VIET NAM NAP 2021-2030 WITH VISION TO 2050

November 2023
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.
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
### VIET NAM CLIMATE POLICIES

- Resolution No. 24-ND/CP on proactively responding to 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/ND-CP on the sustainable and climate-resilient development of the Mekong Delta
- Viet Nam submits its Nationally Determined Contributions
- Law on Environmental Protection No. 72/2020/QH14 approved by the National Assembly
- Decision No. 1055 promulgating the NAP
- NAP technical working groups set up
- Decision No. 1055 promulgating the NAP M&E framework
- NAP Portal launched
- Circular No. 06/2023/TT-BTNMT guiding the integration of climate change response content into strategies and planning
- NAP 2021-2030 under revision

### NAP MILESTONES

- 2013:
  - Law on Water Resources
- 2014:
  - Law on Hydrometeorology
  - Viet Nam submits its intended Nationally Determined Contributions
- 2015:
  - Viet Nam ratifies the Paris Agreement
- 2016:
  - Resolution No. 120/ND-CP on the sustainable and climate-resilient development of the Mekong Delta
- 2017:
  - Viet Nam submits its Nationally Determined Contributions
  - Law on Environmental Protection No. 72/2020/QH14 approved by the National Assembly
  - Decision No. 148/QĐ-TTg promulgating the NAP M&E framework
  - NAP Portal launched
  - Circular No. 09/2022/TT-BTNMT guiding the assessment of impacts, vulnerability, risks, loss and damage caused by climate change
  - Decision No. 148/QĐ-TTg promulgating the NAP M&E framework
  - NAP Portal launched
  - Circular No. 06/2023/TT-BTNMT guiding the integration of climate change response content into strategies and planning
  - NAP 2021-2030 under revision

### TIMELINE OF KEY DATES

- 2020:
  - NAP technical report published
- 2021:
  - Circular No. 06/2023/TT-BTNMT guiding the integration of climate change response content into strategies and planning
- 2022:
  - Circular No. 06/2023/TT-BTNMT guiding the integration of climate change response content into strategies and planning
- 2023:
  - Circular No. 06/2023/TT-BTNMT guiding the integration of climate change response content into strategies and planning
The Ministry of Natural Resources and Environment, assisted by the Department of Climate Change, synthesises and reports on the results of adaptation activities using information collected from plans, programmes, and projects managed by ministries, sectors, and provinces.
From 1993 to 2018, the mean water level rose by around 3mm/year. The duration of the dry season has been lengthening in the north, a trend that is expected to continue.

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 Vietnam.

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.

In high climate change scenarios, the temperature is projected to increase by 1.2-1.7°C by 2050.

Vietnam may experience up to 40-60 additional very hot days by 2100.

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

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

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

The projected increase of 1m by 2100 would inundate 47% of the delta and displace up to 5 million people.

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

CENTRAL COAST
Vulnerable to flash floods, droughts, 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 would inundate 47% of the delta and displace up to 5 million people.

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

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.
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.

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.

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.
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

Vulnerabilities

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

NATURAL RESOURCES & ENVIRONMENT

Vulnerabilities

Priorities

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

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 high-risk rural, mountainous, and coastal areas

AGRICULTURE & RURAL DEVELOPMENT

Vulnerabilities

Priorities
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.

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.

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.

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.
ADAPTATION FROM A GENDER LENS

If women’s needs for climate change adaptation are to be met, then their vulnerabilities must first be recognised, understood, and highlighted.

With this in mind, a 2023 study under the NAP-Sup project analysed the gender-differentiated impacts of climate change on the NAP’s five priority sectors.

It includes baseline data, vulnerability assessments, a review of the current status of gender mainstreaming into sectoral climate policies, surveys, and recommendations.

Scan the QR code below to access the full gender analysis.

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 community-based 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 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 climate-induced 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 climate-caused 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)

<table>
<thead>
<tr>
<th>FINANCIAL ITEM</th>
<th>ANNUAL AVERAGE (% GDP)</th>
<th>ACCUMULATED VALUE (BILLIONS USD. BY NPV)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total financial needs for climate change adaptation</td>
<td>3.0 - 5.0</td>
<td>54.99 - 91.65</td>
</tr>
<tr>
<td>Investments in upgrading existing infrastructure</td>
<td>12</td>
<td>22.0</td>
</tr>
<tr>
<td>Investments in building new infrastructure</td>
<td>16 - 31</td>
<td>29.33 - 56.82</td>
</tr>
<tr>
<td>Supporting affected businesses and individuals</td>
<td>0.2 - 0.7</td>
<td>3.67 - 12.83</td>
</tr>
<tr>
<td>Available finance</td>
<td>15</td>
<td>27.5</td>
</tr>
<tr>
<td>Finance needed</td>
<td>15 - 3.5</td>
<td>27.5 - 64.16</td>
</tr>
</tbody>
</table>
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
Designed and edited by Merran Eby, with contributions from Morgane Rivoal (UNDP Viet Nam).

Reviewed by Bui Viet Hien (UNDP Viet Nam) and Tran Thanh Nga (Department of Climate Change, Ministry of Natural Resources & Environment).

Photos
Cover photo by Bui Thanh Trung.
PHOTO on page 8 by Tran Van Tuan.
Photos on pages 11, 16, 22, 24, and 31-32 by Shutterstock/UNDP Viet Nam.
All other photos designed by Freepik.
About UNDP

UNDP is the leading United Nations organization fighting to end the injustice of poverty, inequality, and climate change. Working with our broad network of experts and partners in 170 countries, we help nations to build integrated, lasting solutions for people and planet.

Learn more at undp.org or follow at @UNDP.