



CLIMATE CHANGE IMPACT CASE STUDY:

North Korea: Climate Change and Security

SUMMARY

Climate change impacts may place additional stressors on North Korea which can have serious implications for security, both internally and regionally.

OVERVIEW

- Climate change is likely to exacerbate natural disasters and affect agriculture and food security in the Democratic People's Republic of Korea (DPRK).
- There is potential for the climate and food crisis to affect long-term stability in the DPRK.
- North Korea struggles with providing the basic necessities to its people, including food, public services, shelter, energy, governance and a general lack of resources. This could result in domestic instability and migration both internally and over the border.
- Additionally, aside from exacerbating natural hazards and affecting critical agricultural yields, climate change impacts could affect critical and military infrastructure.
- Any potentially destabilizing effects within North Korea could spread and threaten regional stability.

REGIONAL RELATIONS

- Several people were killed in South Korea after North Korea released water from the Hwanggang Dam, located near the North and South Korean border in 2009. (Dill et al., 2021) Climate change is likely to worsen natural hazards and ways in which North Korea may seek to mitigate its effects may have an impact on neighboring countries.
- During the 1990s famine in North Korea, thousands of North Korean migrants crossed the border into China and South Korea. Mass movements or significant numbers of migrants moving into other countries are likely to have a destabilizing effect on the region.
- Should there be another major humanitarian emergency or climate-induced migration, China is likely to receive the bulk of migrants, which could strain relations between Beijing and Pyongyang.
- Natural disasters, exacerbated by climate change and humanitarian emergencies sparked or worsened by the impacts of climate change could lead to instability within the DPRK and quickly become a regional concern.



North Korean Soldiers approach military demarcation line.

Source: House Committee on Foreign Affairs, 2012, Flickr. (<https://flic.kr/p/c4Kb63>) (CC BY-NC 2.0)

“Climate change will introduce a series of stressors to North Korean society, which could upset its fragile governance and resource base and lead to instability or conflict.”

(Source: Dill et al., 2021)

KEY POINTS

- Climate change impacts may weaken North Korea's ability to deliver basic public services and provide adequate governance. This will affect the average citizen and vulnerable populations are likely to experience the worst consequences. (Dill et al., 2021)
- If food insecurity in North Korea approaches or reaches levels seen during the 1990s famine, mass starvation, potential unrest and increased tensions within the country would be destabilizing. This could spur internal and external migration, and perhaps even ignite internal conflict.
- According to a study by Dill et al., (2021): "Multiple climate impacts will likely worsen food insecurity, damage infrastructure, induce migration, and constrain resources. Ordinary citizens of North Korea will bear a disproportionate share of the burden. These additional stresses could create pockets of domestic upheaval that could negatively influence the country's general stability."
- Internal instability in North Korea may have the potential to spread and affect regional security. During the 1990s famine, thousands of North Korean refugees fled over the borders into China and South Korea. Most of the refugees ended up in China. Mass migrations over the border into primarily China and possibly South Korea, may increase tensions between countries and raise security concerns. Many border crossers are often detained or sent back to the DPRK, which may strain relations between Beijing and Pyongyang. Larger migrant movements as a result of a humanitarian emergency that may be climate-induced or as a result of conflict, may have the potential to destabilize the region.
- Although it is hard to determine, a conservative estimate puts the number of migrants who have left North Korea since the 1990s famine at around 30,000 -50,000, mostly to China and South Korea. (Dill et al., 2021)
- Additionally, a major humanitarian emergency within North Korea is likely to further tax limited humanitarian resources from the international community in the Indo-Pacific.
- Continued weapons development and testing could intensify if Pyongyang feels threatened by a worsening humanitarian situation or if international attention is diverted elsewhere. This may result in additional weapons testing, threats and aggression towards other nations either for attention or for additional concessions.
- Several rivers in North Korea discharge into the sea along the west coast of South Korea as well as into the Imjin River along the border between North and South Korea and large discharges of water by North Korea can adversely affect South Korea. According to Dill et al., (2021), Hwanggang Dam, near the DPRK-ROK border, is of particular concern. In September 2009, a flash flood in South Korea along the Imjin River killed several people after water was released through the Hwanggang Dam. The two countries signed a dam release notification agreement, but North Korea reportedly has still engaged in unannounced dam releases, according to the report. (Dill et al., 2021)
- Major floods near DPRK's main nuclear facility at Yongbyon has also raised fears of a nuclear accident. The facility is situated along the Kuryong River where seasonal flooding has occurred. According to Dill et al., (2021) Yongbyon workers have reportedly installed mitigation measures, but the efficacy of such would be hard to determine. Aside from an immediate health and safety standpoint to North Korean citizens, any damage to the facility has great potential to affect regional safety and stability. (Aum & Stevenson-Yang, 2022 & Dill et al., 2021)
- While the impact of climate change on security issues in the Korean peninsula are palpable, analysts also say that climate change may provide an opportunity for the international community to engage with Pyongyang on adaptation and mitigation efforts, as well as to assist with food security and other humanitarian concerns. (Aum & Stevenson-Yang, 2022 & Dill et al., 2021)
- Analysts and the international humanitarian community say that granting access back to the United Nations and International Nongovernmental Organizations (INGOs) would be a positive step towards lessening potential security threats exacerbated by climate impacts. The United Nations has called for Pyongyang to grant access back to UN agencies and international humanitarian organizations since they were pushed out of North Korea at the start of the COVID-19 pandemic. This would allow the UN to not only provide support but to monitor the humanitarian situation in the country. (UNOHCHR, 2023 & Dill et al., 2021)
- The UN says the lack of UN agencies, other humanitarian organizations and diplomatic missions in North Korea brought about by Pyongyang's lockdown, have "further aggravated the suffering of its people." The border closures and existing sanctions have severely affected humanitarian aid to the country. (UNOHCHR, 2023)

SOURCES

- Aum, F., & Stevenson-Yang, L. (2022, September 22). *Could Climate Change Compel North Korea to Cooperate?* United States Institute of Peace (USIP). <https://www.usip.org/publications/2022/09/could-climate-change-compel-north-korea-cooperate>
- De Ferrer, M. (2021, September 8). *North Korea: Thousands evacuated after climate change causes devastating floods.* Euronews. <https://www.euronews.com/green/2021/08/09/north-korea-thousands-evacuated-after-climate-change-causes-devastating-floods>
- Dill, C., Naegle, A., Baillargeon, N., Caparas, M., Dusseau, D., Holland, M., & Schwalm, C. (2021, July). *Converging Crises in North Korea: Security, Stability & Climate Change.* Woodwell Climate Research Center & The Converging Risks Lab an institute of the Council on Strategic Risks. https://climateandsecurity.org/wp-content/uploads/2021/07/Converging-Crises-in-North-Korea_Security-Stability-and-Climate-Change_CSR_Woodwell.pdf
- House Committee on Foreign Affairs. (2012). North Korean Soldiers approach military demarcation line. [Photograph]. Flickr. (<https://flic.kr/p/c4Kb63>) (CC BY-NC 2.0)
- United Nations Human Rights Office of the High Commissioner (OHCHR). (2023, March 21). *North Korea's unparalleled self-isolation must cease: UN expert.* UNOHCHR. <https://www.ohchr.org/en/press-releases/2023/03/north-koreas-unparalleled-self-isolation-must-cease-un-expert>
- United Nations Office for the Coordination of Humanitarian Affairs (UNOCHA). (2020, April). *DPR Korea Needs and Priorities 2020.* UNOCHA. https://dprkorea.un.org/sites/default/files/2020-04/2020_DPRK_Needs_and_Priorities_Plan.pdf
- Header Image: North Korean soldiers by House Committee on Foreign Affairs. (2012). [Photograph] Flickr. (CC BY-NC 2.0). <https://flic.kr/p/c4Kbm3>



Climate Change Impact Case Study Prepared By:
Center for Excellence in Disaster Management & Humanitarian Assistance
456 Hornet Avenue, Building 76, Joint Base Pearl Harbor - Hickam, Hawaii 96860-3503
Telephone: 808.472.0518 | DSN: 315.472.0518
<https://www.cfe-dmha.org>