

3.0 Democratic People's Republic of Korea

CIA	Central Intelligence Agency
DPRK	Democratic People's Republic of Korea
MLEP	Ministry of Land and Environment Protection
UNDP	United Nations Development Programme
UNEP	United Nations Environment Programme
UNFCCC	United Nations Framework Convention on Climate Change

The Democratic People's Republic of Korea (DPRK), with a geographical area of 120,538 square kilometers and a population of over 24.4 million, is one of the more isolated countries in the region of East and Southeast Asia. Situated between the Republic of Korea and China, it is geographically isolated in the north-east edge of the region, and its government system also creates an isolation of its own as outside travel and trade to and from the country is limited, particularly with developed countries. This isolation limits development of a clear understanding of the socio-economic¹⁵¹ and climate situation within DPRK.

A. Adaptation Needs and Priorities

The DPRK submitted its First National Communication under the United Nations Framework Convention on Climate Change (UNFCCC) in May 2004. The primary adaptation concerns listed in the document are related to sea level rise, intensified extreme weather events, and flooding (MLEP, 2004). Much of the data on climate change impacts in DPRK rely on outside sources such as the Intergovernmental Panel on Climate Change to identify potential impacts and threats. Climate change is likely to not only increase temperatures, but increase precipitation as well, which could have a negative impact on forestry and agriculture, as well as exacerbate pre-existing threats from flooding.

An United Nations Environment Programme (UNEP) *State of the Environment* document published in 2003, one of the few available assessments of DPRK, also points to significant problems related to resource degradation, deforestation and other vulnerabilities that likely will only be exacerbated by climate-related impacts. Coupled with agricultural pressures (UNEP, 2003), greater precipitation could

¹⁵¹ For example, DPRK did not have a 2010 human development ranking (UNDP, 2010). The last available data is from 1995 and ranks DPRK as a mid-range developing country (UNDP, 1998).

result in soil degradation and create a greater risk for events such as landslides and sedimentation of waterways (which also negatively impacts water quality).

Like many neighboring countries, priority adaptation sectors for DPRK identified include agriculture and food security as well as coastal zones and marine ecosystems. With respect to water resources, there is a need to: increase access through reservoirs and improved management practices; increase efficiency and irrigation practices; and improved flood management capacity.

B. National Level Policies and Strategic Documents

Since completing its First National Communication, DPRK has placed increasing importance on climate change adaptation and mitigation. The country has conducted internal research and the Ministry of Land and Environment Protection (MLEP) has gained increasing government influence. A second National Communication is nearing completion, but at the time of writing had not been published. As well, an effort is underway by DPRK and UNEP to update the 2003 assessment. However, there is a lack of strongly defined adaptation policy in the country other than those inferred through its National Communication. Insufficient financial and technical resources and/or competing priorities may be hindering adaptation efforts. Gender has not been considered prominently in DPRK policy and strategy to date.

Table 1: Key Government Policies and Reports reflecting Adaptation Needs, Priorities and Planned Actions

Name of Policy Action		Government Division Responsible	Status	Sector(s) of Focus	Summary description
1.	National Communication to the UNFCCC ¹⁵²	Ministry of Land and Environment Protection	Submitted May 2004	Multi-sectoral	Provides details on national circumstances with respect to climate change, an inventory of greenhouse gas emissions, as well as identification of impacts of climate change and potential options for adaptation actions.

C. Current Adaptation Action

Based on available information, it appears that only one nationally focused adaptation project is taking place in the DPRK. Due to its relatively isolated economy and society, the country is not benefitting from the regional actions and initiatives that many other East and Southeast Asian countries are taking part in. Of late, DPRK has started opening up trade lines, particularly with China, and hopes to be able to attract Clean Development Mechanism-type investment in the future which may have adaptation co-benefits. The one identified

¹⁵² Ministry of Land and Environment protection, http://unfccc.int/essential_background/library/items/3599.php?rec=j&preref=4296#beg

project focuses on food security and adaptation in the agriculture sector, and is funded by the United Nations Development Programme (UNDP).

Table 2: Current Adaptation Projects and Programs active in Democratic People’s Republic of Korea

Name	Objectives	Funder(s)	Implementing Agency(s)	Type of project	Duration	Priority Sector(s)
National Action						
1.	Reduction of Post-Harvest Losses for Food Security ¹⁵³	The project will focus on post-harvest management practices of farmers and extension workers, and enhance formal training, assessment skills, supplemented by specialized study tours, and the development of pilot demonstration farms.	UNDP Budget: US\$1,761,498	UNDP	Capacity building; Field implementation	2006 – 2010 Agriculture
			Geographic focus (if any)	Jangsuwn Cooperative Farm, Daesong District, Pyongyang Up Cooperative Farm, South Hwanghae Province Soho Cooperative Farm, Mundok County, South Pyongan Province Pyongam Cooperative Farm, North Hwanghae Province Daepyong Cooperative Farm, Singye County, North Hwanghae Province Osin Cooperative Farm, Daeam District, Nampo City		

D. Proposed Adaptation Action

In its National Communication, the DPRK has identified three priority projects for implementation. The needs highlighted in these projects do not appear to be addressed within the current adaptation-related project underway in the country.

Table 3: Proposed Adaptation Projects and Programs in Democratic People’s Republic of Korea

Name	Objectives	Type of project	Priority Sector(s)	Geographic focus (if any)	
1.	Enhancing capacity in the Environment and Development Center to develop the policies and measures to respond to climate change	Modernization and establishment of the data, statistics and analysis needed to develop adaptation policies.	Capacity building	Multi-sectoral	
			Notes: From National Communication.		
2.	Establishment of forecasting service and alarm systems in vulnerable areas along west and east coastal zones over sea level rise	Prevention of damages associated with flooding, typhoons and tidal waves.	Field implementation	Disaster risk management	Coastal zones
			Notes: From National Communication.		

¹⁵³ UNDP, <http://www.undp.org/dprk/docs/projects/RPHLFS.pdf>

Name	Objectives	Type of project	Priority Sector(s)	Geographic focus (if any)
3. Research capacity building for development of new crop variety	Crop diversification	Capacity building	Agriculture	
Notes: From National Communication				

E. Assessment

DPRK presents a very unique situation in terms of assessing current adaptation action. Its closed political and governmental system makes it difficult to ascertain the country’s projected climate impacts and risks, having to rely on national statistics that are difficult to verify, and limited direct observations. What is known is that poverty and famine are significant problems driven by climate variability, degradation of forests and agricultural land, insufficient factors of production including energy and fertilizers, and other factors. Current needs and priorities are difficult to assess, and while it is quite possible that work is ongoing in-country, it is not well publicized. Future adaptation actions may be focused on the country’s identified adaptation priorities—including agriculture and food security as well as coastal and marine ecosystems—and address capacity building and climate forecasting in order to establish an up-to-date assessment of climate risks.

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