







VIET NAM NAP 2021-2030 WITH VISION TO 2050

November 2023

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INTRODUCTION

Viet Nam, which has a coastline stretching more than 3,260km and many low-lying cities, is among the countries most vulnerable to the impacts of climate change and sea level rise.

To combat the increasing effects of climate change, it has updated its **National Adaptation Plan** (NAP) for 2021-2030 with a vision to 2050, grounding it in current climate change policies.

This booklet introduces the essential components of the development and implementation of Viet Nam's NAP, along with prioritised vulnerable sectors, key outcomes, and the technical and financial gaps to be addressed in the decades ahead.



Interested in reading more? Scan the QR code to access Viet Nam's full NAP technical report.

THE NAP AT A GLANCE

Government focal point

Ministry of Natural Resources & Environment

Timeframe

- Phase 1: 2021-2025
- Phase 2: 2026-2030
- Phase 3: 2030-2050

Prioritised sectors

The NAP includes climate change adaptation measures in the following areas:

- Agriculture
- · Disaster risk reduction
- Infrastructure
- Health, society & tourism
- Water resources
- Strengthening policies & resources
- Biodiversity



NAP OBJECTIVES & SOLUTIONS

- 1. Enhance the resilience and adaptive capacity of natural, economic, and social systems and ensure sustainable livelihoods.
- Effectively use and prevent the reduction and degradation of water and land resources
- Develop smart, climate-resilient agriculture
- Manage forests and ecosystems
- Develop climate change adaptation infrastructure
- Strengthen the medical and health care systems
- Ensure social security and gender equality

- 2. Mitigate disaster risk and minimise damage caused by increasing disasters and climate extremes, contributing to addressing climate change-induced loss and damage.
- Issue forecasts and early warnings
- Construct and upgrade works serving disaster risk reduction
- Ensure the safety of people's lives and property and reduce climate change-induced loss and damage

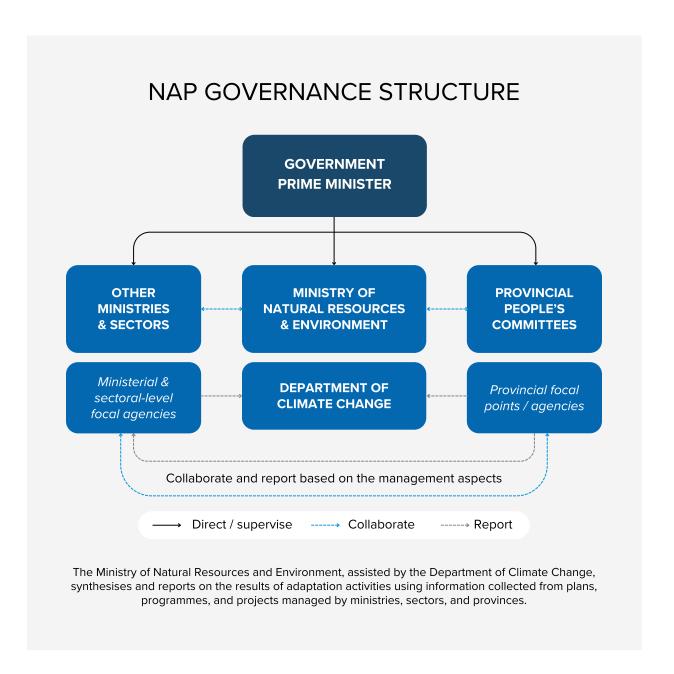
- 3. Complete institutional and policy frameworks, promote public awareness and engagement, and mobilise resources to effectively adapt to climate change.
- Develop and complete institutions and policies
- Communicate, raise awareness and promote public engagement
- Develop human resources
- Develop science and technology
- Mobilise financial resources for CCA
- Promote international cooperation in CC response

- 4. Develop tailored priority tasks and solutions for each region.
- Northern midlands and mountainous region
- Red River Delta
- North-central and central coast
- Central highlands
- Southeast
- Mekong Delta

TIMELINE OF KEY DATES

VIET NAM CLIMATE POLICIES NAP MILESTONES • Resolution No. 24-NQ/TW on proactively responding to 2013 climate change, strengthening natural resource management and environmental protection Law on Natural Disaster Prevention and Control Law on Water Resources Law on Hydrometeorology Viet Nam submits its intended Nationally Determined Contributions Viet Nam ratifies the Paris Agreement • Resolution No. 120/NQ-CP on the sustainable and climate-2017 resilient development of the Mekong Delta 2020 • Viet Nam submits its Nationally Determined Contributions Decision No. 1055 promulgating the NAP Law on Environmental Protection No.72/2020/QH14 approved by the National Assembly Green Growth Strategy launched 2021 NAP technical working groups set up Viet Nam joins the Global Alliance for Adaptation and commits to reach net zero by 2050 at COP26 • Decision No. 888/QD-TTg approving the Scheme on tasks • Decision No. 148/QD-TTg promulgating the 2022 and solutions to implement the outcomes of the 26th United NAP M&E framework Nations Climate Change Conference of the Parties NAP Portal launched • Decision No. 896/QD-TTg approving the National Climate • Circular No. 01/2022/TT-BTNMT guiding the Change Strategy to 2030 with a vision to 2050 assessment of impacts, vulnerability, risks, Viet Nam submits its updated Nationally Determined loss and damage caused by climate change Mekong Delta Master Plan for the 2021-2030 Contributions to the UNFCCC period, with a vision to 2050 NAP technical report published • Circular No. 06/2023/TT-BTNMT guiding the 2023 integration of climate change response content into strategies and planning NAP 2021-2030 under revision





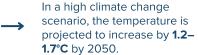


PAST & FUTURE CLIMATE IMPACTS IN VIET NAM



TEMPERATURE INCREASE

The temperature increased by 0.98°C between 1958-2018, 0.74°C of which has been since 1986.





The number of very hot days (>35°C) in a given year has increased by around 10-40 since the mid-20th century.



Viet Nam may experience up to **40-60** additional very hot days by 2100.



ANNUAL **RAINFALL**

Increased rainfall of 2.1% nationwide compared to the baseline.



Increase of **10-15**% by 2050 in southern climate zones, but a decrease in northern climate zones.



TYPHOONS

The number of storms and tropical depressions has increased, and some paths have been unusual.



Storms and tropical depressions are projected to become more frequent and intense, particularly in southern Viet Nam.



SEA LEVEL

From 1993 to 2018, the mean water level rose by around 3mm/year.



Inundation and saltwater intrusion may lead to a rise of up to 0.9m by 2050 in some locations.



The duration of the dry season has been lengthening in the north, a trend that is expected to continue.



Much of the central region and the northern delta will be at higher risk of drought, water scarcity, and desertification.

NORTHERN MOUNTAINOUS REGION

High risk of flash floods and landslides, and a high ethnic minority population with low adaptive capacity and limited economic infrastructure.

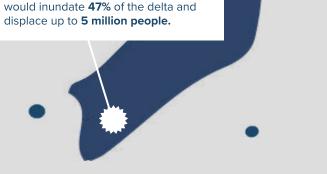
RED RIVER DELTA

Densely populated coastal region vulnerable to sea level rise, drought, floods, and water scarcity.



CENTRAL COAST

Vulnerable to flash floods, drought, landslides, and water scarcity, as well as seasonal storms.



MEKONG RIVER DELTA

The most vulnerable delta in the world

to saltwater intrusion and sea level rise.

The projected increase of 1m by 2100

Want to see the data? Scan the QR code to visit Viet Nam's Climate Risk Index.



The designations employed and the presentation of material on this map do not imply the expression of any opinion whatsoever on the part of the Secretariat of the United Nations or UNDP concerning the legal status of any country, territory, city or area or its authorities, or concerning the delimitation of its frontiers or boundaries.

NOT EVERYONE IS AFFECTED EQUALLY BY THE CONSEQUENCES OF CLIMATE CHANGE.

Recognising and responding to the vulnerabilities of specific groups, such as those highlighted here, is crucial to developing an effective long-term response.



Women are strongly affected by disasters, including through higher risks of malnutrition and gender-based violence, maternal health complications, and the burden of unpaid care.



Ethnic minorities mainly live in remote areas with limited infrastructure. They have lower adaptive capacity and are highly exposed to risks, while climate impacts reinforce the poverty cycle.



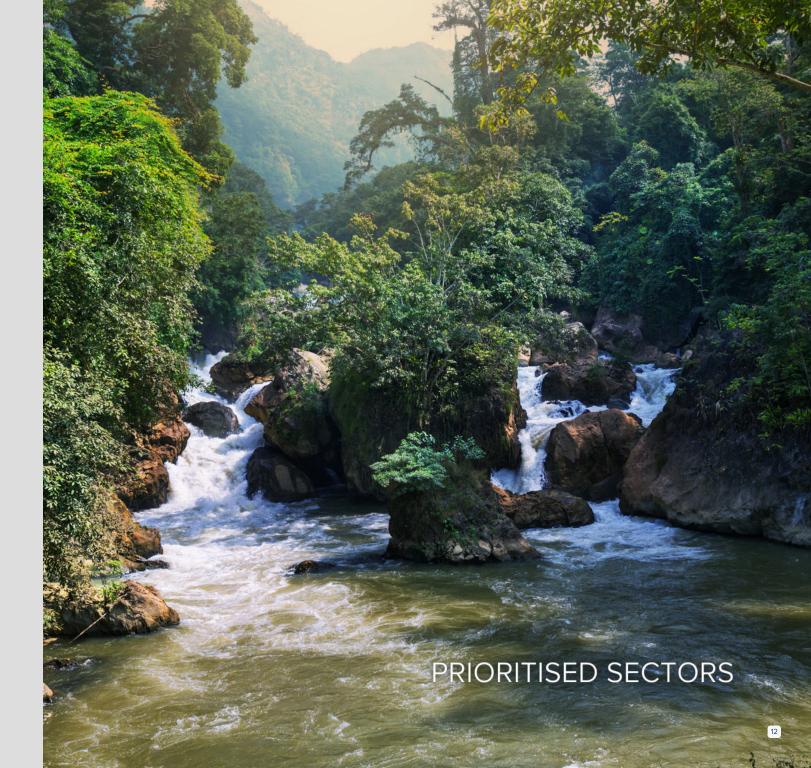
Children and youth suffer from impeded access to education, nutrition, and health care during and after disasters, along with a higher risk of water-borne disease.



The elderly face higher overall vulnerability, especially those who work to survive. Almost 25% of Viet Nam's population will be over 60 by 2050, but the health sector is not currently equipped to cope.



Persons with disabilities face high risks of health problems, economic losses, water shortages, and access to infrastructure, housing, and medical care.



NATURAL RESOURCES & ENVIRONMENT

Vulnerabilities

- Increasing saltwater intrusion, erosion, flooding, drought, and water scarcity
- Rising intensity and frequency of disasters
- Degradation of land and marine resources
- Biodiversity loss
- Unsustainable forest and ecosystem management leading to a rapid decrease in key ecosystems such as mangroves, seagrass beds, and coral reefs

Priorities

- Design & implement water resource master plans
- Strengthen capacity for hydrometeorological and disaster monitoring and forecasting
- Develop nature- and community-based ecological adaptation models
- Mitigate climate impacts on water resources and strengthen livelihoods in coastal, sea, and island areas
- Strengthen ecosystem resilience and biodiversity conservation





AGRICULTURE & RURAL DEVELOPMENT

Vulnerabilities

- Degraded forest, water, and soil quality
- Rising temperatures leading to greater incidence of pests, lower agricultural yields, and saltwater intrusion
- More than 20% of rice production area at risk of being lost by 2100, which would have a severe impact on livelihoods
- Women are at particular risk: 63% of women in rural areas work in agriculture, most of whom are subsistence farmers with a limited voice in decision making

Priorities

- Develop sustainable, efficient farming and aquaculture models resistant to drought, saltwater intrusion, and sudden-onset disasters
- Encourage sustainable, forest-based community livelihoods, conserve biodiversity, and improve the quality of forests and marine reserves
- Build infrastructure for a clean water supply, paying particular attention to highrisk rural, mountainous, and coastal areas

HEALTH

Vulnerabilities

- Changing weather patterns lead to an increase in vector-borne diseases and a disrupted food supply that can put vulnerable groups at risk of malnutrition
- Higher incidence of extreme weather such as heat waves and cold spells
- More than 25% of public medical facilities are at risk of flooding

Priorities

- Develop medical networks for managing new epidemics, prioritising ethnic minorities and people living in remote or isolated areas
- Strengthen monitoring and early warning systems for emerging diseases and the effects of climate change on health
- Build and replicate community health models for water, sanitation, and nutrition
- Improve the infrastructure clean water in areas with high disaster risk
- Complete the policy system and review/ develop health sector plans
- Improve the resilience of healthcare facilities





TRANSPORT

Vulnerabilities

- Major damage to road and railway systems from flooding and erosion caused by landslides, storms, heavy rain, and sea level rise
- 20% of Viet Nam's road and rail network is at risk of erosion and inundation in a high climate change scenario

Priorities

- Enhance the adaptive capacity of transport infrastructure in areas at high risk of landslides, flooding, and sea level rise
- Assess vulnerabilities and climate risks in the five sub-sectors of roads, railways, inland waterways, maritime transportation, and aviation
- Develop regulations and guidelines for climate-resilient road, railway, and waterway infrastructure

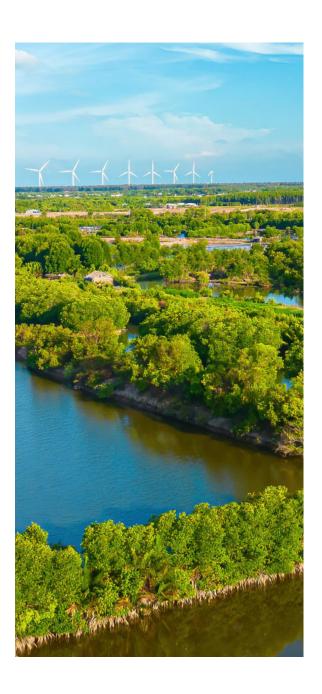
PLANNING & INVESTMENT

Vulnerabilities

- A temperature increase of 1.5°C could cause a potential loss of 4.5% of GDP
- Extreme climate events cost Viet Nam around US\$1 billion per year in losses and damage
- Inefficient public investment & local development planning
- Climate change spending is not monitored by current public budgeting and accounting processes

Priorities

- Integrate climate change into development policies, strategies, sectoral plans, and master plans, ensuring their synchronisation
- Develop mechanisms and policies to support and attract investment for climate change adaptation







NAP PORTAL

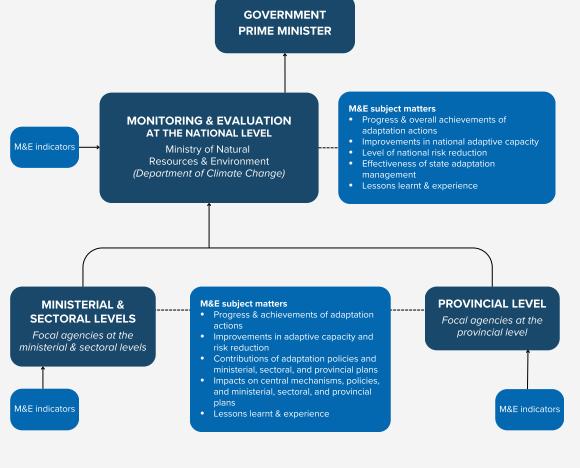
Viet Nam's **NAP Portal** provides comprehensive climate change-related information on policies and programmes, vulnerability and risk maps, adaptation data, and an M&E reporting mechanism.

Hosted by the Department of Climate Change under the Ministry of Natural Resources and Environment, the portal serves as a national climate change adaptation platform with regularly updated information from the government and other official channels, including international organizations and NGOs.

Scan the QR code on the right to visit the NAP Portal.



LOGICAL FRAMEWORK OF THE NATIONAL MONITORING & EVALUATION SYSTEM





GENDER ROADMAP

Viet Nam's Roadmap to Mainstream Gender in Climate Change Adaptation guides ministries on how to incorporate general gender principles into policy enforcement, coordinated governance, practical implementation guidance, capacity-building tools, innovative financial mechanisms, pilot projects, and M&E.

It highlights a total of **44** recommendations: 4 for the formulation and implementation of the NAP itself, 26 for the NAP's five prioritised sectors, and 14 following the five areas under the Gender Action Plan of the Lima Work Programme:

- Priority Area A: Capacity building, knowledge management, and communication
- Priority Area B: Gender balance, participation, and women's leadership
- Priority Area C: Coherence
- Priority Area D: Gender-responsive implementation and means of implementation
- Priority Area E: Monitoring and reporting

Priority activities

- Technical working group on gender and climate change to strengthen governance mechanisms and institutional arrangements for mainstreaming gender equality
- Pilot model for gender-responsive budgeting in sectoral plans developed by ministries



ENSURING SOCIAL SECURITY & GENDER EQUALITY

There have not been many studies and assessments of climate impacts on social security and gender equality, or the difficulties faced by women in the context of climate change.

As a result, the regulations, incentive mechanisms, and solutions to raise awareness on the role and status of women in the implementation of climate change response and disaster risk reduction are presently lacking.

Task 6 under Objective 1 of the NAP is dedicated to addressing this gap, and proposes to:

- Develop sustainable nature-based, ecosystem-based, and communitybased livelihood models focusing on training, job change, technology support, and access to preferential capital and risk insurance services for vulnerable groups.
- Enhance the involvement of women and youth in implementing policies and participating in programmes and activities for disaster risk reduction and climate change adaptation.





TECHNICAL GAPS

While Viet Nam has implemented many adaptation policies and actions and made some important achievements, some shortcomings remain in terms of building the resilience and technical capacity required to meet the goals laid out in the NAP.

Priority areas requiring support

- Strengthening policy capacity and human resources for climate change adaptation
- Enhancing resilience and safety given increasing incidence of climate change-induced disasters



GAPS IN POLICY CAPACITY & HUMAN RESOURCES

Develop climate change policies.

- Support the development of the Law on Climate Change and associated documents.
- Formulate mechanisms and policies on climate insurance, risk-sharing, and the integration of climate change into strategies and plans.
- Develop national standards and technical guidelines to enhance the resilience and adaptive capacity of natural, economic, and social systems.

Train personnel.

- Build staff capacity at all levels for planning, implementing, monitoring, and evaluating climate action.
- Train highly qualified staff on responding to climate change and handling climateinduce loss and damages.

GAPS IN RESILIENT TECHNOLOGY

Improve disaster forecasting and early warning capacity.

- Develop quantitative forecasting technologies
- Make impact-based warnings
- Monitor, forecast, and warn of climatecaused diseases for plants, animals, and humans

Improve infrastructure for climate change adaptation.

- Plant and protect forests
- Conserve biodiversity and ecosystems, prioritising coastal and marine areas
- Improve disaster resilience in coastal and urban areas
- Construct and upgrade disaster-resilient infrastructure
- Provide further search & rescue equipment

Research and transfer climate change adaptation technology.

 Research and transfer advanced technology on smart agriculture, resilient plant and animal species, erosion prevention, water efficiency, water pollution, urban cooling, smart cities, and forest fire control

FINANCIAL GAPS

Viet Nam's economic activity has already been disrupted significantly by climate change, hindering efforts for sustainable development, poverty reduction, and socio-economic development.

Initial calculations suggest that Viet Nam lost US\$10 billion in 2020, or 3.2% of GDP, to climate change impacts.

As increasing temperatures coincide with more severe and frequent extreme weather events, models suggest that the costs to the economy generated by climate change could total as much as US\$523 billion by 2050.

According to Viet Nam's 2020 updated NDC, state resources were only enough to meet 30% of adaptation needs.

ESTIMATED FINANCIAL NEEDS FOR CLIMATE CHANGE ADAPTATION (2021-2030)

FINANCIAL ITEM	ANNUAL AVERAGE (% GDP)	ACCUMULATED VALUE (BILLIONS USD, BY NPV)
Total financial needs for climate change adaptation	3.0 - 5.0	54.99 - 91.65
Investments in upgrading existing infrastructure	1.2	22.0
Investments in building new infrastructure	1.6 - 3.1	29.33 - 56.82
Supporting affected businesses and individuals	0.2 - 0.7	3.67 - 12.83
Available finance	1.5	27.5
Finance needed	1.5 - 3.5	27.5 - 64.16



ACKNOWLEDGEMENTS

About the NAP-Sup project

The Viet Nam National Adaptation Plan Development and Operationalization Support Project (NAP-Sup), with the generous financing of the Green Climate Fund, supports the Government of Viet Nam's vision of strengthening its capability to effectively integrate climate change adaptation into administration processes in priority sectors.

Scan the QR code below to visit the NAP-Sup project website.

About this booklet

This summary is based on the contents of Viet Nam's NAP technical report, which was developed by the Ministry of Natural Resources & Environment with support from a working group composed of experts from key government ministries and the United Nations Development Programme in Viet Nam.

Credits

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Photos

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