

COMMUNITY-LED RESEARCH REPORT ON CLIMATE CHANGE IMPACT

TABLE OF CONTENTS

ABBREVIATIONS	2
ACKNOWLEDGMENTS	3
EXECUTIVE SUMMARY	3
CONSOLIDATED CONCLUSIONS	4
CONSOLIDATED RECOMMENDATIONS	5
CHAPTER ONE: RESEARCH METHODOLOGY	
Preparation Work	8
Research Objectives	8
Research Methods	8
Scope of Research	9
Target Locations	9
CHAPTER TWO: RESEARCH FINDINGS	
 Results from Murun Soum, Khentii Province 	10
 Results from Bayandun Soum, Dornod Province 	19
 Results from Dariganga Soum, Sukhbaatar Province 	26
Capacity–building training & The 6th National HRDs Consultation	32

ABBREVIATIONS

CHRD	_	The Centre for Human Rights and Development
II	_	Individual Interviews
CS0	-	Civil Society Organizations
GoM	-	The Government of Mongolia
CRM	-	Citizen's Representative Meeting
ACSG	-	The Association of Community Saving Groups
MGL	-	Mongolia
CC	-	Climate Change
MoJIA	-	The Ministry of Justice and Internal Affairs
FAA	-	The Food and Agriculture Authority
APWD	-	The Association of People with Disabilities
FGD	-	Focus Group Discussion
ESCR Net	-	Economic, Social, and Cultural Rights Network
NGO	_	Non-Governmental Organization
LG0	-	Local Governor's Office

ACKNOWLEDGMENTS

We express our heartfelt gratitude to the members of the Community Saving Groups (CSG) from Bayandun Soum, Dornod Province; Dariganga Soum, Sukhbaatar Province; and Murun Soum, Khentii Province for cooperating on the "Community-Led Research on Climate Change Impact" project, implemented by the Centre for Human Rights and Development (CHRD) in collaboration with the international organization Economic, Social, and Cultural Rights Network (ESCR Net).

Gratitude also goes to senior herders, female heads of households, vegetable growers, and young herders who actively participated in the "Community–Led Research on Climate Change Impact" by sharing their experiences and insights into the challenges posed by climate change and openly discussing the difficulties they face.

We are also thankful to the administrative officers, the heads of Soum citizens' representatives' meetings, and officials from the three soums who generously provided their time and insights for this research.

Furthermore, we acknowledge the Nature Reserve Administration at Dariganga Soum of Sukhbaatar Province for providing facilities for the focus group discussions and the "Nature's World" group members for allowing the local community research team to use their cameras and other equipment.

Sincere thanks to Francesca Feruglio, Tom Weerachat for their valuable contributions to the project's implementation by providing professional advice on training the research team members and writing the research report, and Vanessa Corioa Castilla for organizing a training on cyber security at the local members' request during the project.

CHRD Team

EXECUTIVE SUMMARY OF THE RESEARCH

The Centre for Human Rights and Development (CHRD), with the help of technical and professional advice from the international organization Economic, Social, and Cultural Rights Network (ESCR Net), began implementing the project "Community–Led Research on the Impact of Climate Change" in 2023. The project has been conducted in collaboration with the Community Saving Groups (CSG) affiliated with the CHRD in Bayandun Soum¹, Dornod Province, Dariganga Soum, Sukhbaatar Province, and Murun Soum, Khentii Province.

The main objectives of the project are to:

- Identify the challenges faced by herders, livestock owners, and vegetable farmers due to climate change;
- Enhance awareness among these groups about adaptation strategies, coping mechanisms, and preventive measures to mitigate the impacts of climate change;
- Strengthen cooperation between local governments and communities;
- Develop the research capacity of residents to independently assess issues and engage with local governments in decision—making processes.

Members of the Community Saving Groups established by the Centre for Human Rights and Development (CHRD) effectively implemented Community–Led Research in their local areas. They presented the research findings and associated recommendations at public hearings involving representatives from various sectors. During these discussions, the members addressed and highlighted critical issues faced by their respective soums.

The changes in weather patterns, the environment, and natural resources will continue to pose long-term challenges, as evidenced by the increasing frequency of natural disasters caused by global climate change. Therefore, the effectiveness of actions aimed at mitigating the impacts of climate change depends not only on the efforts, skills, and practices of herders and farmers but also on the implementation of national programs, policies, and local government action plans. The value of the research lies in its ability to promote understanding among the public about the critical role of policy and coordinated efforts in building climate resilience.

Soum is a small administrative unit in rural Mongolia dividing a province. There are 330 soums belonging to 21 provinces in Mongolia. Soum is divided into bags, the smallest administrative unit in Mongolia. There are in total of around 1500 bags.

Based on the data and conclusions of the community—led research conducted in the three soums the CHRD team developed the following consolidated conclusions.

I. Findings of the Research Survey:

- Due to climate change, the frequency and severity of natural disasters—such as droughts, harsh winters (zud), floods, storms, and wildfires—are increasing. Participants in the research on the impacts of the 2024 zud shared information based on real-life experiences, including the number of livestock lost and crops destroyed, as well as the causes:
- <u>Bayandun Soum, Dornod province:</u> A total of 4,063 animals perished, including 153 horses, 713 cattle, 1,781 sheep, and 1,380 goats—which is double the loss compared to the previous year. The increase in loss is attributed to heavy snowfall and sudden extreme cold.
- <u>Dariganga Soum, Sukhbaatar province</u>: During the 2024 zud a total of 90,000 livestock were lost in the soum. From the respondents of the questionnaire, 77 respondents lost in total of 14,428 livestock. Along with the loss of livestock, those who grow vegetables lost 700 kg of potatoes, 350 kg of cabbage, 500 kg of carrots, 160 kg of beets, 280 kg of onions, and 180 kg of garlic. The main causes were sudden cold spells and heavy snow.
- Murun Soum, Khentii province: From the research participants, 18 reported livestock losses, 32 experienced crop
 damage, and 11 mentioned impacts on their health and well-being. Across the Soum, 3,331 small livestock (sheep and
 goats) and 925 large livestock (cattle and horses) perished. The losses were primarily caused by sudden cold weather
 and heavy snowfall.
- Although severe damages and losses occur during zud, people are often unaware of where or whom to approach for compensation and lack sufficient information.
- The majority of participants expressed a need for information regarding Mongolia's policies and legislation on climate change, as they are not familiar with these topics.
- In interviews with local government officials, it was mentioned that policies and plans are implemented at the local level to mitigate and prevent the impacts of climate change, with citizen participation included. However, the herders and household farmers involved in the research were completely unaware of such policies or plans.

II. Policy Implementation and Regulation at local level:

- Most participants stated that they were unaware of Mongolia's policies and legislation on climate change and expressed
 a need for more information. This highlights the importance of improving access to information and respecting the right
 of herders, household farmers, and citizens to be informed. It also reflects the ineffectiveness of state policies aimed at
 climate change adaptation, which are not reaching local communities or producing the intended results.
- It was recommended that the annual development plans of Soums include measures to mitigate the effects of climate change and prevent natural disasters, with the budget and activities being discussed transparently with citizens and the information being made widely accessible.
- There is a lack of local government initiatives focused on training communities in damage assessment caused by climate change, reporting practices, and working with disaster risk management plans. Additionally, efforts to improve public awareness about these issues are insufficient.
- Local authorities are struggling to implement effective measures for sustainable pasture management and rotational grazing. The overgrazing caused by allowing large numbers of livestock from other soums to graze in the area is leading to pasture degradation and livestock losses due to the resulting shortage of grazing land.

III. Key ideas raised by the participants in the focus group discussions:

• 95% of participants emphasized the lack of sufficient information on reducing vulnerability to climate change, adapting to its impacts, and improving disaster preparedness. They expressed their strong interest in being trained in programs to develop these skills.

- It was noted that herders and household farmers generally do not calculate or assess their losses, which is influenced by entrenched mindsets. Because they are not assessing their damages, they often do not pursue financial assistance or compensation. A lack of confidence in finding responsible organizations for support contributes to this, and they do not plan for recovering economic losses.
- Herders showed great interest in increasing income sources to ensure sustainable livelihoods. They suggested adding
 value to raw materials and producing goods such as tanned hides, ropes, harnesses, soap from animal fat, and dairy
 products, as well as training foals and making saddles and bridles. This would contribute to their income and enable them
 to purchase their own feed and supplies.
- Elder herders expressed concerns about not being able to have young successors. They believe local authorities should focus on youth programs that teach them how to enhance the profitability of livestock products and explore home–based production activities.
- Some herders suggested that establishing cooperatives and working together as clustered households would make it
 easier to cope with natural disasters. By spending winters together as larger groups, they would reduce risks and better
 manage challenges.

CONSOLIDATED RECOMMENDATIONS

The recommendations that came out from the three community–led research conducted in Bayandun soum of Dornod province, Dariganga soum of Sukhbaatar province, and Murun soum of Khentii province were consolidated in consultation with the three research team leaders and drafted by the CHRD's team of advisers are stated below:

I. Enforce and Strengthen National Policy to Meet Local Needs:

- Ensure active involvement of local governments and citizens in the implementation of the mid-term strategic phase (2020–2025) of the Sendai Framework for Disaster Risk Reduction.
- Provide consistent information and training to create a unified understanding across all soums regarding the Law on Disaster Protection, local disaster risk reduction programs, and preventive action plans to have efficient results in order to mitigate risks.
- Provide accessible and simple information to herders and household farmers about the UN Framework Convention on Climate Change, scientific research on climate change, the effects of climate change, and effective measures and actions to mitigate the risks caused. Facilitate discussions to develop realistic and appropriate plans.
- Study the projects and programs being implemented in collaboration with the Government of Mongolia, with the support of the United Nations Development Programme (UNDP), the Green Climate Fund, and the Global Environment Facility, aimed at increasing the efficiency and sustainability of the livestock sector. These efforts should focus on enhancing the capacity to process raw materials from livestock, improving livestock quality, reducing greenhouse gas emissions caused by overgrazing, and having a positive impact on the environment. Additionally, ensure the sustainability of herders livelihoods, and emphasize the protection of livestock as a national treasure.
- Implement policies and plans based on research on pasture capacity, and promote the practice of moving livestock between winter, spring, and summer pastures. Introduce the best practices on sustainable pasture use, and collaborate with experienced senior herders and scientists who have conducted pasture research.
- Promote and raise awareness of Mongolia's newly approved laws on social protection for herders, and work with local authorities to implement them.
- Support policies that encourage the participation of young herders in capacity–building projects and programs.

II. Improve Local Government Policy Planning and Implementation:

- Continue implementing phased and effective programs to adapt to climate change.
- Organize efforts to provide herders, household farmers, and citizens with information on Mongolia's policies and laws
 related to climate change adaptation. Strengthen the capacity of Non Governmental Organizations to collaborate in
 effectively conveying government policies to the public.
- Local governments should engage herders in discussions about the sustainable use of pastures based on their carrying
 capacity. Work toward making sound decisions on rotating summer and autumn pastures, allowing land to rest, and
 adjusting livestock numbers to match the ecological capacity of the pastures.
- By the Province Governor's resolution, a ban has been imposed on the entry of external livestock within the province's territory. Local authorities and the citizens> representative meeting should ensure the implementation of this decision to protect against desertification and pasture degradation.
- Collaborate with the government and insurance companies to either reduce the threshold for livestock mortality (currently 6%) or ensure that herders with insurance receive compensation based on the extent of livestock losses.
- Make the spending and evaluation of funding for the implementation of the "Local Disaster Protection Plan" transparent and improve its effectiveness. This funding includes 1% of the local annual budget and 1.5% of legal entity annual expenses. Additionally, seek alternative sources of funding to increase financial support.
- Study and implement effective measures to compensate for the damages and losses caused to herders and household farmers by the impacts of climate change.
- Reduce the administrative burden on herders during severe weather conditions and promptly take appropriate action to address their needs without any delay.
- Implement projects and programs to provide herders, local governments, and household farmers with off–road vehicles, and foster collaboration with businesses.
- Regularly visit herders to advise and support them in preparing for winter by aligning livestock numbers with pasture capacity and ensuring high–quality preparation for winter.
- Listen to herders opinions about forming work cooperatives based on the "neighborhood group" principle and plan and implement specific preventive measures to reduce the risks of winter and spring disasters.
- Local governments should support policies that involve herders in various projects and programs. For example, organize a "Herders Cultural Heritage Day" in collaboration with tourism organizations to promote herders livelihoods.
- Take practical measures to ensure high–quality preparation for winter and spring, spread good practices among herders, and provide advice and guidance.
- Implement a program to train the next generation of young herders: teach them how to increase the benefits from livestock and how to engage in traditional household production. Seek the support from the parliament member, who is representing the local area.
- In case of heavy snowfall or zud, station a doctor at the bag center to provide medical care.

III. To the herders:

- Participate in associated training programs and learn from experiences on adapting livestock farming to climate change and increasing livelihood sources.
- Actively utilize all available resources to create a realistic personal plan for adapting to climate change and seek support to implement it. This includes:
 - a) Study and implement opportunities to raise livestock suited to pasture capacity and geographic location, focusing on improving herd quality rather than increasing quantity of livestock.
 - b) Work cooperatively under the "neighberhood group" principle, combining efforts to ensure high-quality winter preparations in line with livestock numbers.
- Herders should stock enough hay and fodder to avoid falling into debt.
- Purchase off-road vehicles and stock enough fuel for winter preparations.

- Discuss within the "neighborhood group" ways to increase income sources that support sustainable livelihoods, such as adding value and selling livestock products. Create personal plans to increase income and improve skills through training, aligning with local government plans, and seeking support.
- Focus on preparing the next generation of herders by passing down experience and involving children in projects and programs. Teach young people how to increase the benefits from livestock and engage in traditional household production. Support the promotion of products through coordination with local government plans.

IV. To Non Governmental Organizations (NGO):

- Through the community-led research, members of local Savings Groups have learned how to conduct research themselves. In addition to reporting the research findings and recommendations to international organizations, they will submit official reports to the Government of Mongolia, aiming to influence policy and ensure appropriate decisions are made accordingly.
- Non Governmental Organizations to continue to build the capacity of local Savings Groups, members, teaching them to perform certain government functions and turn research results into practical actions.
- Enhance the Livestock Index-Based Insurance system and explore new options for providing compensation for losses.
- Influence professional organizations to establish an effective crop insurance system for household farmers.
- Submit a request to the local and provincial authorities to issue "RECOMMENDATIONS FROM HERDERS", focusing on supporting herders who have lost their livelihoods by providing them with livestock and creating sustainable income sources for herder households.
- Integrate the case studies and recommendations from COMMUNITY LED RESEARCH on the damages caused by climate change into local government plans. Present these findings to members of parliament elected from the local area and seek funding support for the implementation of those plans.
- Develop a step-by-step plan for climate change adaptation and disaster prevention, and advocate for implementations of these plans to be discussed publicly by the local Citizens' Representative Meeting.
- · Conduct an independent assessment of the effectiveness of government policies and regulations on climate change adaptation, and regularly inform local herders and citizens of the results accordingly.

CHAPTER 1: THE RESEARCH METHODOLOGY

Preparation Work

- From August 28 to September 2, 2023, the preparation work for the "Community-Led Research on the Impacts of Climate Change" began with a training workshop held in Nakuru Lake in Kenya, Africa. The training brought together six social movements, Indigenous Peoples' organizations, and grassroots groups from Colombia, Mexico, Mongolia, Nigeria, Zimbabwe, and Kenya D.Munkhzul, the head of the Association of Community Saving Groups (ACSG) from Dariganga Soum, Sukhbaatar Province, U. Mandkhaitsatsen, Executive Director of the Center for Human Rights and Development (CHRD), participated in the training, along with B. Munkhjin, who worked as an interpreter for D. Munkhzul.
- The objective of the training was to build the capacity of research teams to implement community—led research at the local level. The training focused on developing participants, skills to identify and address the impacts of climate change on people's livelihoods. Additionally, it aimed to empower researchers with the ability to collect data, analyze issues, and propose solutions relevant to their communities.
- The training workshop was facilitated in Dariganga Soum with the participation of 30 individuals–10 members from each of the Association of Community Savings Groups (CSG) representing the three soums. The training aimed to enhance the research capacity of the local research teams by equipping them with essential methodologies.
- Both the pre— and post—workshop, virtual meetings were held with the research teams, providing opportunities for participants to discuss and clarify issues related to their research. During the workshop, participants learned how to manifest the research process, conduct high—quality audio and video recordings, and effectively organize discussions and interviews. The workshop also included practical group exercises to apply these skills.
- Members of the Committee of Saving Groups (CSG) discussed how to organize their research teams to implement the Community–Led Research. They developed action plans and, following the guidelines provided by the CHRD began collecting data, analyzing the results, and presenting their findings through public discussions.

The Objectives of the Research:

First: Identify issues faced by residents and potential solutions.

Second: Empower a community-led research team on the impacts and consequences of climate change, and support collaboration with local authorities.

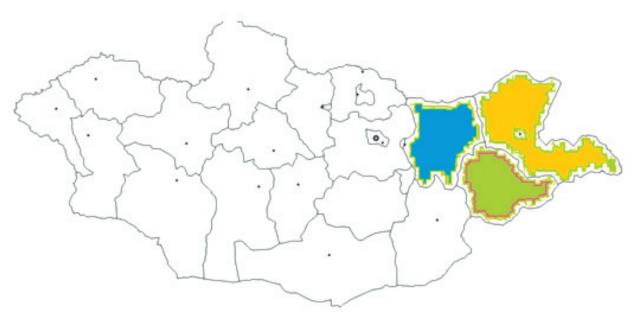
Research Methods:

The following methods and tools were used in each soums to collect associated data:

- **Questionaire method:** A total of 300 participants were involved, with 100 participants from each soums, using a questionnaire consisting of 20 questions to gather information.
- Focus Group Discussions: Focus group discussions were organized in each soum with 4 groups of participants according to the guideline. These included a group of elders, a group of male herders, a group² of female herders, and a targeted vulnerable group³ of people, totaling 120 participants. As a result of the focus group discussions, 2 case examples were recorded from each of the 4 FGDs, enriching the research data.
- Individual Interview: the research team developed a guideline and used it for interviews with key informants during individual interviews. Each soum included 10 participants in these individual interviews, comprising the soum governor, the head of citizens representatives meeting, the head of the governor's office, and administrative specialists. A total of 28 people participated.

² Targeted vulnerable group included people from low income families with many children, disabled person, or widows.

The Scope of the Research: Location of the provinces and soums.



The research included herders, livestock owners, household farmers, and local authorities from three selected soums in the three provinces respectively.

Target Areas of the Research

The research was conducted in the following areas:

- Bayandun Soum, Dornod Province;
- Dariganga Soum, Sukhbaatar Province;
- Murun Soum, Khentii Province;

CHAPTER 2: FINDINGS OF THE RESEARCH

RESEARCH FINDINGS FROM MURUN SOUM, KHENTII PROVINCE

Research team members:

D. Uranchimeg – Head of Research Team, and members: D. Ariunaa, N. Zandanpurev, M. Narantsetseg, Ts. Nergui, U. Nyamtuya, G.Oyun and Ch.Erdenetsetseg.

Activities of Researchers:

In Murun soum, Khentii province, the research was conducted from April 27 to July 3, 2024, to assess the damages caused by climate change and gather information about the situation. The research included 93 participants in the questionaire, 39 participants in focus group discussions, and 8 participants in individual interviews, totaling 140 participants. A public hearing was organized, inviting a total of 55 participants.

Table 1. Research participants by age group.

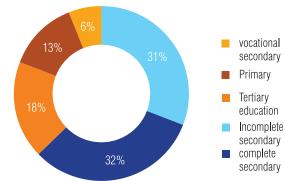
Table 2. Reserach participants by gender.

Reserach type	Age	Number of participants
	17–29	6
	30-39	9
0	40-49	14
Questionaire	50-59	33
	60- above	31
_	Total	93

Re serach type	Gender	Number of participants
Questionaire	Male	46
Quostionano	Female	47
	Total	93

Table 3. Research participants by education. Research team members

Reserach type	Participants	Number of participants
Focus group discussions	Herders' group Elders' group Female group Group of vulnerable people	10 10 10 9
Individual interviews	Male herder Female herder	5 3
	Total	47





Research Team of Khentii province,

Findings of the Questionaire

Nº	Questions	Consolidated answers
1	What do you understand as harms and damages due to the climate change impact?	Weather-related hazardous events, multiple livestock losses, loss of grazing land, and degradation of soil fertility.
2	How is climate change manifested in your area?	Zud (severe winter conditions), drought, desertification, storms, extreme heat and sudden cold snaps.
3	How does climate change affect your family?	Livestock losses by 18 respondents, crop losses – 32, health and mental well–being – 11, increased costs for fuel and oil, frequency of disasters, and reduced working capital for loan repayments.
4	If livestock has died, when did it happen, what was the cause, and how many livestock were lost?	Total livestock losses over the past two years 2023–2024): Small livestock (goats and sheep): 6,302 and large livestock (cattle): 1,498.
5	If you have lost crops, when did it happen, what was the cause, and how many tons/kilograms of crops were lost?	Crop loss amounts an average of $500 \text{ kg} - 5 \text{ tons}$ and for larger areas: $10 - 24 \text{ tons}$.
6	What damages have occurred in your dwelling? Please select the relevant options.	All aswered, "Did not occure."
7	If there have been health or mental health impacts, please provide additional information.	The respondents do not have information.
8	Are you afraid that you will not be able to return your livelihood to its previous level? Why?	Yes. Why? The economy is difficult, and money has become scarce. It may take a long time to reach the previous years' livestock numbers.
9	Please estimate the most recent losses in MNT.	The fact that the extent of losses has not been assessed and that estimates are being made with rough figures shows that there has not been a thorough evaluation of how much risk is involved.
10	Have you received any compensation for your losses?	All answered, "No".
11	If you have received compensation, how did you obtain it?	No answer.
12	If you have not received compensation, why not?	All answered, "Do not know whom to approach".
13	Who did you receive support from when you experienced losses?	Majority answered "The Government, local authorities, relatives, and friends".
14	What type of assistance did you receive?	Animal feed, seeds, and fertilizers.
15	What is needed to reduce the risks of damages caused by climate change?	Government policies and regulations, personal preparedness, improving livestock productivity; sustainable use of pastures and weather alert information.
16	Have you heard about Mongolia's policies and legislation regarding climate change?	All respondents answered "Do not know".
17	Is there a need for information on Mongolia's policies and regulations regarding climate change?	All answered "Yes".
18	How well do you understand measures to mitigate and adapt to climate change?	Very few answered "Average" More than half "Bad", and the rest "Do not know.
19	Are government policies and regulations on climate change adaptation yielding results in your life?	All answered "Do not know".
20	What do you think you need to do to adapt to climate change?	Almost half of them said "access to information on the government policies and regulations", around 40% said "to join local comunities' initiatives, and 5% said "to map the needs and resources of local people".









The members of the research team are in the process of collecting information through the research questionnaire.

Focus group discussions, cases:

During the focus group discussions and individual interviews, real examples of individuals affected by natural disasters in the region were recorded as case studies without repetition, enriching the research findings by documenting experiences of overcoming risks.

I. Herders' group:

- "This winter, I lost 30% of my livestock. Around 200–300 small animals (sheep and goats) and some horses also died. I received food assistance including 2 bags of rice, 2 kg of sugar, and some flour," said N. Altanshagai.
- "Last year, I insured only my goats. In 2023, I lost a significant number of goats, around 130. The insurance payout was 1,130,000 MNT. In 2024 I lost 30 cattle, 20 sheep and goat mostly young ones, due to the harsh winter. It would be good if there were policies to stabilize the prices of hay and feed in the spring. Last year, I did not have a good hay harvest; even though I bought four trucks of hav, it was not enough" said N. Altansukh.
- "In 2023, I lost about 80 foals and over 200 sheep were downwind, and I couldn't find; more than 300 goats died in their shelters, and I lost around 230 horses in 2024. Cattle and small livestock are doing relatively well. I learned that horses and camels need to be insured continuously. The total loss for sheep and goats is approximately 150 million MNT, and for horses, it is about 195.5 million MNT, making the total loss over 250 million MNT" said E. Davgadori, a herder from the 3rd bag of Murun soum.

II. Elders' group:

- "Last year, my vegetables were damaged by hail, and on one hectare, my crop was eaten by pests, resulting in a reduced yield. Local and regional authorities should implement policies and hire professional agronomists. We need young vegetable growers" said N. Bolormaa.
- Due to extreme heat and drought, the soil fertility is low, and the yield has decreased, while pest infestations have increased. The unexpected cold has delayed planting. By June 1, all crops would usually be ready, but now the planting is not even finished. There is a lack of machinery, causing delays. (N. Ulziibyamba)

III. Women's group:

- "In the spring, the nights are cold, causing delays in planting, and it is cooling down early in the fall. The yield per hectare has decreased by 30-35%. The crops are getting smaller. To increase the yield, it is possible to plant in protected soil, choose varieties with short growing periods, and especially start early seedling cultivation for vegetables such as onions, carrots, cabbage, and peppers" said Ts. Nyamsuren.
- "In previous years, we would plant vegetables in early May and harvest the first crops in June. Now, we only started planting around June 10. We are losing time and facing economic losses" said N. Zandanpurev.

IV. Group of vulnerable people:

- "People with disabilities in our community face various challenges in vegetable cultivation, such as a lack of manpower, productivity, and equipment. Our citizens also show low interest in engagement; they do not come to meetings but will gather for a meal. There are over 70 people with disabilities in our soum" said N. Ganzorig - Head of the Disabled People's Association in Murun Soum.
- In 2023, I suffered health issues and was unable to harvest any crops. The plastic cover of my 8x10 greenhouse was torn by strong winds, but I managed to patch it as best as I could and am currently planting crops. The cost of replacing the plastic for two greenhouses is 1.3 million MNT. When I approached the government agencies, there was no support or assistance available. (B. Bolormaa)





During elders' groups discussion







Women's group discussion

Targeted group's discussion

Targeted group's discussion

Individual interviews, cases:

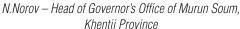
"The allocation of livestock head tax is determined based on the recommendations of local residents. There has not been a detailed assessment of the damage caused by the recent natural disaster, nor an evaluation of the loss of livestock numbers. The monetary amount has not been calculated. The pasture capacity has been exceeded due to the disaster, and the yield for hay and feed preparation has ceased. (B. Myagmardjav — Deputy Governor)

Our organization has two vehicles, one of which is a van, and it has been two years since it was written off. During the winter when there is heavy snow, it is challenging to respond to calls in the countryside. We are involving herders in preventive check-ups and providing them with appropriate treatments during the summer, keeping them under our supervision. (B. Gandolgor – Head of the Health Department)

A program has been announced to provide livestock to households that have suffered losses due to livestock deaths. Previously, the amount was 5 million MNT, and this year it has increased to 8 million MNT. Interest–free, collateral–free loans are being offered for a period of three years. This is providing support to herders. (D. Zolzayaa – Governor of the 5th Bag)

A total of 60 million MNT is collected annually from livestock foot taxes to establish a feed fund. In accordance to the relevant regulations, there is a plan to drill one water well for pasture in each community every year. We spend 20 million MNT on feed costs. We calculate the cost of a bale of hay at 10,000 MNT and purchase only 2,000 bales. This is not sufficient for over 500 herders in the 5 bags. During natural disasters they are sold at the same price as purchased when the sales price of bales of hay is much increased. (B. Myagmardjav – Deputy Governor)







Damaged green houses with duirng spring wind

THE PUBLIC HEARING

A total of 56 people including representatives from various groups participated in the public hearing organized in Murun soum of Khentii province on July 3, 2025.

The public hearing was opened by G. Urantsooj, the Chairperson of the Centre for Human Rights Development. In her opening speech, she emphasized that: "The results of the research are going to be presented for discussion. The aim is to raise awareness among citizens about reducing the harm caused by climate change, improving adaptation strategies, and managing their livelihoods in a way that minimizes damage. Therefore, I hope that your activities will contribute significantly to this goal. Through this discussion, citizens will gain specific knowledge and information, and the local community will have its data and evidence. This information will be used to address the damages and consequences of climate change at the soum, province, and national levels. Furthermore, it will create opportunities to influence national policies aimed at reducing climate change through public engagement. I wish you all success in this discussion".

Ch.Erdenetsetseg – Head of the Community Saving Group, National Champion Farmer.

I believe this is the third time I have collaborated productively with the Center for Human Rights and Development. In the past, they have provided us with support in various areas. I would also like to express my gratitude to the members of our group for their excellent work. Since 2004, we have worked and grown together successfully.

I am a farmer by profession, and I always intend to provide expert advice to vegetable growers in Murun soum. While everything is developing nowadays, people still use traditional methods to grow vegetables, even though the government provides modern equipment and technology. I wonder why they don't care for their bodies and health—just seeing them labor in pain makes me feel sympathy. Watching them dig irrigation ditches by hand is heartbreaking. If young people, who wish to become farmers, see these traditional methods, they might feel discouraged.

Furthermore, I want to point out that the high-quality white-skinned garlic, once grown by the older generation, is no longer planted. Farmers seem to have forgotten that it was a local brand. Nowadays, people grow vegetables using the seeds and seedlings provided by the Ministry of Food, Agriculture, and Light Industry. In the future, the river water will decrease due to warming temperatures and climate change, making traditional vegetable-growing methods unsuitable. Therefore, it is essential to adopt practices like sprinkler irrigation and drip systems to improve operations."

N.Alimantuya — Elder, vegetable grower of Murun Soum

In recent years, due to changing weather patterns, it has become difficult to harvest enough hay, fodder, and fertilizer. Climate change, caused by global warming, has altered the weather beyond our control. A clear example is the overgrazing of pastures in our region. Plants that used to grow no longer do, yields have decreased, and many plant species can no longer thrive.

Herders also face risks due to the lack of livestock shelters, leading to the loss of animals during snowstorms or downwind. To prevent potential dangers, it is essential to build and improve livestock shelters and fences. I support the development of herders' cooperatives.

N.Davaajav - Vegetable grower in Murun Soum

It is essential to create opportunities for turning livestock raw materials into finished products. In the past, herders used to make their tethers and bridles, but now such practices have significantly decreased. Animal hides are often just discarded. Herders don't know how to turn raw materials into products. However, some have started using animal fat to make soap. Nowadays, it's mostly the older generation who care for livestock. Many young people leave for education and opportunities abroad. We need to teach young people how to utilize livestock resources and start home–produced businesses."



B.Myagmarjav — Deputy Governor, of Murun soum



D.Uranchimeg — Head of Committee of Savings Group, Head of the research team





Public hearing in Murun soum of Khentii province



Community members

Conclusion

Through conducting this research, the group members have realized that they can conduct research themselves. It was also observed that there is a common perception that livestock losses and crop failures are just a part of life. Herders and household farmers generally do not calculate their losses, which prevents them from seeking financial support. Even when they do, there are no organizations that respond to their needs. There is also a lack of planning to recover from economic losses. Information and policies on these matters are insufficient, and even when they exist, people may not know how to benefit from them. The Livestock Index Insurance system is not functioning well and is in its starting stage.

It is crucial to assess the damage caused by natural disasters. Since herders lose their livestock, which is their primary source of livelihood, it becomes important to raise animals within their means, grow vegetables, utilize irrigation systems, and reduce manual labor. Efforts should focus on raising awareness about new issues, influencing government policies, improving the insurance system, exploring options for crop insurance for household farmers, and educating herders about insurance at large.

In addition to consolidating the research findings and reporting them to international organizations, it would be beneficial to present them formally in writing and verbally to the Government of Mongolia, ensuring that appropriate decisions are reflected in policy and regulations."

Recommendations

The recommendations made based on the community-led research results of the Research team of Murun soum of Khentii province.

I. Recommendations to the local authorities:

- Train citizens to develop a habit of assessing the damage caused by natural disasters and work with plans to protect against environmental and climate risks.
- Provide support to herders and vegetable farmers to reduce losses and mitigate negative impacts.
- Train herders to develop skills and knowledge for planning preventive measures and reducing losses caused by climate change.

II. Recommendations to the herders:

- Ensure herders are well-prepared for winter and stock hay and fodder according to the size of their herds.
- Improve the enclosure and coverage of winter and spring shelters.
- Adjust the herd size to match their capacity and focus on raising high-quality, productive livestock.
- Leave winter and spring pastures unused during summer to allow them to regenerate.
- Learn to assess the financial value of losses caused by natural disasters and report and document them properly to the associated organizations.
- Fully insure their livestock.

III. Recommendations to household farmers:

- Due to natural disasters, spring plantings are delayed, therefore it is recommended to plant in protected soil and start early seeding.
- Learn to assess and convert losses caused by environmental and climate changes accurately into monetary amounts.
- Seek advice from professionals and follow proper methods to control pests.
- Use machinery during spring planting and irrigation to increase capacity and reduce manual labor as much as possible.
- Focus on cultivating vegetables that are in high demand in the market to increase economic profits.

IV. Recommendations to Non-Governmental Organizations:

- Improve the Livestock Index

 –Based Insurance system and explore new options for compensation.
- Train herders to develop skills and knowledge for planning preventive measures and reducing losses caused by climate change.
- Consolidate the research findings and report them to international organizations, as well as present them to the Government of Mongolia both in writing and verbally to influence policies and decisions.
- Provide support in developing an effective crop insurance system for small–scale farmers.

FINDINGS OF THE RESEARCH OF BAYANDUN SOUM, DORNOD PROVINCE

Members of the Research Team:

The research team consisted of 9 members. They are all local members of the Bayandun soum's ACSG. Six of them are women including the head of the Research Team and three were men. Ya.Munkhzul - Head of Research Team, with the team members: P.Amgalanbaatar, B.Baigalmaa, B.Bat-Erdene, L.Dorjmaa, L.Dulamkhand, N.Jargaltsetseg, L.Tumennast and B.Khishigt collected research data, analyszed, drafted report findings and organized a public hearing.

Activities of the Researchers and Information About Participants:

A team of 9 members from the Association of Community Saving Groups in Bayandun Soum, Dornod Province, conducted a community-led research study on the impacts and consequences of climate change from April 27, 2024, to July 3, 2024.



Research team

Table 1. Research participants by age group.

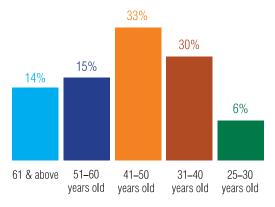


Table 2. Research participants by education.

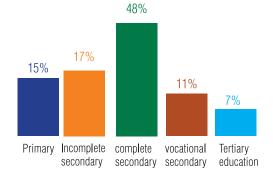


Table 3. Research participants by family members.

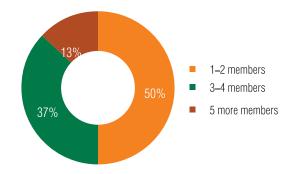


Table 1. Research participants by age group.

No	Question	Consolidated answers
1	What do you understand as loss and damage due to the climate change impact?	Majority of answers were as large numbers of livestock deaths; loss of pasture; degradation of soil fertility; and Risk to human lives caused by climate related disasters.
2	How is climate change manifested in your area?	Blizzards and snowstorms; Sudden cold spells; Wildfires; and Desertification.
3	How does climate change affect your family?	Livestock loss; Health impacts; and Mental health issues.
4	If livestock has died, when did it happen, what was the cause, and how many livestock were lost?	4,968 small livestock ⁴ and 1,354 big livestock ⁵ were lost by the research participants due to cold rain, storms, and blizzards in 2022–2024.
5	If you have lost crops, when did it happen, what was the cause, and how many tons/kilograms of crops were lost?	None.
6	What damages have occurred in your dwelling? Please select the relevant options.	Animal enclosures and shelters.
7	If there have been health or mental health impacts, please provide additional information.	Health issues include mental distress, frostbite on the face, burns on the hands, feeling cold, increased blood pressure, rising blood sugar levels, heart pain, back pain, and mental distress as the payment for herders' loans approaches.
8	Are you afraid that you will not be able to return your livelihood to its previous level? Why?	Yes, the loss of breeding livestock affects livestock growth. Families with few animals are devastated by blizzards and may end up with no livestock.
9	Please estimate the most recent losses in MNT.	Up to 30% of the participants in the research valued their losses at 5–15 million MNT; 10% valued their losses at 20–30 million MNT; and 11% valued their losses at over 30 million MNT.
10	Have you received any compensation for your losses?	No one received.
11	If you have received compensation, how did you obtain it?	No answer to this question.
12	If you have not received compensation, why not?	88% of the survey participants answered "do not know where to seek help"
13	Who did you receive support from when you experienced losses?	60% of the respondents have received no assistance or support; 27% received support from local government and local councils; and 13% received assistance from international organizations like World Vision and the Red Cross.
14	What type of assistance did you receive?	27% of herding households received one bag of feed at a discounted price; 38% of herders received medication from local government and councils; and 13% received food products from the World Vision international organization.
15	What is needed to reduce the risks of damages caused by climate change?	Be prepared personally; properly utilize hay and pasture; implement government policies and regulations; improve the productivity and breeds of livestock; and prepare according to weather alerts and information.
16	Have you heard about Mongolia's policies and legislation regarding climate change?	100% of the respondents answered that they have not heard about the policies.
17	Is there a need for information on Mongolia's policies and regulations regarding climate change?	100% answered that they need information.
18	How well do you understand measures to mitigate and adapt to climate change?	Majority answered as average.
19	Are government policies and regulations on climate change adaptation yielding results in reality?	Do not know. Almost 100% answered "do not know".
20	What do you think you need to do to adapt to climate change?	Obtain knowledge and information about government policies and regulations; seek advice from local authorities and specialists; participate in crop insurance; and improve social insurance for herders.

Sheeps and goats Cattle, horse and camel

Summary of key discussion points from FGDs, Cases:

I. Herdsmen Group:

- Income is low, raw material prices are declining, and livelihoods are difficult. Therefore, herders, especially female herders, should be supported by government policies and have their health protected.
- Geological exploration and/or mining operations should not be carried out in areas with springs and water sources.

II. Elderly Group:

- The group expressed common perception about the younger generation that "The younger generation has become very lazy. They do not even milk their cows and are not focused on fully utilizing and increasing the productivity of livestock." The group also emphasized importance of educating children and young people about climate change.
- Staying and wintering in one place poses a risk of pasture degradation and desertification. Accurate and realistic reporting of livestock losses is necessary.

III. Women's Group:

- There is a high demand for technology that can ease the labor of women engaged in household farming. The cultivation and yield of vegetables are increasingly deteriorating. Pest control or irrigation issues have not been addressed.
- During difficult disaster situations, herders and household vegetable growers need support in access to health service and insurance policies for compensation of loss and damage including improvement of the indexed livestock insurance for herders.

IV. Targeted Vulnerable Group:

- Support is needed to pay for children's education, increase income, and enhance the productivity of livestock.
- Regular access to information on weather is important, and the bag governor should consistently visit herders' homes to provide support and assistance.







Focus Group Discussion with the Elders' Group

Focus Group Discussion with the Women's

Key findings from Individual Interviews, Cases:

- If herders collaborate on their labor and prepare for winter together, it is possible to overcome the risks posed by natural disasters without suffering losses.
- It is necessary to stop giving permissions to mow the grass on the reserve pastures. Because it for herders to graze livestok during zud.
- During 2024 zud tens and hundreds of livestock died. The disposal of livestock carcasses has been a significant issue for herders.







Action Processes of the Research Team

THE PUBLIC HEARING

A public hearing was held at the Cultural Center of Bayandun Soum on July 5, 2024. A total of 40 participants including local representatives, citizens, herders, local government officials, and environmental representatives have participated.

The public hearing was opened by G.Urantsooj, the Chairperson of the Centre for Human Rights Development. She emphasized:

"This time, the research team from the soum is organizing a public hearing to present the results of the research to the local public. It is essential not only for citizens' initiative to communicate the research results to the public but also for local government representatives to understand and collaborate effectively.

The researchers' work will not be completed with just one research, assessment, or discussion. Climate change will continue to evolve, and its frequency is expected to intensify. Therefore, improving adaptation skills to climate change, and overcoming and reducing risks requires, on the one hand, individual preparedness from citizens, and on the other hand, clear policy, plans, and collaboration.

It has been shown that climate change leads to losses and impacts that exceed individual capacity. Nevertheless, this discussion aims to provide people with the opportunity to talk about and discuss their issues."

D.Khishigt, who is a Board Member of the Association of Community Saving Groups of Bayandun Soum, Dornod Province, said:

"The Government policy focused on herders is essential. It is necessary to support herders in terms of health, family well—being, and income, especially during times when raw material prices are falling, and their earnings are low. Many herders are struggling to make a living as the products derived from livestock are not profitable, forcing some to abandon parts of their livestock products due to a lack of sales. The findings of this research are being presented at public hearings and shared with local authorities to raise these concerns with the government." He emphasized further based on the research finding that "It is important to teach children from an early age about climate change, the risks it presents, and the opportunities and solutions they can pursue. Helping them understand what actions they can take personally will empower them to contribute meaningfully. Additionally, training and capacity building for herders is essential to ensure they can adapt to environmental changes and improve their livelihoods".

He mentioned that the last spring was marked by storms and heavy snow, resulting in significant livestock losses. The government campaign to dispose of animal carcasses was not carried out adequately. The herders themselves struggled to deal with disposing of their animals' carcasses, which became a heavy burden. It would be wise for government officials and responsible policy organizations to pay attention to this issue. In addition he said that during disasters, urgent assistance should be provided to herders who continue to care for their livestock and the losses should be assessed realistically.

Finally he said that "the younger generation seems to be quite lazy and is not focusing on increasing livestock productivity. The elderly continue to herd their animals, but urgent assistance is not being provided. The local governor's office and specialists need to pay attention and work on accurate estimation of livestock losses. There is also a lack of focus on waste management at the soum level. People tend to discard waste carelessly, and there is a need for preventive measures to be taken.

Conclusion

The community-led research clearly shows that herders, livestock owners, and household farmers have been significantly affected by the negative impacts of climate change. They often do not receive compensation for their losses, are unsure where to turn for help, and lack of adequate information. During the winter and spring of the past year (2023) alone, livestock losses at the soum level reached 4,063 animals, including 153 horses, 713 cattle, 1,781 sheep, and 1,380 goats, which accounts for 1.58% of the total livestock. Under the indexed livestock insurance policy, herders are compensated only when livestock losses reach 6% of the total herd in the soum. This threshold is too high, making it inaccessible for herders, as many do not receive compensation even after losing a significant number of animals. Despite taking preventive measures against climate change-related natural disasters, such as regularly receiving weather updates, preparing hay and fodder, vaccinating their livestock, and maintaining proper shelter and care, herders find themselves powerless in the face of frequent natural disasters.

There is still a lack of policies and regulations to support the succession of young herders and create job opportunities in livestock farming. Local and national level participation is not ensured in the creation of state policies and regulations to gradually strengthen the capacity of household vegetable growers to mechanize their activities by providing equipment to reduce manual labor and to overcome the negative effects of climate change.





During the analysis period of the research data.

Recommendations:

The community-led research findings in Bayandun soum clearly showed that it is essential to implement a step-by-step disaster risk reduction program that supports herders through government policies and regulations with attention to providing compensation for loss caused by climate change, improving livestock breeding, and increasing productivity. Otherwise, it becomes a contributing factor to the transition to intensive animal husbandry and the abandonment of traditional methods of pastoralism. The research findings lead to developing recommendations in the following four areas:

- 1. Adaptation to Climate Change: The local administration should mobilize citizens and use all available resources to develop and implement disaster prevention programs.
- 2. **Protection of pasture from overgrazing:** Enforce the resolution issued by the province governor to prohibit the pasturing of livestock from other regions.
- 3. Improving drinking and pasture water supply: Improve access to drinking water, take measures to irrigate pastures, and stop mass migration to one area following water.
- 4. Livestock and Vegetable Insurance: Lower the insurance threshold for livestock losses from the current 6% or ensure that every insured herder receives compenation based on the level of their losses. Create compensation insurance for vegetable growers.

I. Recommendations to the local authorities:

- Increase Local Budget Allocation: Increase 1% of the local budget for allocation for disaster protection and risk reduction. and ensure transparency in reporting the expenditure including 1.5% allocations from legal entities equal to their annual operational costs.
- Establish Reliable Measurement Points for Snow Depth: Change the locations of the four established points for measuring snow depth to accurately determine the severity of snowstorms.
- Plant Bushes for Protection Against Snow and Blizzards: Implement afforestation projects to plant bushes that can protect against snow and blizzards.
- Improve the Indexed Livestock Insurance System: Enhance the indexed livestock insurance system to make it accessible to every herder.
- Introduce Disaster Protection Insurance for Vegetable Growers: Implement insurance policies to protect vegetable growers from disasters.
- Develop Preventive Plans Against Climate Change: Develop and assess preventive plans against climate change, and ensure open reporting to residents on their implementation.
- Foster Partnerships for Disaster Prevention: Develop partnerships between the government, private sector, and civil society organizations for disaster prevention and risk reduction.
- Equip Local Government and Emergency Response Teams: Provide local government and emergency response teams with equipment/vehicles that have a good off-road capability during emergencies.
- Support Herders' Health and Well-being: Establish programs to protect the health of herders and provide emotional support during difficult times.
- Implement Waste Management Systems: Establish effective waste management practices.
- Involve Livestock Owners in Assistance Programs: Ensure that livestock owners are included in all forms of assistance and support.

II. Recommendations to herders:

- Ensure Full Participation of Herders in Indexed Livestock Insurance: All herders should be fully enrolled in the indexed livestock insurance program.
- Prepare Feed According to Livestock Numbers: Given the increasing frequency of climate-related disasters in recent years, herders should prepare their feed and supplies according to the number of livestock they have.
- Implement Seasonal Pasture Rotation: Conduct annual seasonal pasture rotation (winter grazing, spring grazing, and summer pasturing) and improve the sealing of winter and spring grazing enclosures.
- Improve Livestock Breeding and Management: Enhance the breeding quality of livestock and adjust the herd size according to own capacity.
- Document and Report Livestock Losses Due to Climate Change: Assess the monetary value of livestock losses incurred from climate–related disasters, document them, and report and register them with official authorities.

III. Recommendations for Household Farmers:

- Protect Soil and Conduct Seedling Planting: Due to climate—related disasters causing delays in spring planting, measures should be taken to protect the soil and plant seedlings.
- Accurately Assess the Climate-Related Losses: Calculate the losses caused by climate change at market value and ensure they are converted into monetary compensation.
- Seek Professional Advice for Pest and Weed Control: Follow the guidance of professionals to combat pests and wild plants effectively.
- **Increase productivity:** Establish cooperative work and introduce new techniques, technology.
- Engage in Greenhouse Farming and Establish Agro-parks: Promote greenhouse farming and develop agro-parks to enhance agricultural productivity.



Ts.Gantuya Governor of Bayandun Soum



Ya.Munkhzul Head of Research Team



D.Khishigt Team Member



During the Public Hearing







During the Public Hearing

FINDINGS OF THE RESEARCH OF DARIGANGA SOUM, SUKHBAATAR PROVINCE

Research team members:

D.Munkhzul - Head of Research Team, and members: D.Ariuntsetseg, Ts.Batkhurel, M.Bolorhculuun, L.Borkhuukhen, J.Byambaa, D.Dariimaa. D.Dugarsuren, J.Munkhtsetseg, N.Uridiinbish.

Research activities:

The research was conducted from May 27, 2024, to July 4, 2024. A total of 150 people participated in this study.

Table 4. Research participants by age group.

Research type	Age	Number of participants
	23–30	10
	31–35	12
	36-40	15
	41–45	14
Questionnaire	46–50	17
Questionnaire	51–55	10
	56–60	7
	61–65	10
	66–70	4
	70-above	1
	Total	100

Table 5. Research participants by agricultural businesses

Research type	Agricultural business	Number of participants
	Herders	85
Questionnaire	Individuals with few livestock	15
	Total	100

Table 6. Research participants by gender

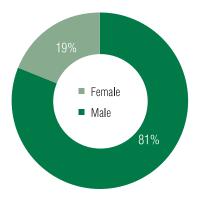


Table 7. Research participants by gender

Туре	Participants	Number of participants
	Herders	10
Focus Group	Women	10
Discussions	Female herders	10
	Elders – Targeted people group	10
Individual	Female	5
Interviews	Male	5
	Total	50



Research team members

Findings of the Research Survey:

Nº	Questions	Consoliidated answers
1	What do you understand as harms and damages due to the climate change impact?	All answers were about loss of pasture, lack of manpower, and crop loss.
2	How is climate change manifested in your area?	Most of respondents said about snowstorms, wildfires, and sudden cold snaps.
3	How does climate change affect your family?	The respondents said that livestock losses, health, mental well-being, and crop loss.
4	If livestock has died, when did it happen, what was the cause, and how many livestock were lost?	From the research participants, 77 people reported losing a total of 14,428 livestock during the snowstorm in 2024.
5	If you have lost crops, when did it happen, what was the cause, and how many tons/kilograms of crops were lost?	The total crop loss over three years is estimated to be between 160 to 700 kg.
6	What damages have occurred in your dwelling? Please select the relevant options.	All respondents said that because of strong winds ger, houses, cattle sheds and fences were damaged.
7	If there have been health or mental health impacts, please provide additional information.	Most of answers were about health damage such as face and hands freezings and get cold.
8	Are you afraid that you will not be able to return your livelihood to its previous level? Why?	All of them answered "yes", because climate change poses significant risks to herders.
9	Please estimate the most recent losses in tugrug amount?	The respondents estimated the recent loss in average of 5 million MNT.
10	Have you received any compensation for your losses?	No one received compensation.
11	If you have received compensation, how did you obtain it?	No answer
12	If you have not received compensation, why not?	Uncertainty about where to seek help.
13	Who did you receive support from when you experienced losses?	Some receive support from local authorities, some from relatives and friends.
14	What type of assistance did you receive?	Livestock feed; Greenhouses; Medicine and fertilizers.
15	What is needed to reduce the risks of damages caused by climate change?	Regulate through policy, maintain personal preparedness, prepare hay and feed, and utilize pastures responsibly:
16	Have you heard about Mongolia's policies and legislation regarding climate change?	All answered "Not heard of".

17	Is there a need for information on Mongolia's policies and regulations regarding climate change?	Everyone said "Yes".
18	How well do you understand measures to mitigate and adapt to climate change?	Mostly choosed "Average"
19	Are government policies and regulations on climate change adaptation yielding results in your life?	All answered "Do not know"
20	What do you think you need to do to adapt to climate change?	Most common answers follow: Stay informed about government policies and regulations. Seek advice from local officials. Connect with NGOs and Civil Society Organizations for guidance. Join local community initiatives. Provide information to herders and citizens. Conduct assessments on needs and resource mapping for the community. Obtain crop insurance.

Focus Group Discussions, cases:

During the FGDs the participants discussed about the loss of livestok, water and labor shortages they faced because of heavy rain and flood in 2023, and zud⁶ of 2024 and their impacts on lives and livelihoods of herders.

- 1. **Water Shortages**: In the group of elders the discussion was about protection of winter pasture and some critics on drilling of water well in winter pasture. "A water well has been drilled in the winter pasture of the soum. This has led to improper use of livestock grazing areas and has had a very negative impact on wintering conditions" said citizen of the 4th bag, 75–year–old elder Dugarsuren Davkhai.
- 2. **Labor Shortages:** Heavy snow and storms require significant labor from every hosehold hitting much harder families with elders, people with disabilities and single–headed households. "During the last winter's snowstorm, we faced a shortage of manpower. It is advisable to work together as a community" says elderly female herder of the 2nd bag, Borkhuukhen Lkhasuren.
- 3. Health Impacts and Access to Medication: During zud people face different challenges. One of them is a challenge to access health service and medicines. "After losing my livestock in last winter's snowstorm, I faced difficulties with transportation. I experienced high blood pressure, kidney pain, and mental distress. There is no doctor in the bag, so when I went to the soum center to get my medication. I was required to have a doctor's prescription. The pressure of having to scan my fingerprint to obtain discount medicine from the pharmacy was quite burdensome" said young female herder of the 4th bag, Khongorzul Gongor.
- 4. **Livestock Losses and Difficulties**: Many families lost livestock in 2024 zud. "I lost my livestock due to the last winter's snowstorm. There was a severe shortage of manpower and technical assistance. I have lost my source of livelihood, and life is very hard" says female herder and head of household from the 1st bag, S.Tserenkhand.
- 5. **Lost Livestock During Heavy Rain**: Heavy rains and floods have a significant negative impact. "During the heavy rains, a young herder from the 1st bag reported that all 110 of his goats had gone missing. Two days after the rain stopped, when the water receded, the herder found his 110 goats dead, having drowned in the floodwaters" said governor of the 3rd bag, Ganbold Batsukh

⁶ Zud is heavy snowfall and storms with severe impacts on livestock grasing.

I. Elderly Male Representative:

 The soum's bag governors should organize a model project for each bag. It is essential to establish a feed production enterprise.

II. Young male herders' representative:

- Lack of awareness of local policies or soum policies. The most crucial need is having skilled manpower and robust equipment like bulldozers.
- There has been a substantial loss of livestock, with one herder remaining with only 600 out of 1,650 heads, resulting in a loss of 700 million MNT, while another herder suffered a loss of 171 million MNT.

III. Young female herders' representative:

- There has been a large loss of livestock, and I have also suffered greatly in terms of health. From having 2,000 livestock, only 200 remained. It is very hard work for a woman to raise livestock.
- The soum does not support hardworking women with average life, who contribute to the community.

IV. Male Representative of Local Government:

 The soum prepares for winter and spring by stocking 30 to 50 million MNT worth of hay each year; however, this amount only covers one-third of the total livestock in the soum. In the 2023–2024 period, 90,000 heads of livestock were lost.

V. Female Head of Household Producer:

• Selling vegetables is challenging. I want to gain knowledge about pickling vegetables. If there is support from the bag, there are many collaborative opportunities in vegetable production.

THE PUBLIC HEARING

A total of 58 people participated in the public hearing held in the Dariganga soum of Sukhbaatar province on July 7, 2024 The public hearing was opened by G.Urantsooj, the Chairperson of the Centre for Human Rights Development. She

emphasized:

We are going to discuss the findings of the research. The results of this discussion should be reflected in some way in the local development plan, concept, and national projects of Mongolia. There are two major directions of work related to climate change. One direction is green development, which includes reducing and eliminating the impacts of climate change and promoting renewable energy. The other direction is adaptation to climate change, which focuses on reducing damages caused by climate change and creating resilience to climate change.

The Governor of the Dariganga Soum, Sukhbaatar Province, D. Boldbaatar, spoke at the opening of the public hearing.

"Our soum has been collaborating with the NGO "The Centre for Human Rights and Development" for the past 10 years and has established Community Saving Groups. Currently, many groups are actively engaged in activities. The work of non-governmental organizations and savings groups significantly facilitates governmental operations. We must discuss the causes of climate change; if we do not, nature will not comply accordingly. Therefore, it is crucial that the group members conduct research and provide accurate information, as this is a timely initiative. I wish you success in the discussions."

Conclusion

The following conclusions have been made from the research questionnaire, focus group discussions, and individual interviews:

Herders and farmers participating in this research in Dariganga soum of Sukhbaatar province do not receive compensation for damages and losses caused by climate change; they do not know whom to approach for assistance and lack sufficient information. The livestock insurance provides compensation only when 6% of the total livestock in the soum is lost, this criteria does not reflect the local reality making it inaccessible to farmers. Despite following up on the weather forecasts to prevent natural disasters caused by climate change and adequately preparing feed, hay, and animal shelters and enclosures, as well as vaccinating and caring for their livestock, herders and farmers still feel powerless against natural disasters. Therefore, there is a pressing need for government policies and regulations focused on supporting herders and farmers and implementing disaster risk reduction programs in phases. Additionally, it is essential to compensate herders and farmers for losses caused by climate change, promote livestock farming, and improve livestock breeds. Supporting the next generation of herders and farmers and increasing job opportunities is also crucial.



The public hearing.



D.Boldbaatar – The Governor of Dariganga soum during



D.Munkhzul — Head of Research team of Dariganga soum,







During the public hearing.

- Citizens and herders are unaware of local administrative policies, planning, and activities on climate change There is no real support.
- No assessment is conducted on the losses suffered by herders affected by natural disasters.
- Almost no actions have been taken to train adaptive skills for coping with climate change and to improve livestock quality.
- Climate change significantly infringes on human rights, impacting health, mental well-being, and livelihoods. There should be a community assembly of the 4th bag.

Recommendations

The recommendations made based on the community-led research results of the Research team of Dariganga soum of Sukhbaatar province.

I. Recommendations to the local government:

- Prepare for the next winter and spring seasons starting now, ensuring collaboration between herders and local government.
- Pay attention to avoid cutting hay for businesses, taking appropriate measures, and providing transparent information.
- Implement policies to properly manage and utilize pastures.
- Make associated amendments in policy documents such as the "Local Disaster Protection Plan."
- Take action to find ways to compensate herders for their losses and provide feedback.
- Purchase equipment/vehicles with adequate durability. Ensure fuel reserves while preparing for winter.
- Provide health care and special attention to the well-being of female herders by sending them to health resorts.
- The local government should particularly focus on promoting and implementing the new laws related to the social protection of herders in Mongolia.

II. Recommendations to the herders:

- Ensure thorough preparation for the winter season.
- · Collaborate with labor within community households.
- Collaborate with the government to improve the quality and breed of livestock rather than just increasing the quantity of livestock.

III. Recommendations to the health care organizations:

- To prevent pressure on herders or citizens from public services in difficult circumstances, take prompt measures appropriate to the situation. For example, temporarily halting the practice of requiring fingerprint verification for medication.
- Station a medical doctor at the bag center for better health care services.

ACTIONS BEFORE THE COMMUNITY-LED RESEARCH ON CLIMATE CHANGE IMPACT:

The two community research team leaders attended the international research capacity-building training. Ms. Ya. Munkhzul attended the training in Bishkek, Kirgizstan on 2023, and Ms. D. Munkhzul and U. Mandkhaitsetsen attended the training organized in Nairobi, Kenya on 2023.





Capacity-building training, Kenya

Capacity-building training, Kirgizstan

The three community research team leaders presented their research findings at the panel session: "Challenges for Environmental HRDs in Human Rights Impact Assessment of Climate Change" of the 6th National Consultation of HRDs organized in Ulaanbaatar on October 1–2, 2024. The research conclusions and recommendations were reflected in the outcome document of the consultation and later presented to the members of the Human Rights Subcommittee of the Mongolian Parliament. The meeting was attended by the secretary and officer of the National Committee on Public Productivity, responsible for human rights issues in the Cabinet Secretariat of Mongolia.



Panel session: Impact Assessment of Climate Change



Community members



The 6th National Consultation of HRDs organized in Ulaanbaatar on October 1-2, 2024