced the amount of hay that they were able to stock. The main worry for many however is that when conditions due warm up, there will be prolonged risk due to the lack of pasture for grazing. In a sense – the peak dzud-related risks for livestock fall on opposite ends of the core winter months in 2010 and 2016.

5. Conclusion

While it is not expected that the scale of the current dzud will reach 2010 levels in terms of livestock losses on a national level – it is very likely that the severity of the situation will be comparable for many herdiers on a more localised level. As the main impact on livestock and livelihoods will peak over the next few months – a livelihoods protection intervention is highly advisable, targeting the most vulnerable herder households who are at the greatest risk of pastoralist drop out.

If support is too little and too late, the knock-on effects for herder families and especially their children will be felt well into the future.

\(^{14}\) Some key informants in certain soums did refer to an “iron dzud” which does involve a sheet of ice limiting access to pasture. However, the major of key informants stated that a “white dzud” with cold temperature and high snowfall is a more accurate description.