



Key messages

- The assessment reveals that the policies and programs in the crop farming sector have very limited provisions that specifically address climate change adaptation, thus largely ignoring this issue.
- General goals and provisions that are indirectly connected with the issue of climate change adaptation, such as improvement of cropping technologies, activities and management of crop farming have been identified.
- It is recommended to develop and implement a National Program for “Climate-smart development of the Crop Farming sector”.
- An important aspect is to strengthen and improve the collaboration between organizations specialized on climate change and the universities and institutes in the crop farming sector, and to develop and implement the joint projects.
- Furthermore, it is also essential to conduct trainings of crop sector personnel and crop farmers in climate change adaptation, and to improve their knowledge and information regarding climate change.
- It is advisable to develop a project proposal for adaptation of the crop farming sector to climate change and to submit it to the Green Climate Fund.

Assessment of the projection of climate change adaptation issues in the crop sector policies

Objective of the assessment

Global climate change is increasingly affecting Mongolia through a range of adverse effects such as reduction of precipitation during the warm seasons, occurrence of prolonged dry and hot weather, degradation of natural ecosystems and soil quality, and displacement of the natural zones by shifting or expansion of the dry Gobi Desert region to the north.

Further adverse effects of climate change include depletion of water resources, loss of soil moisture regime, decrease of the groundwater level, and increase in the frequency and intensity of natural disasters, and these impacts are likely to have strongly negative consequences for the crop farming sector of Mongolia. Therefore, to ensure efficient and sustainable development of the crop-farming sector and food safety of the country in the future, it is imperative to elaborate and implement a climate-smart model for crop sector development. The key objective of this model will be to overcome and adapt to the impacts, risks and additional effects of climate change. The prerequisite for the development of a climate-smart crop-farming model is to create legal frameworks and the necessary institutional environment for the matter.

This policy brief summarizes an assessment of how the issue of climate change adaptation is reflected in the crop sector's policies and programs, and what institutional settings are currently available for the implementation of adaptation measures in the crop sector.

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Main results and conclusions:

- The results of the assessment show that the policies and programs in the crop farming sector have very limited provisions that specifically address climate change adaptation, and lead to conclusion that the issue of climate change adaptation in crop production has been largely ignored in the sector's legal documents, policies and operational programs.
- A number of general goals and provisions that are indirectly connected with the issue of climate change adaptation, such as improvement of cropping technologies, activities and management of crop farming have been identified.
- Goals and provisions relating to the sustainable development of crop farming activities emphasize improvement of farming technologies, cultivation of varieties suitable for hot and dry conditions, cultivation of new crops, improvement of water use in crop farming and soil protection. These measures will contribute to the implementation of the overall goal of climate change adaptation.
- The mechanisms, institutions, and financial resources accountable for implementing climate change adaptation measures have not been adequately identified.
- Indicators for evaluating the implementation of the measures and the outcomes to be achieved are unknown.
- While the government agencies, universities and research institutes in the crop sector conduct a range of activities related to the development of the crop farming sector, including crop research and qualification of crop specialists, the need to develop policies for climate change adaptation and implement adaptation measures is not adequately addressed. This is partly due to insufficient knowledge, information and capacities of the personnel of the said organizations.
- Currently, there are no coherent policies, strategies, and action plans in the crop sector on mitigation of the risks and adverse effects of climate change and adaptation to climate change.

Recommendations:

- Develop and implement a National Program for "Climate-smart development of the Crop Farming sector". The following topics may be covered in the program:
 - Conduct a detailed study of the impacts and risks of climate change on the crop farming sector and its crops;
 - Take full advantage of the positive impacts of climate change, research the possibility of overcoming the negative impacts, develop different adaptation measures and evaluate their effects;
 - Identify strategies and methods (necessary technologies, funding mechanisms, capacity building, etc.) of implementing adaptation measures in the crop farming sector
 - Determine how to integrate these objectives and measures with the policies and activities of the sector;



- Some measures to reduce greenhouse gas emissions from soil and the crop farming sector may also be included.
- As the current policies and programs of the agricultural and crop farming sectors have insufficiently addressed mitigation and adaptation of climate change, measures should be taken to clearly incorporate these issues into new policies, strategies and programs.
- Integrate and implement the goals and measures for climate change adaptation in the crop farming sector, presented in the policies, programs, and documents related to the development of and climate change in Mongolia, to the sector's policies, strategies, and programs.
- Strengthen and enhance the collaboration between organizations specialized on climate change issues and the organizations, universities and institutes in the crop farming sector, and initiate and implement joint projects.
- Improve the knowledge and information on climate change of the staff of organizations, universities and research institutes in the crop sector; provide training and hold regular meetings and discussions on the topic; and facilitate active involvement of crop sector professionals in projects and programs related to climate change adaptation.
- Specialists and researchers in the fields of climate change and crop farming should initiate and develop joint projects and programs, collaborate with international organizations, develop project proposals, concepts and project documentation on the adaptation of the crop farming sector to climate change with funding from the International Green Climate Fund, initiate submission of project proposals to the Fund, and cooperate with FAO and other specialized agencies.
- Provide relevant information to agricultural and crop farming professionals and researchers of universities and research institutes in the sector, and conduct trainings and seminars.
- Conduct regional trainings and provide information to local crop farmers on possible measures for climate change adaptation.
- Prepare and distribute brochures and manuals to the related parties on the effects, risks of climate change and climate change adaptation in the crop farming sector.

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