

COMMUNITY BASED VULNERABILITY & RISKS ASSESSMENT OF ARKHANGAI PROVINCE - CVRA-

KEY FINDINGS & PERSPECTIVES

ARKHANGAI AIMAG, A TERRITORY PARTICULARLY VULNERABLE TO CLIMATE CHANGE

Climate change is already affecting all countries in the world but with huge disparities among regions. Like a lot of countries, Mongolia is vulnerable to current effects and future impacts of climate change. However, studies and indexes show that the country can rely on its adaptive capacities to face it in the near future. But, the current study emphasizes important disparities between Aimags. Indeed, Arkhangai Aimag appears to be quite vulnerable to climate change, especially as far as local communities are concerned.

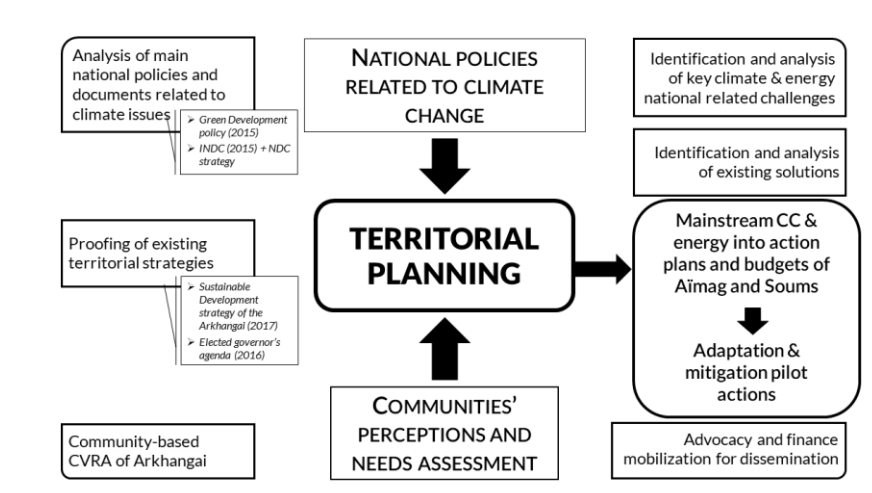
In order to identify the main specific vulnerabilities at subnational level, a community-based climate vulnerability risk assessment of the Arkhangai has been realized by GCMC NGO with guidance and technical support from Geres NGO.

Main results put in evidence that Arkhangai is facing a global warming since 1985 with seasonal disparities. Indeed, winters are becoming colder and more rigorous, while other seasons are getting warmer. In terms of precipitation, it looks like it becomes shorter in duration and more frequently more intense than before. This already results in impacts such as an increasing frequency of extreme climate-related events like dzud, snow storms, and dust storms. In some areas, the frequency of tornadoes is increasing as well. Impacts are also felt by communities regarding pasture quality, water availability & quality and forest coverage & pest or disease prevalence. Negative changes in pasture, forest, and water resources means limited resources, with ever increasing need. Therefore, land dispute is increasingly an issue between herders, farmers, locals and non-locals. This leads to either loss of livestock, or low quality livestock, leading to drop in market price for livestock products, and poor living standards for the herder family as a result.

Climate projections tend to confirm the existing global warming trends for the years to come. However, if the situation could be contained to a +1 or +3°C by 2040-2059 and 2080-2099, it could also increase to +5 or +6°C by 2080-2099 in the worst case scenario, with potential disastrous consequences for Arkhangai local communities. As far as precipitations are concerned, the shifts already felt in rainfalls/snowfalls patterns may continue to get accentuated in the years to come.

SUBNATIONAL ENTITIES PLAY A KEY ROLE IN THE IDENTIFICATION AND IMPLEMENTATION OF ADAPTATION AND MITIGATION TANGIBLES ACTIONS

This community-based climate vulnerability risk assessment plays a key role in the territorial approach to climate and energy issues developed by GERES in collaboration with Arkhangai governorate through CEMAATERR program. It has been conducted in an inclusive and iterative approach giving community members the opportunity to bring their contribution, as far as they are concerned, to the assessment of past and futures vulnerabilities and the identification of adaptation options to address those challenges.



This participatory analysis led to the development of specific training and awareness material in order to raise awareness and understanding of local stakeholders (Aimag and Sum decision makers, civil society, citizens, private sector...) about climate current and future challenges.

It results in the identification of priority orientations to address climate change adaptation and mitigation challenges that meeting community needs and consistent with national commitments and policies; that could be mainstreamed into policy making process at Aimag and sum levels.

Adaptation options at short, mid and long terms identified taking into account the potential evolution of the climate situation in the Arkhangai include:

- ✓ Capacity building and awareness raising for local community members and relevant officials on climate change and its impacts;
- ✓ Introducing and implementing pasture allocation system at the local level (subsequently at national level);
- ✓ Revisiting and developing policies to address the increasing land conflicts;
- ✓ Supporting value-added production of livestock produce;
- ✓ Strengthening the implementation of rehabilitation activities, legally budgeted from profits made from natural resource exploitation such as mining, and forests;
- ✓ Constructing watershed to better provide and manage water resource for livestock.

Mitigation options: On the other hand, analysis of the flow of energy sources as identified by local communities shows that coal is bought from coal mines in Ulaanbaatar, Uvurkhongai since Arkhangai does not have coal resource of its own; and timber issues from Arkhangai forests is mainly sold to the capital. This limited internal flow within the province area emphasizes the need to initiate energy transition through:

- ✓ Reduce & optimize of energy consumptions
- ✓ Develop demand side management measures
- ✓ Increase efficiency of energy and heat supply system
- ✓ Reduce the electricity loss
- ✓ Explore alternative fuel sources
- ✓ Increase cooperation among public and private actors

ARKHANGAI AIMAG COMMITS through the definition of an energy transition strategy in order to increase resilience to climate change, reduce GHG and environmental pollution. Through its **2019-2020 action plan**, the following sectors are identified as priorities:

- natural resources management for adaptation goals
- housing and tertiary buildings (private and public), industries and public lighting for mitigation goals
- awareness raising and capacity building of local stakeholders as transversal measures