

ISSUE BRIEF

CLIMATE CHANGE LOSS AND DAMAGE IN VIET NAM CONTRIBUTION TO THE REVIEW AND UPDATE OF THE NDC1

OVERVIEW

Within the UNFCCC architecture, the Warsaw International Mechanism for Loss and Damage aims to enhance knowledge of risk management approaches to address unavoidable and residual losses.

The Government of Viet Nam is currently reviewing and updating the NDC1 which will inform the future development of the NDC2. The review aims to provide information on the country's efforts to date and to highlight the contributions to climate change adaptation and mitigation for the period 2021 – 2030.

In this context, Viet Nam's updated NDC considers including a new component that begins to look at how losses that are beyond the country's adaptive capacity can be measured and managed. Such a system should ideally be able to estimate both economic and non-economic losses such as loss of life, degraded health, cultural heritage, and losses induced by human mobility. These residual and unavoidable losses occur above and beyond impacts incurred due to regularly occurring disasters in Viet Nam.

HIGHLIGHTS

- Viet Nam loses on average 1-1.5% of GDP annually due to climate-related disasters. The cost of adaptation, not including all long-term loss and damage impacts, is expected to reach 3-5% of GDP by 2030.
- Viet Nam will need to cope with multiple long-term climate risks, including: sea level rise, land subsidence, saline intrusion, and ocean acidification.
- A 1 m rise in sea level would inundate 39% of the area around the Mekong Delta, decreasing the total rice output by 40%.
- Ensuring that long-term risks and unavoidable loss and damage are considered in national planning and international action will be key to effective climate change risk management.

METHODOLOGY

The initial analysis on climate change-related loss and damage focuses on the agricultural sector, which is highly impacted and currently contributes 17% of the Vietnamese GDP. Understanding the scale of climate change-related loss and damage in agriculture is critical to best allocate scarce resources and achieve long-term sustainable development goals. The draft NDC update provides: (i) a conceptual framework to assess climate change loss and damage in the agricultural sector; (ii) an analysis on how climate change loss and damage can be included in project and policy design; and (iii) an analysis of potential tools to transfer and mitigate risks. Some of the identified challenges so far include a lack of disaggregation between natural hazards and climate change hazards, the compartmentalisation of information between different agencies, and gaps in consistent historical data.



FINDINGS

Viet Nam is particularly vulnerable to the adverse effects of climate change, in the form of slow onset and extreme events. Viet Nam's official submission to the UN Framework Convention on Climate Change outlines that it is already 'facing losses and damages which are beyond its resilience and capacity, even after thorough application of climate change adaptation measures and the mitigation of GHG emissions.'

Climate change will affect Viet Nam's productive primary sectors, with consequent economic losses in agriculture and fisheries. Droughts and saltwater intrusion were the main causes of economic losses in 2016 (accounting for over 40% of disaster damage).¹ In 2016, saline intrusion was recorded reaching 90 km inland, far above the regular annual average of 10-25 km. As a result, 400,000 hectares of cultivated land were damaged, of which 30,000 hectares were not replanted.

Sea level rise of 22 cm by 2050 (which is a conservative estimate given current global emissions) would result in the area suitable for aquaculture being reduced by approximately 1 million hectares compared to 2004. This slow onset threat could lead to a 2% loss of the national GDP per year.²

In Viet Nam, more than 500,000 people live within 200 m of the coast, making them at particularly high risk of more intense typhoons, storm surges, and sea level rise.³ In the period 2008-2015, about two million people were temporarily evacuated or forced to migrate as a result of disasters in Viet Nam. At 23%, the poverty rate in coastal areas is already more than twice the national average, in part due to the increasing losses incurred by climate-related disaster impacts.

By 2050, 8% of Vietnam's population (7.4 million people) is expected to be affected by coastal flooding. These impacts could undermine the country's development efforts and put vulnerable groups at greater risk of falling into poverty.

Coastal infrastructure is highly vulnerable to sea level rise, being the second-highest cause of disaster-related GDP loss after agriculture. A 1 m sea level rise above present levels is estimated to cause \$2 billion in road damages.⁴ Between 2001 and 2005, natural disasters caused losses of \$106 million in the transport sector.

¹ CCFSC, 2018.

² UNU-WIDER, 2012.

³ UNDP, 2017.

⁴ Arndt, 2015.



INITIAL RECOMMENDATIONS

- Step up research on the economic and non-economic impacts of climate change-related loss and damage, such as migration, to support more effective national planning and risk management.
- Improve climate change loss and damage data collection, interpretation, and monitoring and evaluation systems.
- Institutionalise and reinforce national capacities to collect and analyse data in a systemic manner.
- Strengthen financial mechanisms to share and mitigate risks (e.g. dedicated funds from the state budget, innovative risk sharing and transfer mechanisms, etc.)
- Conduct pilot projects in climate change loss and damage assessment for certain key agricultural commodities which are vulnerable to climate change, such as rice, aquaculture, and fruits.

These initial recommendations will be used for consultation purposes in the upcoming months through the NDC review and update process.

REFERENCE

Technical Report on Review and Update of Loss and Damage in Viet Nam, 2018. Dang Kim Khoi, Nguyen Thi Lan Huong, and Dang Kim Chi.

This note is part of a series highlighting the on going process of the NDC review and update in Viet Nam. The activity is supported by the UNDP-MONRE Project on Capacity Building for Implementation of National Climate Change Strategy 2014-2018 (CBICS) and UNDP-FAO-MARD Joint Project on Supporting developing countries to integrate the agricultural sectors into National Adaptation Plans (NAPs). These initiatives are funded by BMUB/BMU through the UNDP NDC Support Programme and Integrating Agriculture in National Adaptation Plan (NAP-Ag).



Currently, the UNDP is working closely with GIZ and other development partners to support Viet Nam in reviewing and updating its NDC. The CBICS Project focuses on five building blocks: Mitigation, Adaptation, Co-benefits, Governance, and Finance and Monitoring Reporting and Verification.