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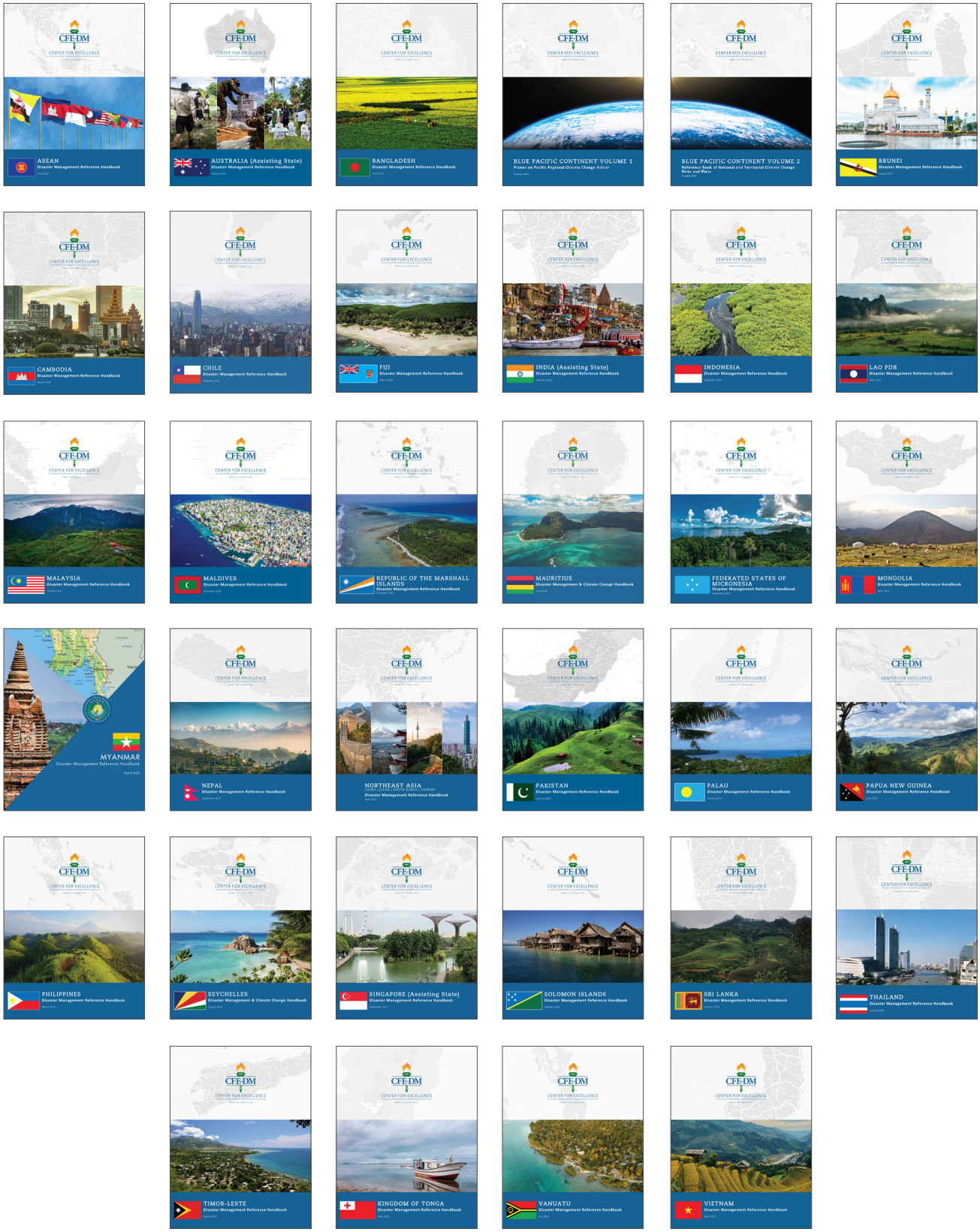
VIETNAM

Disaster Management Reference Handbook

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Front Cover

H. Mù Cang Chải, Vietnam by Steve Le on Unsplash.com https://unsplash.com/photos/green-grass-field-near-green-mountains-during-daytime-ug1Fj8zPntI

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Table of Contents

Acknowledgments **3**

Letter from the Director **7**

About the Center for Excellence in Disaster Management & Humanitarian Assistance **8**

Executive Summary **9**

Country Overview **10**

History 10

Culture and Demographics 11

Ethnic Makeup 12

Key Population Centers 12

Language 12

Religion 13

Vulnerable Groups 13

Economics 17

Government 18

Environment 19

Geography 19

Borders 21

Climate 21

Disaster Overview **22**

Climate Change 22

Hazards 23

History of Natural Disasters 26

Country Risk 30

INFORM Risk Profile 31

World Risk Report 33

Organizational Structure for Disaster Management **34**

Lead Government Agencies in Disaster Response 34

Disaster and Emergency Response 37

Armed Forces Role in Disaster Response 39

Disaster Management Partners 40

The International Red Cross and Red Crescent Movement 43

U.S. Government Agencies in Vietnam 45

Laws, Policies, and Plans on Disaster Management 46

Disaster Management Communications 48

Early Warning Systems 48

Information Sharing 52
Infrastructure 56
Transport 56
Airports 56
Seaports 59
Roads 60
Railways 61
Waterways 62
Schools 62
Disaster Risk Reduction in the Education Sector 63
Communications 64
Utilities 66
Power 66
Water and Sanitation 66
Health 68
Health Care System Structure 68
Health Strategies and Surveillance 69
Communicable Diseases 70
Non-Communicable Diseases 72
Training for Health Professionals 73
Women, Peace and Security 74
Conclusion 76
Appendices 77
DoD DMHA Engagements in the Past Five Years (FY 2020-2025) 77
International/Foreign Relations 80
Participation in International Organizations 82
Force Protection/Pre-Deployment Information 83
Passport/Visa 83
Safety and Security 84
Emergency Contact Information 85
Currency Information 85
Travel Health Information 85
Sendai Framework 88
Country Profile 92
Acronyms and Abbreviations 108
Endnotes 112

Figures

Figure 1: Map of Vietnam 20
Figure 2: Vietnam's Common Natural Disasters by Region 22
Figure 3: Natural Hazards by Average Annual Occurrence in Vietnam, 1980-2020 24
Figure 4: INFORM Risk Index, VIETNAM (2025) 32
Figure 5: Vietnam Steering Committee for Civil Defense Organizational Structure 37
Figure 6: Ministry of Health Organizational Structure 69
Figure 7: UN Sendai Framework for Disaster Risk Reduction 2015-2030 89
Figure 8: Population Pyramid, Vietnam (2023) 95

Photos

Photo 1: Drought-stricken Provinces Receive Water Tanks 75
Photo 2: VINASARCOM and U.S. Troops in Tabletop Exercise 78
Photo 3: Oregon National Guard Provides Trauma Care Training to Vietnamese Medical Personnel 79

Tables

Table 1: Natural Hazards in Vietnam, Fatalities, People Affected, and Damage, 1900 to 2020 24
Table 2: Overview of International Airports in Vietnam 57
Table 3: Overview of Domestic Airports in Vietnam 58
Table 4: Existing Rail Lines to be Updated by 2030 62
Table 5: CDC Travel Health Information for the Vietnam 86

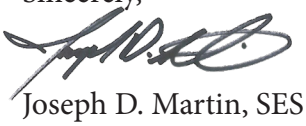
Letter from the Director

Vietnam is subject to various natural hazards, and is particularly affected by flooding and storms, including typhoons. The country has made significant strides in strengthening capacities to cope with disasters, including enhancing whole-of-government responses. Major restructuring in 2025 aims to further streamline disaster management administration and resource allocation for disaster management activities.

Cooperation in international disaster response is in line with the 2023 U.S.-Vietnam Comprehensive Strategic Partnership (CSP), an overarching framework for advancing the bilateral relationship between Vietnam and the U.S.[1] Vietnam has increasingly hosted mission stops in recent years for Pacific Partnership, which is the U.S. Navy's largest annual multinational humanitarian assistance and disaster response mission conducted in the Indo-Pacific. Vietnam hosted stops in 2022, 2023, and 2024 in Quang Ngai and Phu Yen provinces, where U.S. and Vietnamese officials strengthened ties through exchanging best practices and lessons learned on critical issues, including natural disaster management, forest fire prevention, and coastal erosion.[2] The Center for Excellence in Disaster Management and Humanitarian Assistance has proudly supported disaster management engagement activities in Vietnam in 2022 and 2023 between the Oregon National Guard and Vietnam's National Committee for Incident, Disaster Response, and Search and Rescue.[3] As Vietnam continues to strengthen its whole-of-government disaster management capabilities, we are pleased to collaborate in support of disaster preparedness, response, and training initiatives.

This Vietnam Disaster Management Reference Handbook is intended to provide an overview of Vietnam's disaster management system and practices for personnel within the U.S. armed forces and others who may engage alongside Vietnamese counterparts in disaster response operations or collaborative disaster-related trainings and activities. It is our hope that this resource not only informs readers but also strengthens cooperation and advances our shared capability in disaster response.

Sincerely,



Joseph D. Martin, SES
Director

About the Center for Excellence in Disaster Management & Humanitarian Assistance

Overview

The Center for Excellence in Disaster Management and Humanitarian Assistance (CFE-DM) is a United States (U.S.) Department of Defense (DoD) organization comprised of nearly 30 subject matter experts that provide academic research, civil-military coordination training, and operational insights to support decision making before, during, and after crises. The Center is designed to bridge understanding between humanitarians, civilian, and military responders. CFE-DM partners with a diverse group of governmental and nongovernmental actors, as well as academic institutions to increase collaborations and capabilities in humanitarian assistance and disaster response. While maintaining a global mandate, the Indo-Pacific region is our priority of effort and collaboration is the cornerstone of our operational practice. The Center is a direct reporting unit to U.S. Indo-Pacific Command (USINDOPACOM) and is located on Ford Island, Joint Base Pearl Harbor-Hickam, Hawaii.

Vision

Resilient Joint Forces, Allies, and Partners that are fully prepared to respond across the spectrum of humanitarian crises.

Mission

CFE-DM builds crisis response capacity in US, Allies and Partner militaries across the Indo-Pacific to save lives before, during, and after emergencies.

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EXECUTIVE SUMMARY

Vietnam has a high exposure to natural hazards – especially floods and storms[4] – and in recent decades has been steadily reducing vulnerabilities and increasing coping capacities. The severe hydrometeorological hazards to which Vietnam is particularly exposed are largely the result of the country's location along the South China Sea with a long coastline and other unique topography including two major river deltas, coastal plains, mountainous regions, and highlands.[5]

According to the Viet Nam Disaster and Dyke Management Authority (VDDMA), from 2011 to 2020, extreme climate events caused severe economic damages, with a total loss estimate of VND 230 quadrillion (approximately US$10 billion at 2022 exchange rates).[6] Over the last 20 years, the country has experienced an average annual economic loss of 1–1.5% of gross domestic product (GDP).[7] In the aftermath of Typhoon Yagi in 2024, the estimated amount needed for recovery and rehabilitation was valued at VND 53.96 trillion (US$2.21 billion).[8] Despite these significant economic losses, Vietnam has remarkably maintained a positive GDP growth rate since initiating major economic reforms in the 1980s.[9]

The signing of the Law on Natural Disaster Prevention and Control (LNDPC) in 2014, marked a major turning point for Vietnam, as it established core principles and components of the nation's disaster risk management (DRM) system. The law has since been amended, and additional decrees have provided guidelines on sectoral plans, community-based DRM, the establishment of the DRM Fund, and regulations on disaster forecast, warning, and communication. Major reforms are anticipated in 2025 to streamline disaster management (DM) administration and the resourcing of DM activities in the country.

In the event of a disaster, VDDMA oversees disaster monitoring systems like the Vietnam Disaster Management System to provide timely alerts and information. VDDMA is mandated to preside over the preparation of disaster response plans and to direct and coordinate disaster response and recovery nationwide.[10]

Vietnam places great importance on the area of disaster risk assessment, and disaster zoning helps authorities identify priority measures for each region. The government is gradually mapping disaster events nationwide, though the effort requires significant financial and technical resources. Importantly, in October 2024, the Ministry of Agriculture and Rural Development (now the Ministry of Agriculture and Environment), through VDDMA, collaborated with United Nations (UN) agencies and others to produce the Multi-Sector Post-Disaster Recovery Assessment Report in the wake of Typhoon Yagi. The report provided a comprehensive picture of damages, losses, and recovery needs in key sectors, and served as an important forum to guide early recovery planning and provide essential data to rebuild infrastructure and livelihoods.[11]

Vietnam is a signatory to the Sendai Framework for Disaster Risk Reduction, and community-based DRM has been widely adopted since being introduced to the country 25 years ago.[12] Cross-sectoral collaboration remains a challenge, as do financial constraints, especially as the government balances investment in infrastructure with non-structural measures, such as community training. In 2019, the Disaster Risk Reduction Partnership (DRRP) was established, and it involves more than 20 entities, including international organizations and national government ministries. The DRRP has played a leading role in information sharing during major natural disasters, including the 2019-2020 drought and saltwater intrusion (total funding of more than US$1 million in relief to communities in the Mekong Delta) and 2020 historical flooding in the Central region (total funding of US$25 million).[13]

COUNTRY OVERVIEW

Note: This handbook refers to the country as "Vietnam," as the U.S. Government spells the name. However, the handbook retains the name "Viet Nam" as spelled in Vietnamese organizational titles.

Vietnam, officially recognized as the Socialist Republic of Vietnam, is a Southeast Asian country with a rich cultural heritage of more than 50 recognized ethnic groups. While Vietnam is considered a low-income country, it is recognized as one of the fastest growing economies in the region.[14] The Government of Vietnam (GoV) is driving new economic growth by expanding diplomatic relations, initiating wide-ranging trade agreements, and opening the country to increased Foreign Direct Investment (FDI). Vietnam is balancing urbanization with supporting agricultural productivity, and grappling with more frequent and severe hazard events while still achieving economic growth.[15]

History

The Vietnamese trace their beginnings to the 7th century BCE, to the Dong Sun Civilization. From 200 CE to the 10th century, they were frequently at odds with the Cham and Khmer people or under the rule of successive Chinese dynasties. These origins fostered a strong narrative of national struggle against foreign dominance.[16]

Europeans began to arrive in the 1500s, and a rebellion in the 1700s led the prominent Nguyen clan to seek the assistance of the French. However, relations deteriorated, leading to a series of conflicts resulting in French occupation by 1883. Thereafter, the Sino-French War, often called the Tonkin War (1884-1885), left the French with undisputed control over Vietnam.[17] The exploitations of French colonial rule, combined with rising nationalism throughout the colonial world, encouraged a resurgence of Vietnamese nationalism in the early 20th century.

During World War II, Vietnam's communist nationalist movement gained momentum. In 1941, Ho Chi Minh founded the Viet Minh, or "Vietnamese League." After Japan's defeat in 1945, the Viet Minh declared independence in the north, while the returning French reasserted control in the south.[18] Relations deteriorated, leading to the First Indochina War (1946–1954).

By 1954, the defeat of the French at Dien Bien Phu had become a proxy for the Cold War. The two sides agreed to the Geneva Accords of 1954, but unification stalled, leading to the Second Indochina War (known in Vietnam as the "War of Resistance" or "American War").[19] As the war spread to Laos and Cambodia, U.S. military support peaked at 534,000 personnel in 1969. Despite peace talks that year, fighting continued until Vietnam unified as the Socialist Republic of Vietnam in 1975.[20]

The new government consolidated its control over the south, by eliminating political rivals, re-integrating South Vietnamese loyalists, the confiscation of privately owned land, and expanding a centralized socialist economy. New Economic Zones were set up to de-urbanize the population and establish collectivized farming. Though Vietnam joined the UN in 1977, it remained isolated - due to its treatment of ethnic Chinese (Hoa) and its 1978 invasion of Cambodia, which effectively ended the Khmer Rouge's genocide.[21]

Facing economic stagnation, the Communist Party launched the 'Doi Moi' (Renewal) policy in 1986, emphasizing liberalization. A new constitution in 1992 reorganized the government and expanded economic freedoms.[22] The Paris Agreement on Cambodia in 1991 effectively lifted the U.S. economic embargo on Vietnam, and Vietnam joined the Association of Southeast Asian Nations (ASEAN) in 1995. Vietnam's economy saw remarkable growth, with little impact from the Asian financial crisis. A bilateral trade agreement with the U.S. in 2000 transformed Vietnam into an export-oriented,

manufacturing-based economy, leading to World Trade Organization membership in 2007.[23]

Despite economic gains, Vietnam continued to face challenges with corruption and the restriction of civil liberties. In 2016, the 12th National Congress emphasized a stronger stance against corruption, while avoiding reforms that could lead to pluralism.[24] That year, the tipping point was the Formosa Ha Tinh Steel toxic offshore spill, which devastated fishing communities and spurred protests calling for transparency in compensation. In response, the government initiated the "blazing furnace" anti-corruption public awareness campaign, though by 2024, a series of political dismissals raised concerns about the campaign's political motives.[25] In late 2022, major financial fraud by a real estate tycoon shook the country, alarming foreign investors and prompting Vietnam's central bank to embark on a massive rescue, costing more than US$24 billion.[26]

Following Communist Party General Secretary Trong's unexpected death in 2024, a series of uncharacteristic deliberations led to the selection of To Lam as the new General Secretary, and Luong Cuong, a military general and politburo member, as the new President – moves seen as restoring balance between the military and security factions ahead of the 2026 National Party Congress.[27]

Culture and Demographics

Vietnamese culture is a combination of indigenous traditions and various external influences. The Vietnamese people are descendants of more than 50 ethnic groups, though the majority are Kinh. Society's agricultural origins still have cultural influence, as seen in village community characteristics. One example is the philosophy of dualism in Am and Duong (yin and yang in Chinese) and the five basic elements, which are reflected in a cultural tendency to seek equilibrium and relations-based settlement of conflict and dispute. Historically, agriculture and education were preferred professions, and many Vietnamese heroes still revered today are common people who came from farming families. The most important values manifest in one's loyalty (to the nation over the ruler), piety (beyond the framework of family), and happiness of the family (over the family's wealth and social position).[28]

The concept of family is highly valued, with several generations often living under one roof. Confucianism heavily influenced traditional Vietnamese relations, with expectations that a man take care of his wife and children; a woman be obedient to her father, husband, and then son; [29] and all take care of aging parents and are loyal to the king.[30] In recent decades, GoV efforts to equalize family relations include the Law on Marriage and Family and public awareness campaigns on violence against women and girls.[31]

Cornerstones of Vietnamese culture include collectivism and saving face. Collective well-being often takes precedence over individual pursuits. The practice of saving face dictates the preservation of one's dignity, honor, and respect, such that disagreements are resolved with discretion, ensuring that individual and collective pride remains intact. Communication styles tend to be more indirect than direct, with formality and respect prioritized. Vietnamese perceptions of time may diverge from Western notions of punctuality, especially if a deadline threatens to disrupt relationships and overall harmony.[32]

Traditional festivals take place year-round in concert with seasonal farming habits. Each region has its own agricultural rituals, such as praying for rain and bringing new rice, as well as trade rituals like casting copper, making firecrackers, and racing boats. There are four main national festivals: Lunar New Year or Tet Nguyen Dan, the biggest festival, held in late January or early February; July Full-Moon Festival or Vu Lan, a Buddhist festival dedicated to the deceased and ancestors; August Full-Moon Festival, Mid-Autumn or Moon-Watching Festival, dedicated to children; and Hung Kings Worshipping Festival, March 10th of the Lunar Calendar, dedicated to the worship of the Hung Kings, the first emperors of Vietnam.[33]

Ethnic Makeup

Vietnam possesses a rich cultural heritage with 54 officially recognized ethnic groups. The majority of Vietnamese belong to the Kinh ethnic group. The Kinh have traditionally lived in the coastal and low-lying areas, while ethnic minorities have generally populated the northwest and central highlands. Though commonly associated with remote and mountainous regions, many ethnic minorities now live in urban areas to which they have migrated for work or because of disasters in their home regions.[34]

According to the last Population and Housing Census (April 2019), the Kinh ethnicity accounts for 85.3% of the Vietnamese population, while 14.7%, or 14.1 million people, belong to 53 ethnic minorities. Only six ethnic minority groups have a population size of over 1 million people, and these are: the Tay (1.85 million people), the Thai (1.82 million people), the Muong (1.45 million people), the Mong (1.39 million people), the Khmer (1.32 million people), and the Nung (1.08 million people). Eleven groups have fewer than 5,000 people, and several ethnic groups, such as the Brau, Roman, and Odu, are the smallest groups, with only several hundred people each. In the period from 2009 to 2019, the population of the 53 ethnic minorities increased by nearly 1.9 million people, with the average annual population growth rate of +1.42% - higher than the corresponding rates of +1.09% for the Kinh ethnicity and +1.14% for the whole country.[35]

Key Population Centers

Vietnam's population is undergoing profound changes in demographic structure, with a transition from high to lower birth and mortality rates, meaning people are tending to live healthier and for longer. The total fertility rate has nearly halved from 3.80 children per woman in 1989 to 1.95 in 2023.[36] Vietnam's population was estimated at 99.5 million in 2024, according to the UN Population Fund (UNFPA); 22% of the population was aged 0 – 14 years, 68% was aged 15 – 64 years, and 10% was aged 65 years or older.[37] Therefore, Vietnam is currently in the "window of demographic dividend," meaning a large proportion of the country's population is of working age, creating an opportunity for rapid economic growth projected through 2039.[38] At the same time, Vietnam's older population is increasing rapidly, such that Vietnam will experience a transition from an "aging" society to an "aged" society (with 20% of the population aged more than 60 years) by 2036, and this characteristic requires important reforms but also offers opportunities for socio-economic development.[39]

In 2019, approximately one third of the population lived in the metropolitan areas of Vietnam's two mega-cities, Hanoi and Ho Chi Minh City.[40] The coastal areas and islands are home to about 30 million residents in 136 coastal districts and 12 island districts belonging to 28 coastal provinces.[41]

Following government efforts to effectively de-urbanize the population and set up New Economic Zones in rural areas during the 1970s and 1980s, urbanization has since been a vital component of Vietnam's contemporary development.[42] The share of the population living in towns and cities has grown from less than 20% of the population in 1990 to more than 37% in 2022.[43] Along with workers shifting from agriculture to industrial and service sectors in cities, urban areas have also increased due to natural population growth.[44]

Vietnam's urban landscape is characterized by the presence of two urban poles, one in the North, which includes Hanoi, and the other in the South, anchored by Ho Chi Minh City. These urban centers serve as the nation's economic powerhouses and stand out as the most vibrant and geographically accessible regions, collectively contributing 80% of industrial and service sector jobs, production, and profits.[45] The Vietnamese government is actively supporting urbanization as outlined in the Politburo's Resolution 6. Its goal is to achieve an urbanization rate that surpasses 45% by 2025 and 50% by 2030.[46]

Language

Vietnamese is the official language and is

the language of instruction used in education and government. There are also 93 indigenous languages and 17 non-indigenous languages. The indigenous languages of Vietnam belong to the following language families: Austroasiatic, Austronesian, Hmong-Mien, Kra-Dai, and Sino-Tibetan, among others.[47]

Fewer than 10% of people in Vietnam speak a foreign language, and English is the most common one at 5% of the population.[48] As of January 2014, all candidates for civil service must have a minimum proficiency level of A2 in English.[49] Other foreign languages that have become popular for economic reasons include Mandarin Chinese, Korean, Japanese, and Spanish. French is spoken by about 1% of the population, due to colonial history. [50] Cantonese is spoken among the Hoa, which make up about 1% of the population and are comprised of ethnic Chinese communities that historically migrated from southern China.[51]

Religion

The religious landscape is composed of indigenous and non-indigenous elements, and prior to the first millennium, traditional beliefs, Buddhism, and Confucianism were considered the three co-existing official religions (or "three teachings," Tam giao).[52] In the 16th century, Portuguese missionaries introduced Roman Catholicism, which grew along with the influence of Western modernization, until a resurgence of nationalism in the 20th century brought new religious pathways, including Caodaism and Hoa Hao Buddhism, followed by religious suppression. Other religions also established a footprint, and they include Protestantism, the Baha'i faith, and the Church of Jesus Christ of Latter-day Saints.[53]

While the 1992 constitution, article 70, stipulates that citizens have the right to religious freedom, and a series of laws and resolutions, including the 2013 constitution, appear to expand freedom of religion, concerns exist that religion is restricted and used to control ethnic and religious minorities in Vietnam. According to the U.S. Commission on International Religious Freedom, "the Communist Party of Vietnam uses state-controlled religious organizations to control religious life and to intimidate and pressure independent religious communities." State-controlled religious organizations operate under the direct control of the government, particularly the Fatherland Front of Vietnam, the Government Committee for Religious Affairs, and the Ministry of Public Security, and include the following: Vietnam Buddhist Sangha, 1997 Cao Dai Sect, Hoa Hao Buddhist Church, Evangelical Church of Vietnam-North, Evangelical Church of Vietnam-South, and Committee for Solidarity of Vietnamese Catholics.[54]

In October 2023, the government reported that 27% of Vietnam's population (approximately 26.5 million people) adhered to a religion. While the majority of the total population do not follow a religion, the government reported 95% of the population have a religious and belief-based life. Census data from 2019 indicates religious adherents comprise 44.6% Catholics, 35% Buddhists, 7% Protestants, and 13.4% Cao Dai, Hoa Hao, and other small groups.[55]

Vulnerable Groups

Vietnam's Law on Natural Disaster Prevention and Control (LNDPC) defines vulnerable groups as "a group of people who, due to their characteristics and circumstances, are likely to suffer more adverse impacts of natural disasters than other groups in the community." Vulnerable groups include children, older people, pregnant women, women nursing infants under 12 months of age, people with disabilities, people suffering from dangerous diseases, and poor people."[56] The LNDPC gives these groups priority in several state policies ensuring measures are suitable for vulnerable groups, and that timely, accurate, and targeted warnings give special attention to vulnerable groups. The groups covered below are not comprehensive but highlight some groups with heightened social vulnerabilities.

Women

The GoV has affirmed the importance

of gender mainstreaming in several pieces of legislation, including the LNDPC (2020 Amendment); the National Strategy for Natural Disaster Prevention, Response and Mitigation (2007- 2020), which recognizes disasters' impacts on vulnerable groups, including women, and the role of civil society, such as Women's Associations, in relief and recovery; and the National Adaptation Plan for the Period 2021-2030, with a Vision to 2050, which recognizes the impacts of climate change, especially among women.[57] The 2006 Law on Gender Equality promotes gender equality "in all aspects of social and family life." However, sector-level policies on gender mainstreaming are lacking and local actions plans tend to not be implemented.[58]

The majority of women (65%) work in the informal sector, either self-employed or family labor, without income security and social protection.[59] Informal employment is concentrated in agriculture and services sectors, where women dominate low-wage roles.[60] Limited societal awareness of gender issues and the continuing belief that ties women's roles to family remain barriers to their participation and leadership in formal sectors,[61] and also prevent women from taking a more active role disaster preparedness and response. For example, many women remain in place, rather than evacuate during floods, due to limited mobility options and risk perception related to past flood experiences.[62] In the immediate aftermath of a flood event, worsened hygiene conditions can cause infectious diseases that lead to overlooked gynecological health risks for females. Girls may also miss out on schooling, as they assist at home while boys are given priority to return to school after a disaster.[63]

One study in Quang Tri province found women to be mainly responsible for simple prevention and response measures at the household level (e.g., storing food, cleaning the house and taking care of family after the flood). They rarely participated in planning and decision-making processes related to flood resilience in their communities.[64] Gender stereotypes are pervasive and violence against women is a concern. According to a study, in 2019, nearly two-thirds of women nationally experienced one or more forms of violence in their lifetime, often as a result of controlling behaviors by husbands.[65] Further, the Center for Disaster Preparedness states that in all countries violence against women and girls is present after a disaster, during which time instances of sexual assault, physical abuse, and human trafficking tend to increase.[66]

Children

According to the GoV, there were 28.3 million children, or 28.5% of the population, under the age of 18 years in 2022, and 7.5% (7.5 million) were under the age of 5 years. Of children aged 2–17 years, 1.8% live with a disability, and 10.9% live in poverty. Children living with a disability are likely to experience multiple deprivations, and child poverty is more than twice as prevalent in rural regions than in urban zones (13.7% versus 5.0%) and more than five times as prevalent among minority ethnic groups than among the Kinh (35.9% versus 6.5%).[67] Malnutrition among children is also a significant challenge. In 2022, nearly 20% of children under 5 years old were stunted, leaving many with permanent physical and brain damage.[68] In general, disparities in the areas of education and access to clean water and sanitation are highlighted in rural regions, low-income households, and ethnic minorities.

Children are considered a particularly vulnerable group during natural disasters due to their dependence on adults, limited ability to evacuate or understand danger, and increased susceptibility to threats to their safety and health following a disaster. A mix of national laws, policies, and international commitments aim to protect children in the event of disaster in Vietnam. The Law on Children No. 102/2016/QH13 defines a child as below the age of 16 years and states that a child is entitled to care by a social relief entity when affected by a natural disaster.[69] The National Strategy for Natural Disaster Prevention, Response and Mitigation (2021-2030) also noted children as a vulnerable

group, especially in the area of community-based disaster risk management (CBDRM). Decree No. 20/2021/ ND-CP on Social Assistance for Vulnerable Groups includes guidance on social care services for children, and, in 2018, the government launched a disaster prevention program for schools, which included multi-hazard preparedness and safety drills.

Older People

Vietnam is one of the world's most quickly aging nations, with older people (OP) making up 12.8% (12.6 million) of the population in 2021, up from 8.68% (7.45 million) in 2009. By 2030, OP are expected to comprise 17% (17.9 million) of the total population.[70] More than 15% of OP self-assess that they are in "poor" or "very poor" health, and more than 11.7% of OP have disabilities impairing at least one function (i.e. seeing, hearing, mobility, communication, or cognitive function). Many OP have limited income, with nearly 13% living in poor or near-poor households. Importantly, a high percentage of OP (63.3%) live in rural areas, which often lack medical and social assistance, and over 35% of OP live alone, with other OP, or with children under 15 years of age.[71]

The combined effect of these factors is that OP have specific needs before, during, and after a disaster. OP are especially vulnerable to disasters due to high rates of chronic illness, disability, and social isolation, and ongoing health care services are often required.[72] This group also needs adequate infrastructure for mobility – i.e. safe roads, modes of transportation, and accessible evacuation sites.[73] In Vietnam, a comprehensive view of OP is found to be lacking, as OP are mainly depicted as homogenous and frail, rather than diverse and with capacity to participate.[74]

In recent years, the Vietnam Association of the Elderly (AE) – a national organization with Party representation and strong representation at the local level – has increasingly been involved in CBDRM activities. In Hue City, the local AE has participated in CBDRM planning and training events since 2022, and in Phu Thuong Ward, the local AE has established standing support teams. These activities have contributed to the success of disaster prevention, such that during 2022's Typhoon Noru, the Phu Thuong AE was active in response, helping OP move to safe places, take preventative measures, and recover effectively afterwards.[75]

People Living with Disabilities

In 2016, 7% of Vietnam's population were People with Disabilities (PWD), and the GoV estimates that 4% of the PWD population experiences difficulties in two or more functional domains. Disability rates tend to increase with age, and the North Central and Central Coast regions have the highest disability rates. The disability rate in rural areas is 1.5 times higher than in urban areas.[76] Economic disadvantages also persist among PWD, with nearly 20% of PWD living in poverty, compared to the national average of 10.9% in 2016, and 79% of PWD living in ethnic minority households experience multidimensional poverty.[77] Disability compounded by poverty reduces PWD's ability to take preventative measures and recover effectively after a disaster.

The 2010 Law on Persons with Disabilities defines a person with disabilities as "a person who is impaired in one or more body parts or suffers functional decline manifested in the form of disability which causes difficulties to his/her work, daily life and study."[78] Characteristics that make PWD vulnerable in the event of disaster, include mobility constraints, communication barriers, and social marginalization.[79]

People Living in Poverty

Poverty significantly reduces a person's resilience to disaster by limiting their ability to take preventative measures, access resources during an emergency, and recover effectively afterwards. Impoverished people are more likely to live in hazard-exposed areas and are less able to invest in risk-reducing measures. The lack of access to insurance and social protection means that people in poverty are often forced to use their limited assets to buffer disaster losses, and they have limited means to rebuild when disaster

strikes.

The Multidimensional Poverty Rate in 2020 in Vietnam was below 5%, however signs of increasing inequality exist, especially in higher concentrations of low-income households in remote areas and among those engaged in agricultural activities. In 2020, of those living in poverty, 79% were ethnic minorities, and 66% were engaged solely in agriculture.[80] Vietnam includes people living in poverty as a vulnerable group in the LNDPC, and the government has invested in constructing resilient infrastructure especially for poor households since 2018. Social protection systems support vulnerable groups during disasters, including a revised 2021 post-disaster assistance program that enables emergency borrowing and fosters insurance market development.[81]

Ethnic Minorities

Despite comprising only 15% of the population, ethnic minorities represent a disproportionately high percentage of individuals living in poverty (79%), with the Xo Dang, Kho Mu, and Mong among the poorest.[82] The factors that drive social and economic development among these groups include a lack of physical and economic connectivity, basic household livelihood assets, market linkages, and labor market mobility.

Though displacement experiences vary across ethnic minorities in Vietnam, many struggled to adapt to new livelihoods and were unable to thrive after resettlement. Additionally, prejudice prevents many ethnic minorities from having equitable access to economic activity, and the experiences of minority women and girls are often compounded by gender prejudice.[83] Many ethnic minorities have less social capital (commonly built with family and other relations) and therefore less coping capacity. When affected by natural disaster, these households are more likely to seek loans from local money lenders, incurring debt at very high interest rates.[84]

Migrants

Internal Migrants — Nationally, there are 6.4 million migrants aged 5 years and older, accounting for 7.3% of the total population in Vietnam, and the areas which see the highest rates of in-migration are the Red River Delta and southeast regions of the country. Women and people in the 20-39-year-old cohort account for a higher share of migrants (55.5% and 61.8%, respectively). Migrant children are less likely to attain secondary education, and nearly half of all migrants must rent or borrow houses.[85] Internal rural-urban migration is fueled by rapid industrialization. Cities like Ho Chi Minh City and Hanoi and surrounding provinces attract young adults (aged 20-39 years) and those with higher education seeking higher wages.[86] Among ethnic minorities, rural-urban migration contributes to village income through remittances.[87] Rapid urbanization in Vietnam has contributed to peoples' exposure to urban flooding, especially in Ho Chi Minh City, Hanoi, Hue, Nam Dinh, Hai Phong, and Can Tho, due to factors like poor land-use planning and inadequate infrastructure. Migration to cities contributes to urban expansion and often the government cannot keep up with the increasing demand for housing, utilities, and city services. Uncontrolled settlements, such as slums and squatters on the waterways, reflect the deteriorating conditions of the urban poor, who are among the most vulnerable groups to flood risk and environmental degradation occurring in cities.[88]

Forced Migrants — Forced migrants include internally displaced people, asylum seekers, refugees, climate-displaced, and often stateless people. Vietnam receives only a small number of people seeking international protection per year, and the country is not a signatory to the 1951 Convention Relating to the Status of Refugees. According to the World Bank Database, the number of refugees in Vietnam is 990, and the last data available was from 2011. Climate-related displacements are a significant phenomenon in Vietnam. According to the Internal Displacement Monitoring Centre, in September 2024 Typhoon Yagi affected 3.6 million people in nearly half of Vietnam's provinces, and displaced (forced the

evacuation of) more than 130,000.[89] Statelessness is a significant issue, as many Cambodians had to flee from the Khmer Rouge regime to Vietnam in the 1970s and, during displacement, lost documentation of their Cambodia residency. While some have since regained Cambodian citizenship, those who remain stateless are often denied access to education, health care, and job opportunities due to lack of legal identification. In 2019, UNHCR reported 30,581 stateless people living in Vietnam.[90]

Economics

Vietnam has achieved remarkable success in promoting economic development, raising living standards and lifting millions of people out of poverty. The Doi Moi economic and political reforms launched in 1986 spurred rapid economic growth, promoting a socialist-oriented market economy and transforming the country from one of the poorest nations in the world into a lower middle-income country by 2010. The economy has proven resilient to shocks, such as the Asian financial crisis in the 1990s and the Coronavirus Disease 2019 (COVID-19) pandemic. However, an aging population and a desire to boost productivity are key elements driving the need for structural reforms, such as reducing state involvement and creating conditions for fair competition among firms. Climate change also puts pressure on Vietnam's economic development, and its economy experiences significant average annual losses as a result of climate-related disasters. Its mixed economy reflects limited private freedom and firm control by the GoV, which aims to drive economic growth through diversification and strategic trade partnerships.[91]

From 1991 to 2020, Vietnam's economy averaged nearly 7% GDP growth per annum. In 2022, it rebounded strongly from the COVID-19 pandemic, notching a GDP growth rate of more than 8% that year.[92] Though Vietnam's economy slowed following turbulence in its real estate sector in 2023, recovery was swift and fueled by government fiscal and policy support and an increase in exports and tourism.[93] Economic growth in 2024 surpassed projections and reached an impressive 7.6% GDP growth rate in the fourth quarter, according to Vietnam's Government Statistics Office (GSO).[94] According to the International Monetary Fund (IMF), GDP in 2024 was estimated at approximately US$506.43 billion.[95]

Vietnam's main economic sectors are services; industry and construction; and agriculture, forestry, and fishing; they contributed 49.9%, 42.6%, and 7.5%, respectively, to GDP, in 2023.[96] The services sector employs almost 40% of Vietnam's workforce.[97] Despite growth, labor productivity in Vietnam's service sector lags behind that of regional peers; in 2019, the value-added per Vietnamese worker was approximately US$5,000, compared to Malaysia (US$20,900) and the Philippines (US$9,300). Thus, the potential of the services sector plays an important role in Vietnam's economic growth plans, and the government aims to boost productivity by implementing reforms, such as reducing restrictions on services trade, improving access to finance for domestic firms, and promoting adoption of technologies.[98]

The industry and construction sector employed approximately 17 million individuals, or over 33% of Vietnam's workforce, in 2022.[99] That same year, Vietnam's real estate market faced significant challenges when a major real estate developer's US$12 billion fraud scheme caused a run on the country's largest private bank. Subsequent growth in the sector has been slow, as developers are faced with tighter funding conditions, more legal hurdles, and a slowdown in sales.[100]

Vietnam's manufacturing sector is a critical component of the country's export trade. In 2023, processing and manufacturing industries accounted for nearly 85% of exports, generating more than US$253 billion.[101] FDI also plays an important role, as US$290 billion in exports in 2024 (representing 71.8% of total export value) were driven by FDI enterprises and, according to the GSO, the country hosts more than 220,000 foreign-owned firms.[102] According to Harvard University's Atlas of Economic Complexity, between 2017 and 2022, Vietnam's exports

grew more than 11% per year on average, outpacing overall economic growth. Vietnam's top export destinations are the U.S. (26.29%), People's Republic of China (PRC; 20.45%), and South Korea (5.19%), and top export categories are electronics, textiles, agriculture, and machinery.[103]

The agriculture, forest, and fishing industry employs approximately 34% of Vietnam's workforce (2022), a noted decline from previous decades, when, for example, in 1991, 74.62% of the workforce was employed in this sector. However, the reduction in employment is reflective of the government's ongoing efforts to diversify the economy and boost productivity, especially in other sectors.[104]

Government

The Socialist Republic of Vietnam is an authoritarian state ruled by a single party, the Communist Party of Vietnam (CPV), currently led by General Secretary To Lam, President Luong Cuong, Prime Minister Pham Minh Chinh, and Chairman of the National Assembly Tran Thanh Man.[105] The GoV describes itself as "a socialist country under the leadership of the Vietnam Communist Party," where the Party holds a national congress every five years to outline the country's direction.[106] The National Assembly has the power to make and amend the Constitution. There have been five Constitutions since 1945, the current one having come into effect in 2013.[107]

The CPV was founded in 1930 and is based on Marxist-Leninist doctrine and Ho Chi Minh's thought. By constitutional law, it is considered the vanguard of the Vietnamese working class, laborers, and the Vietnamese nation, and is the leading force of the State and society.[108] While the Party Congress convenes every five years, the Central Committee is the standing body; it includes leaders from all primary government departments as well as heads of organizations such as Vietnam Television and Voice of Vietnam. The Central Committee convenes generally twice per year and can include more than 180 official members. The standing bodies of the CPV are the Politburo and the Secretariat.[109] In practice, the CPV provides direction on all matters of policy, which the legislative and executive systems implement. Party committees, or boards, exist at all levels of administration, including the National Assembly, People's Councils, political social organizations, and judicial and executive bodies, for the purpose of ensuring the implementation of the guidelines and policies of the Party.[110]

The highest representative body is the National Assembly (Quoc-Hoi), a unicameral legislature. It decides significant national affairs and exercises supreme control over all activities of the state.[111] The National Assembly consists of approximately 500 members, who are elected by absolute majority vote through a two-round system, every five years.[112] The executive branch is an implementing body, in charge of tasks assigned by the state, and it is accountable to the National Assembly. The President serves as head of state, nominal commander of the armed forces, and chairman of the Council of National Defense and Security.

Together, the General Secretary of the Party with the President and the Prime Minister have been historically known as the "troika" and considered a product of domestic political compromise, which helps sustain a balance of power between government and party institutions and mitigates intra- and extra-party conflicts.[113] However, in 2024, the Party restored a "four pillar" structure, by approving the new President, whose role was previously fulfilled by the General Secretary of the Party. The four-pillar structure includes: the General Secretary, the President, the Prime Minister, and the head of the National Assembly.[114]

The judicial system in Vietnam consists of the Supreme People's Court, the local people's courts, military tribunals, and the Supreme People's Procuracy. The people's courts function at all levels of the government except at the commune level. The Supreme People's Procuracy is responsible to the National Assembly, which also supervises the Supreme People's Court. The

system of the People's Procuracy was established in 1960 and acts as state prosecutor at all administrative levels. Within the system of the People's Procuracy, there are Military Procuracies organized into central, zone, and regional levels. Because the main role of the People's Procuracy is to uphold the Constitution, including the rights of citizens and the interests of the state, its reputation is one of a watchdog, monitoring the performance of government agencies, and it retains vast powers of surveillance.[115]

Political-social organizations, or "people's associations," several of which are written into the constitution, play an important role in the political system, as they officially represent the interests of different social communities in Vietnam. These include: the Vietnamese Fatherland Front (a direct descendant of the Viet Minh), the Vietnamese Trade Union, the Vietnamese Women's Union, the Ho Chi Minh Communist Youth Union, and the Veterans Association.[116] The Vietnam Fatherland Front, according to Article 9 of the Constitution (2013), is a political alliance, with supremacy over other political social organizations, that enjoys "favorable conditions" provided by the state for its activities.[117]

The current territorial structure in Vietnam, updated in 2013, divides the country into 63 provinces and centrally administered cities. The cities and the provinces are subdivided into district-level administrative units, and further into municipalities. The five centrally administered cities are Ha Noi, Ho Chi Minh City, Hai Phong, Da Nang, and Can Tho.[118]

All 11,162 municipalities in Vietnam are classified as either "urban" municipalities (wards and townships) or "rural" municipalities (communes). By the end of 2015, 2,184 municipalities (1,581 wards and 603 townships) were classified as urban, which accounts for 20% of all municipalities. Municipalities are classified hierarchically into six classes – Special and Class One (I) to Five (V) – based on a threshold of infrastructure development, population size and socio-economic characteristics.[119]

Environment

Vietnam's topography is characterized by the Annamese Mountains (or Annamite Range) forming a natural border in the west and a long coastline along the South China Sea (SCS), known as the "Eastern Sea" in Vietnam. Two major river delta regions define socioeconomic activity, and flood control mechanisms, such as dikes and canals, are major features. While deltas and narrow plains are found along the coast, the majority of Vietnam's territory consists of rugged high mountains and hilly regions. Offshore are thousands of islands and islets scattered from north to south, and Vietnam is a major claimant state in the SCS. The climate varies from north to south and from the mountains to the coast.

Geography

Vietnam is located on Southeast Asia's Indochina peninsula.[120] The country is S-shaped, long, and thin, stretching from 8° 27' N to 23° 23' N latitude, with a total length of 1,650 kilometers (km; 1,025 miles [mi]). Its width, from east to west, at its widest point is approximately 500 km (311 mi) and approximately 50 km (31 mi) at its narrowest.[121] Vietnam's geography can be divided into the highlands and the Red River Delta in the north, the Giai Truong Son (Central mountains, or the Chaine Annamitique), the central coastal lowlands, and the Mekong River Delta in the south.[122] The highest elevation is Fan Si Pan Mountain, which reaches 3,144 meters (m; 10,315 feet [ft]).

Vietnam has a total land area of 331,052 square kilometers (km^2; 127,820 square miles [mi^2]), and a long coastline that extends 3,444 km (2,138 mi), excluding islands.[123] Approximately three-quarters of the total land area comprises mountains and highlands, though much of this is at moderate elevations, as mountainous regions over 2,000 m (6,562 ft) above sea level account for only 1% of land area. Approximately 85% of Vietnam's territory sits below 1,000 m (3,281 ft) above sea level. The Annamese Mountains run approximately 1,100 km (684 mi), beginning in neighboring Laos, through Vietnam's northwest

to its southeast, terminating at the edge of the Saigon plain in southern Vietnam.[124]

A relatively dense network of rivers traverses Vietnam. The principal rivers are as follows: in the north, the Red and Thai Binh; in the center, the Ca, Ma, Han, Thach Han, and Thu Bon; and in the south, the Mekong and Dong Nai.[125] The Mekong River begins in southwestern PRC and flows 4,200 km (2,610 mi) to the SCS, passing through Myanmar (Burma), Laos, Thailand, Cambodia, and Vietnam. The river has a freshwater lake, the Tonle Sap in Cambodia, that acts as a reservoir during flood stages, greatly reducing the danger of devastating floods downstream. The Red River, flowing for 1,200 km (746 mi), can increase more than 60 times in size and reach a flow rate of 9,500 cubic meters (335,500 cubic feet) per second at the peak of the rainy season.[126] Flood control is managed through an extensive system of dikes, reservoirs, and canals.[127] Figure 1 shows a map of Vietnam.[128]

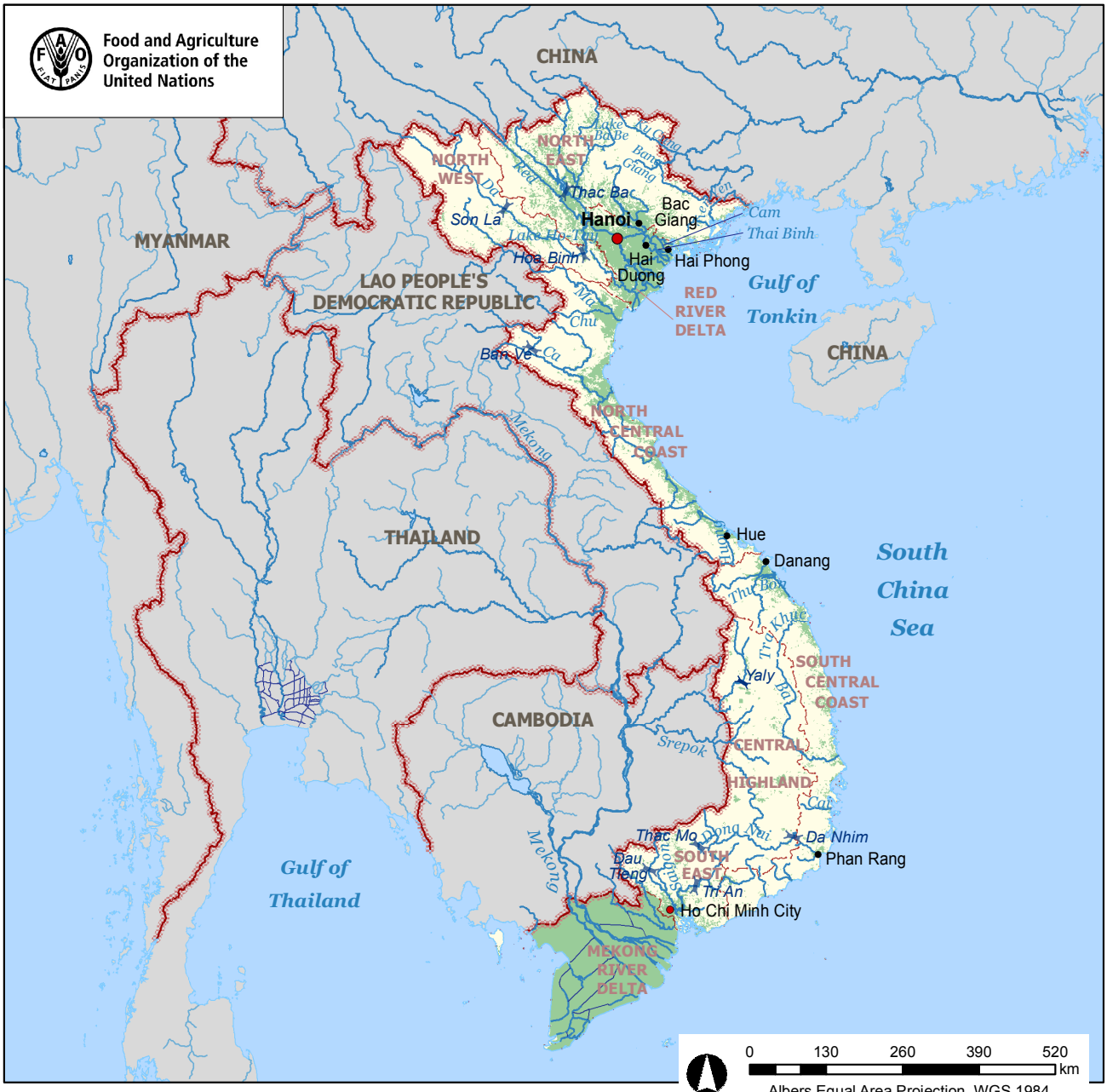


Figure 1: Map of Vietnam

Borders

Vietnam shares land borders to the north with PRC (1,297 km [806 mi]), and to the west with Laos (2,161 km [1,343 mi]) and Cambodia (1,158 km [720 mi]). The PRC border is based on a treaty signed by both parties in 1999 and jointly demarcated in 2009.[129] Approximately 16% of the border with Cambodia is not demarcated and remains a point of contention between the two countries.[130]

Along Vietnam's eastern coast is the SCS. Vietnam's maritime boundaries are based on straight baselines, which extend 12 nautical miles (nm) from the coast for territorial waters, 24 nm for the contiguous zone, and 200 nm for both the exclusive economic zone (EEZ) and continental shelf. In 2024, Vietnam filed a claim with the UN, following a similar claim by the Philippines the month before, to extend the outer limits of its continental shelf to 350 nm, which is one potential option addressed in the United Nations Convention on the Law of the Sea.[131] Vietnam claims the Paracel Islands, an archipelago in the SCS also claimed by Taiwan and the PRC, and the Spratly Islands, an archipelago in the SCS claimed by Malaysia, Philippines, Brunei, Taiwan, and the PRC. Vietnam also has overlapping claims in the Gulf of Thailand, though agreements demarcate the boundaries and joint areas among Malaysia, Thailand, Cambodia, and Vietnam.[132]

Vietnam has a group of around 3,000 islets in the Tonkin Gulf, and additional groups of islands to the west and southwest, which are uncontested.[133]

Climate

Vietnam's climatology is influenced by a wide range of latitudes and diverse topographic features, including highlands, lowlands, and coastal plains. The country's monsoons are influenced by variations between warmer El Niño and cooler La Niña years. El Niño phases generally bring warmer and drier winter conditions across Southeast Asia, while La Niña phases bring cooler summers. Vietnam is affected by an average of six to seven typhoons annually; typhoons are normally accompanied by tidal waves, high winds, and storm surges, and they can wreak damage throughout the country.[134]

Across the country, average monthly mean surface air temperatures are approximately 20-27°C (70-81°F). June is generally the warmest month, and January is the coolest. Average monthly rainfall ranges from 25.1 millimeters (mm; 1.0 inches [in]) in February to 261.61 mm (10.3 in) in August.[135]

Vietnam's southern and central regions experience tropical savanna and tropical monsoon climates, respectively, and seasons are characterized by the summer monsoon (southwest monsoon), which brings precipitation, warmer temperatures, and southwest winds from the Indian Ocean. The rainy season runs May to September, with temperatures averaging 28-29°C (82-84°F) and annual rainfall averaging 1,900-2,600 mm (75-102 in), about 90% of which falls during the rainy season. The dry season is November to April, when temperatures average 26-27°C (79-81°F).

The central coast is transitional and has a rainy season that coincides with northeasterly winds between September and December. The dry season corresponds with southwesterly winds. Average annual rainfall in this region ranges 1,500-3,000 mm (59-118 in), of which about 80% falls during the rainy months.

Vietnam's north experiences a humid tropical (temperate) climate, influenced by both the summer and winter (northeast) monsoons. Unlike the south, the northern region experiences all four seasons, with noticeable temperature variations. The northeast monsoon affects the northern region between October and March; it brings dry and cold weather, with temperatures ranging 15-20°C (59-68°F). The northern mountainous regions, like Sa Pa, Tam Dao, and Hoang Lien Son, may see temperatures reach 0°C (32°F) with snow. The southwesterly winds bring higher humidity levels with temperatures ranging 22-27.5°C (72-82°F). Average annual rainfall is approximately 1200-1800 mm (47-71 in), with the highest rainfall occurring in July and August and the lowest in January.[136]

DISASTER OVERVIEW

Vietnam regularly experiences storms, tropical cyclones or typhoons, floods, and landslides. The long coastline exposes it to many of these hydrometeorological hazards. One of the most frequently occurring disasters is flooding, including riverine flooding in the delta areas, coastal flooding, particularly during storms, and flash flooding in the northern mountainous areas. Altogether, floods are the natural disaster that accounts for the country's greatest economic losses. Climate change is projected to increase the number of people in Vietnam exposed to flood risk. It is also projected to increase population exposure to epidemics such as malaria and dengue as increasing average temperatures create more habitable zones for the mosquito vector. Vietnam also faces drought risk, and in 2015-2017 experienced its worst drought in almost a century. There is a low to moderate risk of earthquake and potential for tsunami, though the country has not experienced one in recent history. Figure 2 depicts a map of the regions of Vietnam and the major natural disasters that each region most commonly experiences.[137]

Climate Change

Climate change is already affecting Vietnam and is anticipated to bring significant impacts in the future.

Annual temperatures over the whole country increased 0.89°C (increased 1.6°F) on average between 1958 and 2018, an increase of 0.15°C (0.27°F) per decade. The highest temperature increase was experienced in the last decade, indicating an accelerating trend. Over the same period, annual rainfall increased by an average of 5.5% for the entire country, although with trends varying by region.[138] From 1993 to 2018, sea level rose an average of 3.6 mm (0.14 in) per year.[139]

In the future, temperature increases in Vietnam are projected to range between at least 1.0°C (1.8°F) and 3.4°C (6.1°F) by the period 2080–2099 in comparison with the 1986–2005 baseline, similar to the projected global average increase. Rises in annual maximum and minimum temperatures are expected to be stronger than the rise in average temperature and are likely to amplify effects on human health, livelihoods, and ecosystems. Key food and cash crops are projected to face losses in agricultural productivity in the face of rising temperatures, saline intrusion, and other drivers. Rising temperatures will also increase heat stress on the population and lead to negative health outcomes, especially for poorer communities and outdoor laborers.

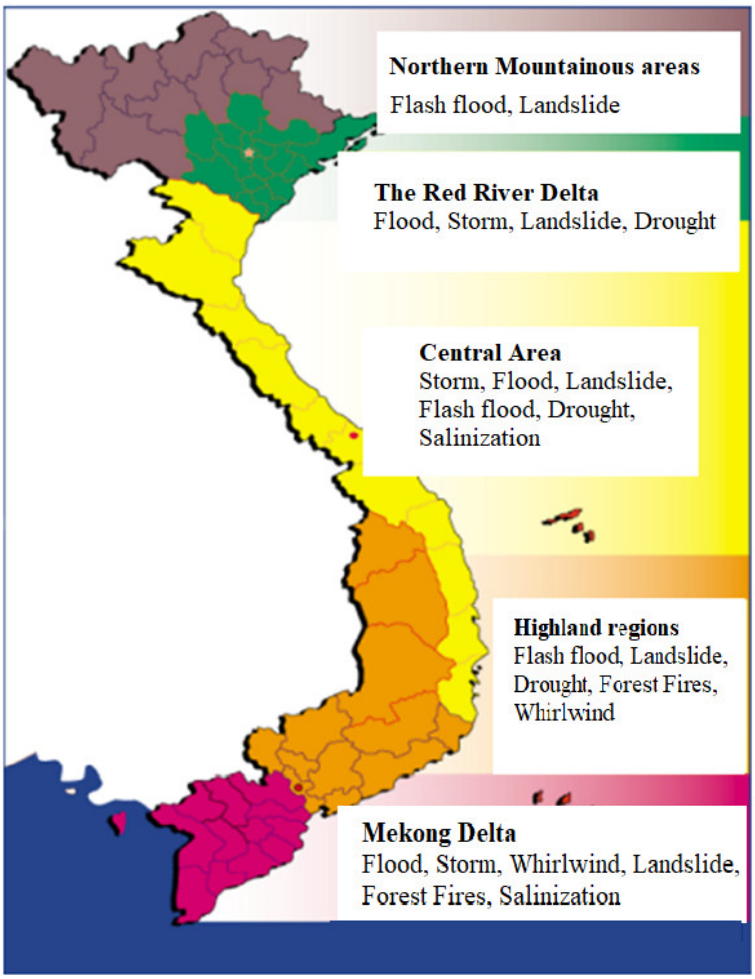


Figure 2: Vietnam's Common Natural Disasters by Region

Vietnam's low-lying coastal and river delta regions have very high vulnerability to rising sea levels.[140] Projections of likely average sea level rise along Vietnam's coastline range from 0.13 m to 0.36 m (0.43 - 1.2 ft) by mid-century and from 0.27 m to 1.03 m (0.89 - 3.4 ft) by the end of the century.[141] Depending on the emissions pathway and without effective adaptation action, an estimated 6 - 12 million people will likely be affected by coastal flooding by the period 2070-2100. Fluvial (riverine) flooding, including in the large delta areas, is likely to affect more of the population; this projection ranges from 3 to 9 million people affected by 2035–2044.

While climate projections confidently predict some rise in average temperatures, there is more uncertainty with projections of future precipitation change. In the Vietnam climate risk country profile report by the World Bank and Asian Development Bank, 12 out of 16 climate models showed an increase in average annual precipitation by 2080-2099. Analysis by Vietnam's Ministry of Natural Resources and Environment showed more confidence in projected annual precipitation increases. There is uncertainty in projecting how climate change will affect the future frequency of tropical cyclones or typhoons; however, modeling across the globe indicates a general trend of increased intensity and increased frequency of the most extreme tropical cyclones.[142]

Hazards

The 2020 Law on Natural Disaster Prevention and Control identifies many disasters experienced in Vietnam; they include tropical storms, tropical depressions, strong breezes at sea, tornadoes, lightning, heavy precipitation, floods, flash floods, inundations, landslides and land subsidence caused by floods, runoff, or drought, water rise, saltwater intrusion, extreme heat, droughts, wildfires, extreme cold (less than 13°C [55.4°F]), hail, frost, fog, earthquake, and tsunami. This section covers the most commonly occurring natural hazards with significant impacts on the population and economy; these include storms and tropical cyclones (or typhoons), flooding, landslides, earthquakes, and droughts. According to the VDDMA, from 2011 to 2020, extreme climate events caused severe economic damages, with a total loss estimate of VND 230 quadrillion (approximately US$10 billion).[143]

The pie chart in Figure 3 provides a quick snapshot of the most common natural hazards by average annual occurrence from 1980 to 2020.[144] Storm (114 or 48.51%) and flood (89 or 37.87%) are by far the most frequently occurring natural hazards, followed by epidemic (10 or 4.26%), drought (7 or 2.98%), landslide (6 or 2.55%), and wildfire (1 or 0.43%). While drought, landslide, and epidemic occur less frequently, when they do occur, they affect large numbers of people.

Table 1 provides a more detailed overview of natural hazards in Vietnam over a longer time duration, from 1900 to 2020. It includes the number of people affected, fatalities, and total damage, as assessed by the World Bank Group and Asian Development Bank, based on data from the Centre for Research on the Epidemiology of Disasters' Emergency Events Database.[145]

Flooding

Flooding is a significant, recurring hazard for Vietnam, which experiences riverine, coastal, and flash floods. Floods represent the largest risk in terms of economic impact as flooding accounts for an estimated 97% of average annual loss from hazards. The UN Office for Disaster Risk Reduction (UNDRR, formerly UNISDR) estimates Vietnam's annual losses from all flood types to be approximately US$2.3 billion, while analysis of World Resources Institute data leads to an estimated annual negative impact on GDP of US$2.6 billion due to flooding.

Flooding impacts are heavily concentrated in the areas around the Red River Delta in northern Vietnam and the Mekong River Delta in southern Vietnam. Those vicinities encompass significant urban areas, including the nation's two largest conurbations of Hanoi and Ho Chi Minh City. Research projects an increase in the population affected by an extreme river

flood of 3–10 million people by 2035–2044, due to climate change.[146] The delta areas, such as Long An and Dong Thap Provinces in the Mekong region, experience annual floods with the monsoon season, which brings heavy rain. Many delta areas prone to recurring riverine flooding during the monsoon season have invested in significant flood mitigation infrastructure, though the extreme flood events of 2000 and 2011 resulted in widespread damage and casualties.[147] Significant improvements were observed during the 2018 floods, yet the intensification of extreme events projected by most global models will exacerbate the risk from

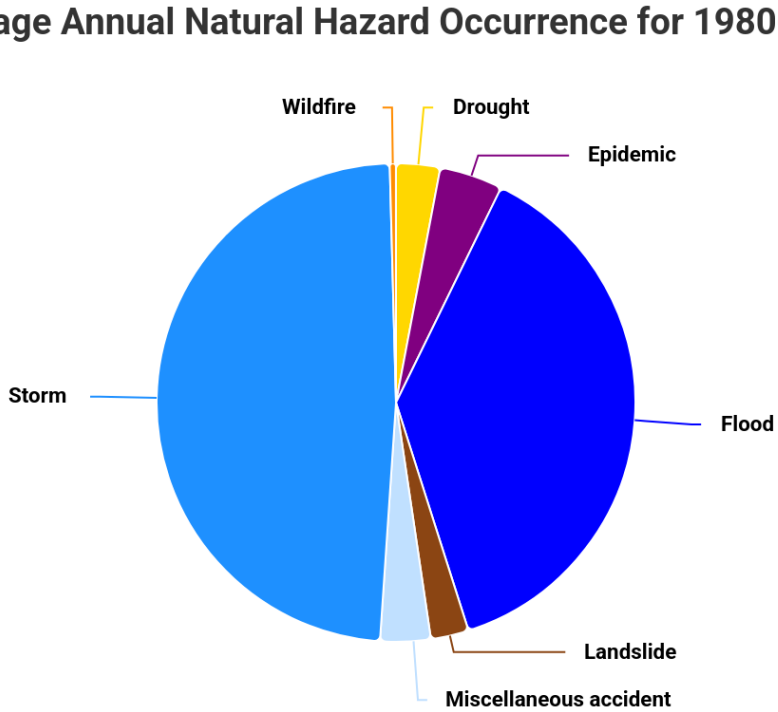


Figure 3: Natural Hazards by Average Annual Occurrence in Vietnam, 1980-2020

Disaster Type	Disaster Subtype	Events Count	Total Deaths	Total Affected	Total damage ('000 US$)
Drought	Drought	6	0	7,860,000	7,399,120
Epidemic	Others	1	16	83	0
	Bacterial disease	1	598	10,848	0
	Parasitic disease	1	200	0	0
	Viral disease	8	395	97,027	0
Flood	Others	16	1,012	2,011,287	160,055
	Coastal flood	6	804	4,353,316	749,000
	Flash flood	13	481	912,607	516,700
	Riverine flood	52	3,644	25,637,158	2,896,407
Landslide	Avalanche	1	200	38,000	0
	Landslide	4	109	40	0
	Mudslide	1	21	1,034	2,300
Storm	Others	10	323	219,280	145,035
	Convective storm	8	160	4,513	10,100
	Tropical cyclone	92	18,869	53,272,568	9,967,657

Table 1: Natural Hazards in Vietnam, Fatalities, People Affected, and Damage, 1900 to 2020

river floods. Tidal flooding has increased in the Mekong Delta, where record water levels, driven by rising sea levels, have increased year-on-year. The intensification of tidal flooding will pose a growing challenge to communities such as Can Tho, which is already experiencing intensified tidal flooding in the Mekong Delta.

Historically, DRM in Vietnam has mainly focused on rural areas, yet flood risk is increasing in urban and peri-urban communities. Increased urban flood risk is due not only to increased rainfall and impacts of climate change, but also to other factors including poor land use and under-planned urban development, which lead to over-concreting, obstruction of drainage flows, and blockage of floodways. Some areas that historically flooded only during heavy rains have experienced flooding during just light rain in the last decade; an example is central Vietnam's Quy Nhon City and Hue City.[148]

Following a typhoon, flooding and landslides often cause the most damage to houses and other structures. The mountainous northern region is particularly vulnerable to flash floods and landslides following storms and other periods of prolonged heavy rain.

Landslide

Landslides are often caused by sustained, heavy rainfall, but deforestation and construction have also contributed to increased landslide risk during storms and periods of increased precipitation. Landslides are often responsible for damage to roads and other parts of the transport sector following storms, as was seen when Typhoon Yagi struck northern Vietnam in September 2024. The mountainous northwest and central highlands are particularly vulnerable to water-induced landslides because of their steep slopes, higher rates of precipitation, and varying soil conditions.[149] Lao Cai and Yen Bai Provinces in the northwest are especially affected by flash floods and mudslides caused by heavy rain in steep areas, including some areas that have experienced deforestation and lost their natural capability to retain soil in wet conditions.[150] Moreover, houses in the northern mountainous areas are more vulnerable to landslides due to their location on hill slopes and construction with less durable materials. In the highland provinces, houses commonly fall into the categories of simple or less permanent houses, with wooden walls or tarpaulin coverings and roofs of palm leaves or tarpaulin.[151] The recovery for mountainous communities following landslides is often a longer and more challenging process than for disasters in other areas.

Tropical Cyclones (Typhoons) and Storms

Vietnam was affected by 6-7 tropical cyclones every year on average from 1970 to 2018.[152] The country faces impacts from tropical cyclones from the Northern Pacific (referred to as typhoons) as well as tropical cyclones originating in the Southern Pacific Ocean. Note that these are the same types of storms, but the terminology varies depending on geographical origin.[153]

Typhoon season in Vietnam runs from approximately June through the end of November, and the season for tropical cyclones from the South Pacific runs from 1 November to 30 April.[154] Tropical cyclones are most common in northern Vietnam from July to October and in central Vietnam from September to December, while further south they diminish in strength and frequency.[155] Typhoons and storms are accompanied by strong wind, tidal waves, storm surges, and continuous, heavy rainfall. More often than wind, flooding and landslides, which are triggered by rainfall, cause the most damage. In September 2024, Typhoon Yagi was the strongest typhoon in 70 years to strike the Vietnamese mainland. It affected 26 provinces and resulted in 320 deaths, 25 missing, 197 injuries, more than 283,383 houses damaged, 286,674 hectares (ha; 708,386 acres) of rice fields damaged, and overall damage estimated at VND 36.388 trillion (US$1.491 billion).[156]

Drought

Drought is a recurring hazard that can affect all parts of the country. Droughts are usually caused by lack of rainfall and limited water retention capacity of reservoirs, and they are

exacerbated by hot weather. Two primary types of droughts may affect Vietnam – meteorological drought, which is usually due to lack of rain, and hydrological drought, which is usually associated with a deficit in surface and subsurface water flow, potentially originating in the larger river basins..[157] Droughts are more likely to impact central and southern Vietnam, as well as small portions of the northwest that are furthest inland. In 2005, many of the southern provinces faced a shortage of rainfall and prolonged heatwaves, resulting in a rapid decline of water levels in major river systems and reservoirs, and the impacts eventually affected approximately 1 million people.[158] Vietnam experienced its worst drought in 90 years in 2015-2017, which was the country's longest and strongest El Niño-induced drought and saline water intrusion period. It severely affected more than 18 provinces in regions that produce key agricultural export and food security crops, including rice, coffee, pepper, fruits, and aquaculture.[159] Research estimates an increase in the annual probability of drought in Vietnam of approximately 10% due to climate change under various future emissions scenarios. Analysis projects that these changes will apply across all of Vietnam's regions, with drought projected to take place more often and for longer periods.[160]

Earthquake

Vietnam has a low to moderate risk from earthquakes.[161] Earthquakes that occur are typically of moderate magnitude and less destructive as most of the country is not near tectonic plate boundaries. Most earthquakes have ranged from 5.0 to 5.9 in magnitude and caused minor structural damage. The historical record is a 6.8 magnitude earthquake, though the strongest possible earthquakes that Vietnam could experience are estimated to be up to a magnitude of 7.5, and these quakes are more likely to occur in the northwest region or Nghe An Province. In recent years, earthquakes have occurred more frequently. The Director of the Institute of Geophysics stated that most of the earthquakes in 2024 were induced by human activities, particularly hydro-electric power operations.[162]

Epidemic

Malaria and dengue are vector-borne diseases that are both prevalent in Vietnam and continue to stress the healthcare system due to their annual occurrence, especially during the monsoon season. Typhoid fever and tuberculosis (TB) are also relatively common diseases in the country. Zoonotic diseases can hinder economic development, as seen with the 2019 African Swine Flu that had severe impacts on domestic consumption and exports.[163] As with the rest of the world, Vietnam was heavily impacted by the COVID-19 pandemic. While effectively keeping the pandemic at bay during 2020 and 2021, Vietnam faced significant outbreaks the following year.[164]

Tsunami

Vietnam has not experienced tsunamis in recent history, but its eastern coastline is exposed to potential tsunamis generated by earthquakes occurring in the SCS, particularly in the Manila trench..[165] A magnitude 8.0 earthquake in the Manila Trench could result in central Vietnam's coast experiencing tsunami heights of more than 1 m (3 ft), though the possibility of this happening is very small.[166]

History of Natural Disasters

The following is a list of significant natural disasters in Vietnam in the last ten years.

October 2024 – Tropical Cyclone Trami

Tropical Cyclone Trami (referred to as storm No. 6 by the GoV) made landfall over central Vietnam's Quang Nam Province on 27 October, four days after making landfall in the Philippines.[167] Other affected provinces included Ha Tinh, Quang Binh, Quang Tri, Thua Thien Hue, Da Nang, and Quang Ngai. An estimated 143,424 people were affected by the storm.[168] At least eight people died (seven in Quang Binh Province and one in Thua Thien Hue), and 14

people were injured (seven in Quang Binh, four in Quang Nam, two in Thua Thien Hue, and one in Quang Tri). Additionally, 626 houses were damaged due to roofs blown off or flooding. Approximately 1,269 ha (3,138 acres) of crops and fruit trees were flooded and damaged, 1,733 ha (4,282 acres) of aquaculture were damaged, and 1,506 head of cattle and 104,699 poultry died or were swept away.[169]

September 2024 – Typhoon Yagi

Typhoon Yagi (referred to as Typhoon No. 3 by the GoV) was the most destructive tropical cyclone to hit Vietnam in decades. It made landfall on 7 September 2024 in Quang Ninh and Hai Phong Provinces with wind speeds in excess of 213 km/hour (132 mi/hour) and ultimately affected 26 provinces and cities across northern Vietnam. The typhoon resulted in 320 deaths, 25 missing, and 1,978 injuries. Over 283,383 houses had wind-related damage, 122,415 houses were flooded, and 3,755 schools and 852 healthcare facilities were damaged. The typhoon also caused significant damage to transportation, power, water supply, and telecommunication infrastructure, disrupting water and electricity services. Approximately 286,647 ha (708,320 acres) of rice fields and 63,352 ha (156,546 acres) of other crops were damaged. Additionally, 11,835 aquaculture cages were destroyed or washed away, and 44,550 head of livestock and 5,761,454 poultry perished. All of this damage severely impacted food security and livelihoods. Altogether, the typhoon had severe impacts on housing, social infrastructure and services, food security, agriculture, and livelihoods.[170]

July to November 2023 – Floods and Landslides

On 30-31 July, central southern Vietnam experienced heavy rains, which triggered floods and landslides, killing at least six people in Lam Dong and Binh Thuan Provinces, damaging 435 houses, and flooding more than 3,000 ha (7,413 acres) of rice and other crops.[171] In the north, at least 13 people died, and eight others were injured after heavy rains 2-10 August brought flooding to Lai Chau, Yen Bai, Son La, Lao Cai, Dien Bien, Thai Nguyen, Gia Lai, Dak Lak, Dak Nong, and Lam Dong Provinces,[172] and additionally brought landslides to Lai Chau and Dien Bien, where 100 homes were damaged.[173] On 12 September, northern Vietnam experienced heavy rainfall, winds, and thunderstorms that caused flash floods and landslides, which resulted in the deaths of at least nine people in Lao Cai, as well as damaged home, fishing farms and crops Lao Cai, Ha Giang, and Yen Bai Provinces.[174] On 6-7 October, northern Yen Bai Province received heavy rainfall that led to floods and landslides, which killed two people and affected nearly 1,900 others.[175] On 10-14 October, heavy rain and floods affected the central-northern provinces of Quang Tri, Thua Thien-Hue and Quang Nam, resulting in two people killed, 3,910 people displaced, and 7,820 people affected, primarily in Da Nang City.[176] From 29 October to 3 November, the northern central province of Ha Thinh received heavy rainfall that led to floods and landslides, resulting in at least one person dead, 21 displaced, and 9,361 people affected. At the same time, the southern province of An Giang experienced storms and a tornado that affected more than 2,100 people, while landslides in southern Ben Tre Province affected 575 people.[177] On 13-14 November, central Vietnam received heavy rainfall, thunderstorms, and strong winds that caused floods and landslides across Quang Tri, Thua Thien Hue, and Ha Tinh Provinces, which resulted in 525 people displaced, 6,820 people affected, and more than 1,000 head of livestock lost.[178]

October to December 2022 – Floods and Landslides

Heavy rainfall affected parts of northern central Vietnam in early October 2022. It triggered landslides and resulted in casualties and damage. As of 11 October, at least 800 people were affected by landslides in Thuong Hoa Commune, Minh Hoa District, Quang Binh Province. In Nghe An Province's Kyson District, 30 households were affected by landslides.[179]

Central Vietnam's Quang Ngai Province experienced floods and landslides on 10-11

October 2022. Two people went missing, and more than 1,000 were relocated to temporary shelters. About 2,000 houses were flooded, primarily in Nghia Hanh and Duc Pho Districts, with an average flood level of 0.3 - 0.7 m (1.0 - 2.3 ft).[180]

September to October 2022 – Typhoon Noru & Tropical Storm Sonca

Tropical Storm Noru struck Vietnam on 28 September 2022. It brought severe rainfall and floods to the region. The Central and Central Highlands regions experienced very heavy precipitation on 27-28 September, with 200-300 mm (7.9-11.8 inches) recorded in some places, including Hue, Da Nang, Quang Nam, Quang Ngai, and Kon Tum Provinces. The event resulted in two people dead, 62 people injured, 160 houses destroyed, 7,346 houses flooded, and 3,364 houses otherwise damaged across 12 provinces. Additionally, 874 ha (2,160 acres) of rice, 4,445 ha (10,983 acres) of other crops, and more than 3,000 ha (7,413 acres) of aquaculture were flooded. A reported 20,292 poultry and 724 head of cattle died or were washed away, and 5,372 trees fell.

On 15 October 2022, Tropical Storm Sonca made landfall in northern Vietnam's Quang Ngai Province, before it moved westward across northern Vietnam and brought heavy rainfall, resulting in flooding in Quang Binh, Quang Tri, Thua Thien Hue, and Da Nang Provinces.[181] Hue and Da Nang cities experienced serious flooding up to 0.5-1.5 m (1.6-4.0 ft) deep. Tropical Storm Sonca affected 21,537 households during 13-15 October. Successive storm surges from late September through mid-October affected 109,217 households (436,868 people) with 19 deaths, 110 injuries, 89,451 inundated houses, 185 collapsed houses, and 7,174 damaged houses. The impacts of the storms and floods were considered among the worst since 2007.[182]

October 2021 – Floods and Tropical Depression

Floods and landslides caused by heavy rain affected northern and central Vietnam, where casualties were reported. In Quang Binh Province, up to 1,903 residents across seven towns and districts were evacuated, and more than 1,300 houses were damaged. In Quang Ngai and Quang Nam, at least one person died, 7,000 people were evacuated, and more than 16,400 houses were flooded. Floods and landslides blocked many of the main roads across central and north Vietnam, and power outages were reported in Thua Thien- Hue Province.[183]

September 2021 – Storm Conson

Storm Conson triggered flash floods in Central Vietnam, where two fatalities were reported alongside hundreds of houses damaged and over 1,000 ha (2,471 acres) of rice fields destroyed. The most affected provinces were Quang Ngai, Quang Tri, Kon Tum, and Gia Lai. Rough seas caused problems for ships, and 18 people were rescued from two ships that ran aground.[184]

April 2021 – Flash Floods

Floods swept through a village in Minh Luong Commune, Van Ban District, in Lao Cai Province of northern Vietnam on 17 April 2021. The sudden flood caused a landslide. Three people were killed, and 36 homes were damaged.[185]

December 2020 – Floods

Widespread floods triggered by heavy rainfall in central and southern Vietnam resulted in five fatalities, left one person missing, and saw 5,000 people evacuated in Khanh Hoa, Lam Dong, Dai Lak, and Quang Nam Provinces. This weather event came on the tail of the worst flooding in the past decade in October to November 2020.[186]

October to November 2020 – Central Vietnam Floods

In October and November 2020, Vietnam experienced the worst flooding in a decade with the Inter Tropical Convergence Zone combined with six consecutive tropical depressions, storms, and tropical typhoons that resulted in widespread flooding in most of Central Vietnam. The combined events killed 291 people, with an additional 66 people reported missing, and 1.5

million people severely affected. The disaster destroyed over 500,000 houses, 144,000 ha (355,831 acres) of rice paddies, 787 km (489 mi) of dikes and canals, and eroded and damaged 272 km (169 mi) of coastline, all of which resulted in economic damage worth US$1,443,850. The VDDMA reported that many areas in Central Vietnam recorded a total rainfall of more than 2.4 m (7.87 ft), and in some locations, floodwaters exceeded the previous historical highs, recorded in 1979 and 1999.[187]

Typhoon Molave, which made landfall on 28 October 2020 with winds up to 145 km/hour (90 mi/hour), was one of the most devastating typhoons to affect the country in decades. The GoV declared a state of emergency in seven of the fourteen affected central provinces, and the U.S. Ambassador to Vietnam declared the events a disaster, a declaration that paved the way for U.S. disaster relief assistance.[188]

August 2020 – Floods and Landslides

Heavy rains, floods, flash floods, and landslides impacted 13 provinces and cities in northern Vietnam. The events resulted in seven deaths, one person missing, over 1,000 damaged houses, and over 2,000 ha (4,942 acres) of rice and crops destroyed.[189]

July 2020 – Earthquakes

In July 2020, Vietnam experienced a magnitude 5.3 earthquake in Son La Province. The tremor impacted residences as far away as Hanoi (roughly 300km [186mi]). An approximate 16 aftershocks of greater than magnitude 2.5 and 15 aftershocks of less than magnitude 2.5 were measured two days after the initial event.[190]

April 2020 – Floods

Storms brought strong winds, lightning, and heavy rainfall, causing flooding in Quang Binh. Three people were killed and 13 more injured due to wind and lightning impacts on shelters. Over 6,000 houses were damaged. Lao Cai, Ha Giang, Yen Bai, and Son La were the worst affected provinces.[191]

January to April 2020 – Severe Drought and Saltwater Intrusion

During this period, 10 of the 13 provinces in the Mekong River Delta area were affected by drought and saltwater intrusion, resulting in water shortages, significant damage to crops, and limited access to water for over 200,000 households. More than 685,000 people had their access to livelihoods and basic services disrupted, with an estimated loss of production from 460,000 ha (1.1 million acres) of rice paddy.[192]

March 2020 – Tornados and Thunderstorms

Tornados, heavy rain, and thunderstorms in northern Vietnam resulted in five fatalities and at least 17 people injured; more than 777 houses were damaged.[193]

November 2019 – Tropical Cyclone Nakri

Tropical Cyclone Nakri passed over South-Central Vietnam on 13 November 2021. The storm's impacts killed two people, destroyed 430 houses, damaged several roads, and flooded over 1,000 ha (2,471 acres) of crops.[194]

October 2019 – Typhoon Matmo, Floods, and Landslides

Typhoon Matmo passed over Central Vietnam on 30 October. It destroyed 179 houses and damaged 2,314 others in the provinces of Quang Ngai. Binh Dinh, Phu Yen, Gia Lai, and Thua Thien Hue. As a result, one person was reported missing, and 14 more people were injured.[195] In the same month, heavy rain caused flooding in other parts of Central Vietnam, including Nghe An, Binh Dinh, and Ha Tinh, where three fatalities and damage to over 5,000 houses was reported. The heavy rain also triggered landslides, which blocked major roads in several areas.[196]

September 2019 – Tropical Cyclone Podul

Tropical Cyclone Podul made landfall over Quang Binh Province in Central Vietnam on 29 August with maximum sustained winds of 55-65 km/hour (34-40 mi/hour). Six people died as a result of wind-induced damage and flooding.[197]

August 2019 – Floods

Following torrential rains in August 2019, several provinces in the central highlands and southern region were flooded. The worst affected provinces were Kien Giang, Lam Dong, Dak Lak, and Dak Nong. Other provinces affected include Gia Lai, Kon Tum, Dong Nai, Binh Thuan, and Binh Phuoc. The disaster resulted in 11 deaths and one missing person, five injuries, and over 1,985 people evacuated. In total, 12,307 houses were flooded.[198]

August 2019 – Floods

In August 2019, Phu Quoc, a popular tourist destination island, experienced the worst flooding in its history. Within seven days, Phu Quoc received more than 1 m (3.28 ft) of rain, while the average annual rainfall on the island is 3 m (9.84 ft). The heavy rainfall flooded 8,424 houses and caused damages totaling US$4.6 million.[199]

June 2018 – Floods

In June 2018, the northern mountain provinces of Vietnam experienced heavy rainfall. Some areas such as Sin Ho (Lai Chau), Mu Cang Chai (Yen Bai), Ha Giang, Ngan Son (Bac Can), and Bac Quang (Ha Giang) received as much as 330 mm (12.99 in) of rain. The heavy rains caused significant flooding and landslides to the region.[200]

November 2017 – Typhoon Damrey

The aftermath of Typhoon Damrey affected 4.3 million people in nine provinces and left 107 people dead. The typhoon destroyed approximately 3,400 houses and damaged approximately 141,100 houses. The government evacuated more than 36,000 people in the coastal Can Gio district of Ho Chi Minh City. The typhoon also submerged 5,296 ha (13,086 acres) of paddy fields and nearly 15,000 ha (37,065 acres) of vegetables and fruit fields.[201]

June to August 2017 – Floods

Heavy rain triggered flash floods and landslides in four northwestern provinces. These events left 27 people dead, 14 people missing, and 231 houses washed away or collapsed. In addition, landslides damaged 425 houses and about 340 ha (840 acres) of agricultural land.[202]

October 2017 – Landslides

Landslides along the Krong No River damaged 15 ha (37 acres) of land along with agriculture produce. In addition, 50 households were damaged, and 19 land erosions were reported.[203]

August 2016 – Floods and Landslides

Tropical Storm Dianmu triggered floods and landslides in Yen Bai, Phu Tho, Lai Chau, Dien Bien, Son La, Hoa Binh, and Thanh Hoa Provinces. At least nine people were reported dead, and 1,341 houses were inundated in the first month. By December 2016, it was reported that 134 people had died, 151 people were injured, 233,271 houses flooded, and 4,093 houses were damaged or collapsed.[204]

2015 to 2017 – Drought

The worst drought Vietnam had seen in 90 years started in 2015 and lasted until 2017. The drought was attributed to the El Niño weather event, with 52 out of 63 provinces affected. In addition, the drought was aggravated by saltwater intrusion that extended up to 90 km (56 mi) inland in some coastal areas. This saline intrusion made river water too salty for human and animal consumption, crop irrigation, or fish-farming.[205] In total, 2 million people, including 520,000 children and 1 million women, needed humanitarian assistance.[206]

Country Risk

Risk calculation takes into account exposure to hazards, vulnerability, and coping capacity. Addressing all of these elements is important in reducing and mitigating disaster risk. Various indices emphasize structural or institutional risk while others emphasize hazards or losses (human and economic). Regardless of emphasis, disaster risk calculations use some form of the equation:

$$\textit{Disaster Risk} = (\textit{Hazard} \times \textit{Vulnerability}) / \textit{Capacity}$$[207]

Taken from the UNDRR glossary, definitions will help clarify this formula:

- Capacity - The combination of strengths, attributes, and resources available within an organization, community, or society to manage and reduce disaster risks and strengthen resilience.
- Disaster risk - The potential loss of life, injury, or destroyed or damaged assets, which could occur to a system, society, or a community in a specific period of time, determined probabilistically as a function of hazard, exposure, vulnerability, and capacity.
- Hazard - A process, phenomenon, or human activity that may cause loss of life, injury, or other health impacts, property damage, social and economic disruption, or environmental degradation.
- Vulnerability - The conditions determined by physical, social, economic, and environmental factors or processes, which increase the susceptibility of an individual, a community, assets, or systems to the impacts of hazards.[208]

In general, the goal of indexing risk is to inform decision makers and DRR and climate change adaptation (CCA) practitioners of the level of risk to and underlying capacity of the target community. The various risk calculation models support proactive crisis management frameworks and are helpful for prioritizing allocation of resources and for coordinating actions focused on anticipating, mitigating, and preparing for humanitarian emergencies.

INFORM Risk Profile

INFORM is a collaboration of the Inter-Agency Standing Committee (IASC) Reference Group on Risk, Early Warning, and Preparedness with the European Commission. It is a multi-stakeholder forum for developing shared, quantitative analysis relevant to humanitarian crises and disasters. The Joint Research Center of European Commission is the scientific lead. Operational dashboards accompany their risk profiles, of which this handbook covers two for Vietnam -- INFORM Risk and INFORM Severity.

- **INFORM Risk** is an open-source risk assessment for humanitarian crises and disasters. It can support decisions about prevention, preparedness, and response.
- **INFORM Severity** is a way to measure and compare the severity of humanitarian crises and disasters globally. It can help develop a shared understanding of crisis severity and ensure all those affected get the help they need.[209]

The **INFORM Risk** Index measures the risk of humanitarian crises and disasters in 191 countries. The INFORM model is based on the standard dimensions of risk: Hazards and Exposure, Vulnerability, and Lack of Coping Capacity. The first dimension measures the natural and human hazards that pose the risk. The second and third dimensions cover population factors that can mitigate against or exacerbate the risk. The Vulnerability dimension considers the strength of individuals and households relative to a crisis while the Lack of Coping Capacity dimension considers factors of institutional strength.[210]

The INFORM model is split into different levels to provide a quick overview of the underlying factors leading to humanitarian risk. INFORM gives each country a risk score of 1-10 (1 being the lowest and 10 the highest) for each of the dimensions, categories, and components of risk, as well as an overall risk score.[211] A higher score indicates a greater risk for a country. In the 2025 INFORM Risk Index, Vietnam had an overall risk score of 3.7/10, which INFORM categorizes as the "Medium" risk class and lands Vietnam as the 79th most at risk country in the Index out of 191 countries total. The Hazards and Exposure dimension score takes into account a combination of both natural and human hazards, and Vietnam rated 4.6/10 or 47th of 191 countries. The Vulnerability dimension score was 2.7/10 for a rank of 143rd of 191, and the Lack of Coping Capacity dimension score was 4.0/10 for a rank of 107th of 191. Within the Hazards

and Exposure dimension, the greatest risks were physical exposure to the natural hazards of River Flood at 9.9/10 and Coastal Flood at 9.6/10; within the Vulnerability dimension, the greatest risk was the socio-economic vulnerability of Inequality at 3.9/10; and within the Lack of Coping Capacity dimension, the greatest risks were Governance at 5.3/10 and Access to Health Care at 4.8/10. Figure 4 depicts of snapshot of the Vietnam country profile in the 2025 Inform Risk Index.[212]

The **INFORM Severity** Index measures the severity of humanitarian crises against a common scale at the global level. The concept is based on three dimensions: impact of the crisis, conditions of people affected, and complexity of the crisis. The model is divided into levels to give insight into each of the dimensions.

INFORM Severity adopted the following definitions:

- Humanitarian crisis is an event or series of events that causes harm to the physical, mental, social, and economic well-being of a large group of people, exceeds their ability to cope using their own resources, and how complex it is to fill such gaps by the humanitarian responders.
- Severity of humanitarian crisis is an extent of outcomes, in terms of distribution of people affected by the severity of conditions they confront within the crisis, generated by the impact of a crisis and worsened by how complex it is to deliver humanitarian response in the operational environment.
- Measure of crisis severity summarizes a range of quantitative information about severity of humanitarian crisis and presents it in numerical and/or categorical scale to be easily used in decision making.

Typhoon Yagi striking Vietnam in September 2024 is an event measured in the INFORM Severity Index. All INFORM Severity scores are on a scale of 1-5, wherein 1 is the least severe and 5 is the most severe. As of the December 2024 INFORM Severity Index, Vietnam netted a total Severity Index score of 2.6/5.0, which is categorized as "Medium" (among the categories of Very Low, Low, Medium, High, and Very High). The event showed a "Decreasing" trend

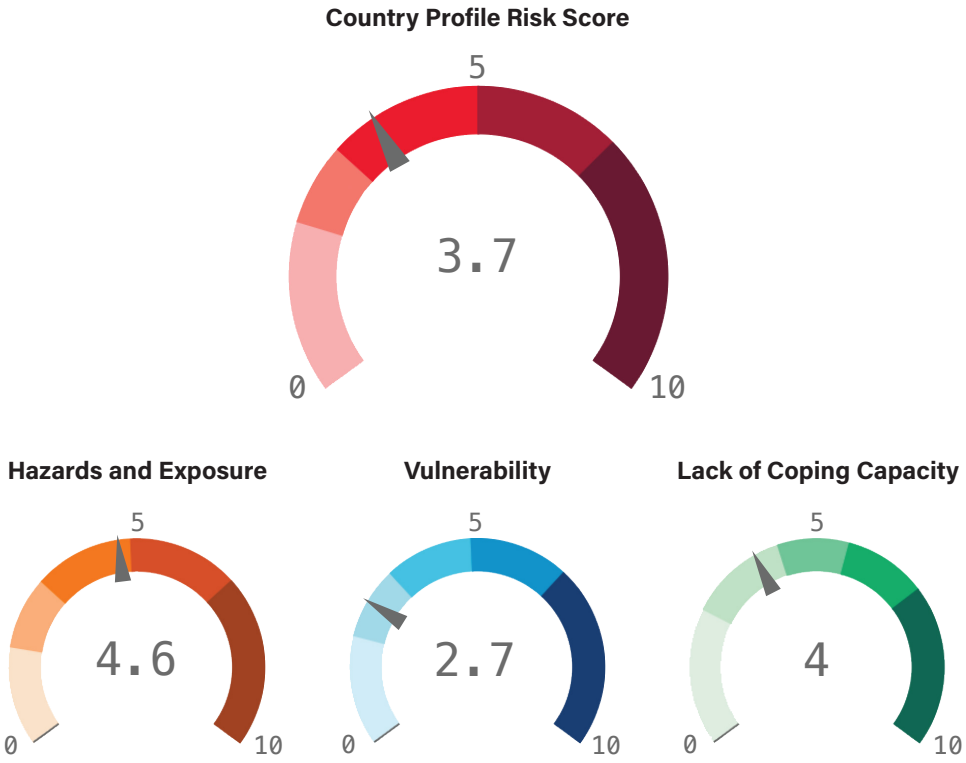


Figure 4: INFORM Risk Index, VIETNAM (2025)

over the last three months up to December 2024. The impact of the crisis (typhoon) was scored 2.9/5.0, with a geographical score of 3.3/5.0 and human score of 2.6/5.0, all of which take into account the affected area (47.9% of the country), people in the affected area (45.3% of the population), people affected (7.9% of the total population exposed), and people affected by category (3.6% of affected population displaced). Typhoon Yagi was the strongest typhoon to strike Vietnam in decades, and it left widespread devastation and a long-term recovery process.[213]

World Risk Report

The WorldRiskReport by Bundnis Entwicklung Hilft strives to raise awareness of disaster risk among the global public and political decision-makers and to provide practitioners with data to promote faster orientation to complex situations – i.e., societies experiencing disasters. This effort stems from the perception that disaster risks are not solely determined by the occurrence, intensity, or duration of extreme events. Social factors, political conditions, and economic structures play an important role in turning these events into crises. Thus, this index is based on the assumption that every society can take precautions – e.g., effective disaster preparedness and management – to reduce the impact of extreme events and lower the risk of disasters.

The WorldRiskReport calculates the level of risk a country faces based on a formula of exposure to hazards and vulnerability. It provides an assessment of the risk that countries will confront disasters but does not indicate probabilities for the emergence of disasters, nor does it forecast the timing of future disasters. This index uses 100 indicators that include risk, hazard exposure, vulnerability, and coping capacity (as defined above), and adds two others:

- Susceptibility - The disposition to suffer damage in the event of extreme natural events. Susceptibility relates to structural characteristics and frameworks of societies.
- Adaptation - A long-term process that also includes structural changes and comprises measures and strategies that address and try to deal with future negative impacts of natural hazards and climate change. Analogous to "lack of coping capacity," the lack of adaptive capacities is included in the Index.

In the 2024 WorldRiskReport, Vietnam ranked 16 of 193 countries. Vietnam's total Index score was 24.24 (on a scale of 0-100 wherein the lower the number the less risk a country faces), putting it in the "Very High" risk class, which is the highest of five risk classes (Very High, High, Medium, Low, Very Low). The component scores were:

- Exposure: 26.73 (Very High)
- Vulnerability: 21.98 (Medium)
- Susceptibility: 20.35 (High)
- Lack of Coping Capacity: 12.38 (Medium)
- Lack of Adaptive Capacity: 42.13 (Medium)

The 2024 WorldRiskReport particularly noted Vietnam for frequently experiencing flooding, especially in the Gianh river watershed.[214] It positively recognized 2023 research by Nguyen et al., which used a bottom-up approach based on hydrodynamic modeling, included an assessment of the adaptive capacity of the population via interviews with 298 inhabitants, and focused on the combinations of hazards and drivers that can lead to system failure to offer a better understanding of compound events.[215]

ORGANIZATIONAL STRUCTURE FOR DISASTER MANAGEMENT

Vietnam's DM efforts have in recent years shifted toward a more coordinated whole-of-government approach to mitigate disaster risk as well as respond to multiple types of hazards. Historically, DM primarily focused on floods, as evidenced in the establishment in 1946 of the Central Dike Protection Committee by decree of President Ho Chi Minh.[216] Today, under its successor, the National Steering Committee for Natural Disaster Prevention and Control, Vietnam has developed a strong and more robust disaster response capacity at both the national and subnational level.

In March 2025, the Ministry of Agriculture and Rural Development (MARD), under which the national disaster management authority falls, and the Ministry of Natural Resources and Environment (MoNRE) merged to form the new Ministry of Agriculture and Environment (MAE). Disaster prevention, hydrometeorology, and climate change are among the many sectors managed by the new ministry.[217] Some of the key tasks of the new MAE pertain to improving forecasting and early warning systems in support of disaster prevention, CCA, and environmental protection as a priority for sustainable development.[218] The new ministry has 30 affiliated focal point departments or agencies, of which 26 have administrative units, notably including the Department of Management of Dikes and Disaster Prevention and Control; Department of Climate Change; and Department of Hydrometeorology.[219]

Vietnam's National Steering Committee for Civil Defense is a new actor, whose legal foundation was established by Civil Defense Law passed on 20 June 2023.[220] Its responsibilities include disaster response and recovery; as of March 2025 it continued to be increasingly operationalized.

Lead Government Agencies in Disaster Response

The government coordinates DM policies and interventions at the national or central level through inter-ministerial committees, which are replicated at the provincial, district, and commune levels.

The top body for the GoV's DM policy development and decision-making is the National Steering Committee for Natural Disaster Prevention and Control (NSCNDPC), which is formally known as the Central Steering Committee for Natural Disaster Prevention and Control. The Standing Office of the NSCNDPC is the Viet Nam Disaster and Dyke Management Authority (VDDMA; also referred to as the Viet Nam Disaster Management Authority [VNDMA], particularly in older documents).[221] The VDDMA was established in 2017 and is the lead coordinator for natural disaster mitigation and response activities.[222]

VDDMA

VDDMA is an authority with policy advisory and coordination functions in support of decision-making and inter-sectoral work in DM and provides a mechanism to facilitate the technical guidance for provincial work. VDDMA has significantly grown in risk information sharing, DRM monitoring, data collection, research, and development and application of DRM information technologies.[223] VDDMA was originally under MARD, which merged with MoNRE on 1 March 2025 to become the new MAE.

VDDMA will also serve as the permanent office for the new civil defense committee, created by law in 2023. This law, the 2023 Law on Civil Defense, mandated the merging of the

NSCNDPC and the National Committee for Incident, Disaster Response, and Search and Rescue (VINASARCOM) to form the National Steering Committee for Civil Defense. This new national steering committee will replace previous committees and perform the inter-sectoral coordination, advisory, and organizational functions for civil defense operations. However, during the transition period while the new committee is being established, the national focal point responsible for implementing disaster prevention activities has been MARD.[224]

VDDMA supports the NSCNDPC by enhancing monitoring capabilities, guiding provincial DRM activities, conducting risk assessments, and collecting and sharing DRM data with stakeholders. It has developed platforms for coordinating disaster response and recovery operations, risk assessment, and information sharing. VDDMA provides guidance to provincial and city-level committees for disaster prevention and search and rescue to develop local monitoring systems connected with the central system, and it assists with monitoring and keeping track of disaster risks and decision-making at the central and local levels. In 2021, VDDMA achieved provincial capacity assessment through the development and application of Provincial Disaster Management Indicators (PDMI) in all 63 provinces; this process is designed to assess progress with the implementation of DRM-related policies at the provincial level.[225] VDDMA's disaggregation of data by sex, age, and disability has made Vietnam a leader among ASEAN member states in doing so in DRR initiatives.

NSCNDPC

The NSCNDPC has been chaired by the Deputy Prime Minister.[226] NSCNDPC members included senior representatives of ministries and ministerial and other governmental agencies; senior representatives of Vietnam Television, Voice of Vietnam, and Vietnam News Agency; and the VINASARCOM Chief of Office. Additionally, invited leaders of relevant organizations included the Vietnamese Fatherland Front Central Committee, Central Vietnam Women's Union, Central Ho Chi Minh Communist Youth Union, Vietnam Red Cross Society, and others. NSCNDPC's wide-ranging responsibilities have included providing guidance on DM national plans and laws, organizing drills and providing training, coordinating disaster response and recovery, including directly responding and mobilizing resources as appropriate, planning annual funding, and directing statistical reporting on disaster-related damage, assistance, and recovery.[227]

At the provincial level, the Office(s) of Provincial Committees for Disaster Response and Search and Rescue play a key role, though staffing has varied from part-time to full-time depending on the province.

VINASARCOM

VINASARCOM and NSCNDPC coordinate to organize search and rescue activities during disasters. VINASARCOM is the Government's focal agency for search and rescue and, as such, is responsible for assisting the Prime Minister in coordinating ministries, sectors, and provinces in their work. VINASARCOM is oriented toward the military and linked to the "four on-the-spot" disaster response motto, referring to leadership on-the-spot, human resources on-the-spot, materials on-the-spot, and logistics on-the-spot or on-site.[228] It has been strengthened in recent years with staffing at national, provincial, district, and commune levels. In emergencies, the army, air force, and navy can be rapidly mobilized and coordinated at the request of each level's respective steering committee.[229]

Vietnam Steering Committee for Civil Defense (VNCIVDEF)

Legally mandated on 20 June 2023, the Vietnam Steering Committee for Civil Defense (VNCIVDEF), or National Steering Committee for Civil Defense, has become increasingly operational. It is an inter-agency coordination body that advises and assists the Government and Prime Minister in organizing, directing, and managing national civil defense. This is envisioned as a proactive approach that embodies

the four-on-the-spot principle and includes measures to prevent, respond, and recover from war consequences, incidents, disasters, natural calamities, and epidemics. VNCIVDEF oversees the Civil Defense Commands of ministries, central agencies, and provincial authorities. Its responsibilities include:

- Advising on related strategies, policies, and plans
- Proposing the establishment of specialized civil defense forces to ensure prevention, response, and recovery from incidents nationwide
- Being prepared to participate in foreign disaster response and humanitarian assistance
- Advising on the mobilization and coordination of forces and resources across national ministries and agencies and local authorities
- Guiding the implementation of civil defense activities
- Raising awareness through training

The VNCIVDEF chairman is the Prime Minister; standing vice chairman is the Deputy Prime Minister; vice chairmen are the Ministers of National Defense, Public Security, Agriculture and Environment, and Health; and the standing member is the Chief of the General Staff of the Vietnam People's Army, concurrently the Deputy Minister of National Defense. Committee members include Ministers or Vice Ministers of Industry and Trade; Construction; Science and Technology; Culture, Sports, and Tourism; Finance; Education and Training; Home Affairs; Justice; Foreign Affairs; Public Security; and Agriculture and Environment. Members also include the General Directors of Vietnam Television, Voice of Vietnam, and Vietnam News Agency. Additionally, representatives are invited from the Vietnam Fatherland Front, Vietnam Women's Union, Ho Chi Minh Community Youth Union, and Vietnam Red Cross Society.

The Ministry of National Defense is the permanent agency of the steering committee and is responsible for:

- Developing the committee's work program and organizing its regular activities
- Leading emergency meetings to address urgent and unforeseen issues
- Monitoring and enforcing the implementation of the committee's regulations, work program, and tasks
- Coordinating with Civil Defense Commands at ministerial and local levels to ensure necessary preparations for forward steering committee operations and inspection teams overseeing disaster response and recovery efforts

The Office of VNCIVDEF provides administrative and advisory support, and incident monitoring and assessment. It coordinates with relevant government agencies on logistics and procurement. The office also monitors and oversees permanent agencies of civil defense commands in maintaining protocols and submitting reports.[230]

VNCIVDEF is comprised of several civil defense commands. Five commands at the national level are headed by the Ministry of Defense, Ministry of Construction, Ministry of Public Security, Ministry of Industry and Trade, and Ministry of Health, each of which has specialized and other forces under its purview that can be utilized in incident responses. There are additional civil defense commands, including at the provincial, district, and commune or village levels. Figure 5 depicts the organizational structure of VNCIVDEF.[231]

As the National Steering Committee for Civil Defense develops its operations, many DM activities are carried out by extant entities, even as they also shift under the newly created MAE. Some lead government positions pertaining to DM and DRR under the new MAE are very similar to positions formerly located in MARD or MONRE and are held by the same personnel, including the following:

- MAE's General Director of Vietnam Disaster and Dyke Management Authority is Mr. Pham Duc Luan, who was the General Director of the Vietnam Disaster and Dyke Management Authority under MARD;
- MAE's Director of the National Remote

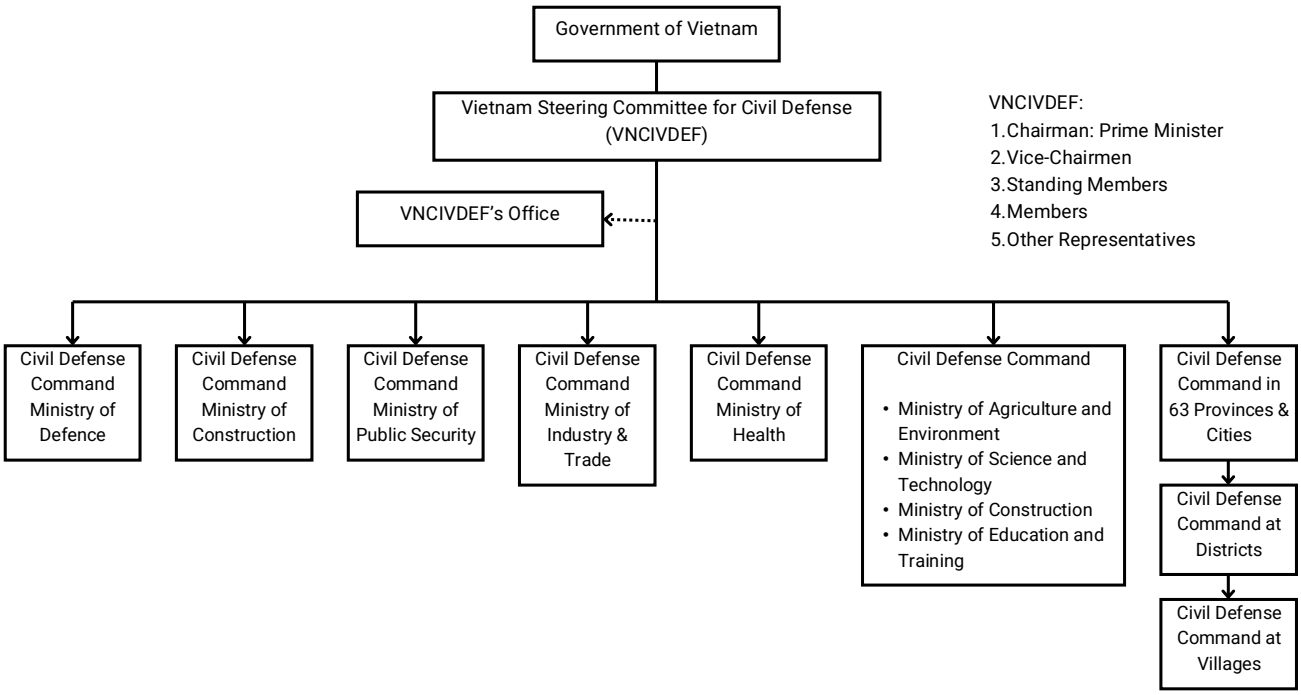


Figure 5: Vietnam Steering Committee for Civil Defense Organizational Structure

Sensing Department is Mr. Tran Tuan Ngoc, who was the General Director of the National Remote Sensing Department under MONRE;
- MAE's General Director of the National Center for Hydrometeorological Forecasting is Mr. Nguyen Thuong Hien, who was Chief of Staff of MONRE; and
- MAE's General Director of the Department of Climate Change is Mr. Tang The Cuong, who was General Director of the Department of Climate Change under MONRE.[232]

Disaster and Emergency Response

In Vietnam, disaster response is a coordinated effort involving multiple agencies, with the VDDMA leading at the national level. This coordination extends vertically through the Steering Committees for Disaster Prevention and Control, which operate at central, provincial, district, and commune levels to ensure an organized and effective response. There are slight but important differences in the tasks and functions of the committees at each level:

- Commune-level Steering Committee for Disaster Prevention and Control (SCDPC): Carry out disaster response instructions and commands from all levels to the community; take the lead in advising the People's Committee of the commune to maintain the commune-level disaster response force, with the core being the militia and self-defense force and the participation of the Vietnam Red Cross Society, Youth Union, and other local mass organizations.
- District-level SCDPC: Command and organize disaster response and search and rescue within the district level; assess damage; implement the Natural Disaster and Control Fund; members include leaders of the Fatherland Front, Women's Union, Red Cross, Ho Chi Minh Communist Youth Union, and social organizations at the district level along with relevant government departments and agencies.
- Provincial SCDPC: Command disaster response and search and rescue within their jurisdiction; act as conduit, connecting "online" with Central and local disaster prevention and control agencies; members include Provincial People's Committee Chairman, ministerial representation, Commander of the Provincial Military

Command, Provincial Border Guard, the Fatherland Front, Women's Union, Red Cross, Communist Youth Union, and others.

Notably, Provincial and District-level SCDPCs are provided with funds for their operations and carry significantly more authority than the Commune-level SCDPC's.[233]

The Government of Vietnam classifies five levels of natural hazards based upon severity of hazard.[234] Lead response roles in the five disaster risk levels are as follows:

1. LEVEL 1 (Low Risk): Every Chairman/ Chairwoman of the Communal People's Committee shall directly command and mobilize resources; assist at the request of local authorities; submit reports; and carry out commands given by the superior natural disaster management agency.
2. LEVEL 2 (Average Risk): Every Chairman/ Chairwoman of the Provincial People's Committee shall command local authorities, agencies, and units within the province to respond to natural disasters; mobilize resources, submit reports, and carry out commands given by the Prime Minister, National Steering Committee for Natural Disaster Prevention and Control, and National Committee for Search and Rescue.
3. LEVEL 3 (High Risk): The National Steering Committee for Natural Disaster Prevention and Control shall direct local authorities, Ministries, ministerial agencies, and Governmental agencies to take disaster response measures and mobilize resources.
4. LEVEL 4 (Extremely High Risk): The Prime Minister shall direct Ministries, ministerial agencies, Governmental agencies, and relevant local authorities to take disaster response measures.
5. LEVEL 5 (Disaster): The National Steering Committee for Natural Disaster Prevention and Control shall report to the Prime Minister who may request the State President to declare a state of emergency.[235]

An additional responder in some disaster incidents is the Fire Prevention, Fighting, and Rescue Police Force, which falls under the Ministry of Public Security. The Force extinguishes fires and conducts search and rescue operations during fire incidents as well as emergencies and disasters. Each province has a Fire Office, under which local fire stations operate. Coordination with other units involved in rescue activities has been a challenge during natural disaster incidents.[236] However, a special elite firefighting and rescue police force has been established across 10 central-run provincial and municipal police departments on a trial basis, with the aim of developing a force capable of responding swiftly to fire emergencies on land and water. In addition to carrying out local tasks, these elite units are to serve as core teams in international rescue and relief missions, according to the ministry's Fire Prevention, Fighting, and Rescue Police Department.[237] The National Assembly passed the 2024 Fire Prevention, Fighting, and Rescue Law, set to take effect on 1 July 2025 to streamline regulation of fire prevention, firefighting, and rescue activities.[238]

Various ministries are tasked with different aspects of international cooperation in disaster management and prevention, in accordance with the 2013 Law on Natural Disaster Prevention and Control:[239]

- The Ministry of Foreign Affairs is responsible for calling for international assistance and contacting other countries and territories to provide coordinated assistance for Vietnamese people affected by natural disasters. It also acts as Vietnam's focal point when providing assistance to other countries.
- The MARD acts as the focal point for international cooperation in natural disaster prevention and control.
- The MoNRE is responsible for international cooperation in the observation, assessment, forecast, warning, and identification of levels of meteorological, hydrographical, and oceanographic natural disaster risks.

- The Vietnam Academy of Science and Technology is responsible for international cooperation in the observation, assessment, and identification of levels of natural disaster risks, earthquake information, and tsunami forecast and warning.
- The National Committee for Search and Rescue is responsible for international cooperation in search and rescue and coordination with related ministries, ministerial-level agencies, and government-attached agencies in the process.

There are a variety of local groups and organizations who play a significant role in supporting government efforts in DM, particularly in information sharing, coordination, and response. Prominently, the Viet Nam Women's Union (VWU) leadership has a position in the National Steering Committee for Natural Disaster Prevention and Control (at the central level) and the Steering Committee for Natural Disaster Prevention and Control (at local levels). VWU has been actively involved in collecting information, conducting aware-raising activities, and raising women's concerns in DRR.[240]

Armed Forces Role in Disaster Response

The Vietnamese People's Army (VPA, also known as the People's Army of Vietnam) plays a significant role in disaster relief operations. Operating under the MND, the VPA encompasses Ground Forces, Navy (including naval infantry), Air Defense Force, Border Defense Force, and Vietnam Coast Guard. Working in tandem with the Coast Guard is the Vietnam Department of Fisheries Resources Surveillance, which is the standing agency for combating illegal, unregulated, and unreported (IUU) fishing. Other security forces include the Vietnam People's Ministry of Public Security, which is responsible for internal security and controls the national policy, and the Vietnam Civil Defense Force.[241] A 2023 law consolidated volunteer civil defense team leaders, residential ward lookouts, and part-time commune police officers into a local security force with arrest powers, uniforms, and local offices.[242]

The VPA's primary mission includes protecting the country's independence and sovereignty, but it is also significantly involved in natural disaster response, including search and rescue operations. The VPA is also engaged in economic projects, such as electrical infrastructure, oil and gas services, hydroelectric projects, aviation and seaport services, telecommunications, shipbuilding, and weapons and equipment factories. Approximately 98 VPA businesses operate in various fields of the economy including flight services, seaport services, telecommunications, and the ship-building industry.[243] The MND has directed all military entities to develop plans to respond to earthquakes, tsunamis, and dike, dam, and reservoir bursts.

The VPA has historically been mobilized in response to major nationwide calamities, notably bringing its operational capacity and logistics support in response to Typhoon Linda in 1997, catastrophic flooding in 2000, and Typhoon Damrey in 2005.[244] It was also involved in responding to the COVID-19 pandemic, with military doctors, medical staff, and soldiers participating in outbreak containment.[245] During floods and storm, the MND is responsible for organizing and directing the army to ensure the protection of dikes, including the diversion and slowing of floods. However, regular maintenance of dikes falls under the VDDMA. In 2014, MND issued a decision to establish teams focused on disaster relief. Five teams were trained to be ready to participate in regional and international disaster relief operations:

- A collapse rescue team under the Engineer Command for collapsed buildings
- A team responsible for handling environmental consequences under the Chemistry Command
- A Disaster Relief Medical Assistance Team under the Army Medical Department
- A canine search-and-rescue team under the Border Guard Command
- A maritime search-and-rescue team under the Navy Command

In 2024, the VPA mobilized 460,000 personnel to help in response to Typhoon Yagi, which made landfall in northern Vietnam on 7 September and affected 26 provinces and caused some of the worst flooding ever experienced in the northern mountainous area. Significantly, 358,700 standing army personnel and 5,320 military vehicles were deployed, with 143,700 people and 4,290 vehicles actively engaged in flood and landslide response.[246] In a reflection of how widespread Typhoon Yagi's impacts were, the VPA's deployment for that one disaster rivaled its deployment for all disasters in 2020. In response to disasters and accidents across Vietnam in 2020, the VPA reportedly mobilized 364,262 soldiers and militia members and 12,945 vehicles, all of which participated in the rescue of 1,770 people, provided education and awareness about storms to 3,110,095 people, assisted with the relocation of 201,236 households to safer locations, transported 178.5 tons of necessities, provided 13,823 cubic meters (3.65 million gallons) of water to drought-affected areas, repaired 60,030 houses, and harvested 146 ha (360 acres) of rice.[247]

Vietnamese armed forces have also participated in foreign disaster response. In February 2023, a VPA team responded to the earthquake in Turkey, a deployment that marked the first time that Vietnam officially deployed and engaged in an overseas search and rescue mission. During their 10-day mission in Turkey, the VPA team, in cooperation with international search-and-rescue teams, searched 31 locations and identified 15 locations where victims were buried in rubble. Additionally, the Vietnamese MND delivered relief goods including dry food, rice, milk, and medical supplies.[248] Following the July 2018 dam collapse in southern Laos' Attapeu Province, over 100 Vietnamese army officers, including medics, assisted Laos in relief efforts. The officers assembled with nine cars, VND 450 million (US$19,500) in relief goods, and enough supplies to provide medical treatment for 500 people, while joining in search and rescue efforts.[249] The VPA also provided assistance in response to the 2008 earthquake in Sichuan, PRC.[250]

The VPA has increasingly participated in regional disaster exercises or rescue drills. Vietnam, Laos, and Cambodia conducted a joint search and rescue exercise in November 2024 in Cambodia. The three countries' armies (including 563 soldiers from Cambodia, 71 from Vietnam, and 64 from Laos), under the direction of their respective defense ministries, aimed to strengthen cooperation to support each other in natural disasters, provide assistance to people affected by natural disasters, and minimize the loss of life and property.[251] Previous joint rescue drills among Vietnam, Laos, and Cambodia were held in 2022 and 2020.[252] The Vietnam Coast Guard held its first drill with the Philippine Coast Guard in August 2024, as they jointly participated in training exercises including search and rescue, fire and explosion prevention, and maritime safety.[253] The Vietnam Coast Guard similarly held joint patrols with PRC in the Gulf of Tonkin in November and December 2023.[254]

Disaster Management Partners

International and local NGOs and bilateral and multilateral partners provide important support to the government's DM system.

United Nations Country Team in Vietnam

The UN Country Team in Vietnam is comprised of 14 UN agencies, funds, offices, and programs working in Vietnam in support of development areas including health, education, agriculture, climate resilience, and inclusive governance. The One Strategic Framework for Sustainable Development Cooperation between the GoV and the UN for the period 2022–2026 (Cooperation Framework) is the UN central framework plan for supporting development activities, including DRR.[255] UN entities operating in the country include the Food and Agricultural Organization (FAO), International Fund for Agricultural Development (IFAD), International Labour Organization (ILO), International Organization for Migration (IOM), UN-Habitat, UN Women, UNAIDS, UN Development Programme (UNDP), UN

Educational, Scientific and Cultural Organization (UNESCO), UNFPA, UN Children's Fund (UNICEF), UN Industrial Development Organization (UNIDO), UN Office on Drugs and Crime (UNODC), and World Health Organization (WHO).

Coordination of the UN entities in country is led by the UN Resident Coordinator, who is also the head of the UNDP in the country.[256] During an international disaster response, the UN Office for the Coordination of Humanitarian Affairs (OCHA) will support UN inter-agency coordination and outreach with the larger international humanitarian community. The UN organizations that often contribute or commit to aid emergency response efforts following a large-scale disaster (such as in the wake of Typhoon Yagi striking in September 2024) include UNDP, IOM, UNICEF, WHO, UNFPA, FAO, UN Women, and ILO, working in support of local authorities and in coordination with NGOs.[257] In 2024, UNDP supported MARD in the completion of the building and installation of 24 early warning stations in high-risk coastal communes in seven provinces, and provided assistance operating the stations. UNDP and VDDMA completed a training course for representatives of seven central provinces on the use of drones to evaluate risks and damage and to determine evacuation routes and locations.[258] In 2024, the UN Central Emergency Response Fund allocated US$2 million to support people in need of urgent humanitarian assistance in Vietnam.[259]

ASEAN

Vietnam is an active member of ASEAN, which provides a framework for mutual disaster assistance among the 10 member states as set out in the ASEAN Agreement on Disaster Management and Emergency Response (AADMER). In a disaster response, ASEAN may deploy the Emergency Response and Assessment Team (ERAT). The ASEAN-ERAT has deployed more than 28 times, including to Vietnam in 2014 in response to Typhoons Ramasun and Hagupit.[260] Vietnam actively participates in ASEAN-ERAT initiatives and, in December 2023, the VDDMA collaborated with the ASEAN Coordinating Centre for Humanitarian Assistance on disaster management (AHA Centre) to organize a Training of Trainers course in Vietnam. This initiative aimed to develop a cadre of trainers who would subsequently conduct localized ASEAN-ERAT training programs for provincial disaster management officials, thereby enhancing Vietnam's capacity to respond to emergencies and support humanitarian assistance efforts.[261] Additionally, in October 2023, Vietnam, as the Chair of the ASEAN Committee on Disaster Management (ACDM), hosted the 19th Meeting of the Governing Board of the AHA Centre. During this meeting, it was reported that, by September 2023, the AHA Centre had completed 87% of its annual work plan, the highest completion rate since the Centre's establishment in 2011. Vietnam's active participation in these initiatives underscores its commitment to strengthening regional DM cooperation within the ASEAN framework.[262]

Bilateral organizations, often donor arms of other governments, providing relevant financial support include those of Japan and Australia. Japan International Cooperation Agency (JICA) provides funding for efforts on disaster prevention, health, education, transportation infrastructure, judicial reform, economic or financial reform, and other development initiatives.[263] JICA funded an estimated 68 projects, grants, or loans during the 2008-2024 period.[264] Australia's Department of Foreign Affairs and Trade has provided over AUD 3 billion (US$1.9 billion) in development assistance to Vietnam since 1973.[265] The U.S. started providing aid to Vietnam in 1989 with a particular focus on assistance to PWDs,[266] and during the period 2020-2024, the U.S. Mission to Vietnam provided US$7.7 million in emergency response and disaster preparedness assistance.[267]

Disaster Risk Reduction Partnership

The DRRP (sometimes called the Disaster Risk Mitigation Partnership), co-chaired by the MARD Vice-Minister and UN Resident

Coordinator, is the main forum for coordination of humanitarian and recovery efforts among national and international humanitarian and DRR actors.[268] UN inter-agency coordination is led by the UN Resident Coordinator's Office and with support from UN OCHA. The GoV, UN, and development partners coordinate crisis response and recovery activities through key sectors; each sector is co-led by the respective government ministry and designated agencies.[269]

DRRP was established under MARD's Decision No. 3922/QD-BNN-TCCB dated 11 October 2019. Its members include four ministries — Agriculture, Defense, Foreign Affairs, and Information and Communications — and more than 20 international organizations, NGOs, and financial institutions that are involved in developing, implementing, and overseeing disaster prevention and response activities.[270] In March 2024, members including UN Women, Action Aid, JICA, Plan International, and World Vision, met to start developing the partnership's plan for 2025-2030. The plan was developed in accordance with GoV's priorities on natural disaster prevention and in line with all partners' strategic goals, according to the UN Resident Coordinator.[271]

The DRRP 2025-2030 plan aims to strengthen Vietnam's resilience by focusing on key areas such as coordinated policies, risk-inclusive development planning, and community awareness.[272] In December 2024, DRRP officially launched the Viet Nam Multi-Sector Assessment (VMSA) to guide disaster recovery planning and resource mobilization. The VMSA is a collaboration of key ministries, UN agencies in Vietnam, and other development partners including the EU, JICA, ADB, HelpAge International (HAI), Save the Children Viet Nam (SCV), and Catholic Relief Services (CRS).[273]

Disaster Management Working Group

The DMWG was set up in 1999 to bring together international NGOs in the wake of severe floods. The aim was to support information sharing and coordination of relief activities. It meets regularly, with the objective of supporting DRR and DM in Vietnam through improved information sharing and coordination of interventions among agencies.[274]

Vietnam Union of Friendship Organisations Resource Centre

The Vietnam Union of Friendship Organisations (VUFO)-NGO Resource Centre was established in 1993 to help international NGOs and their Vietnamese partner institutions. It has approximately 110 member organizations, primarily based in Vietnam and working on hunger eradication, poverty reduction, and sustainable development.[275] The VUFO-NGO Resource Centre is the secretariat for the DMWG, and falling under VUFO is the People's Aid Coordinating Committee (PACCOM), established in 1989 to manage relations with international NGOs and to mobilize aid. PACCOM works closely with international NGOs at the central level and in all 63 provinces and centrally administered cities to facilitate foreign NGOs' activities in Vietnam.[276] It provides information relevant to foreign NGOs working with local partners and guides and monitors the implementation of policies on international NGOs' operations.[277]

Disaster Management Policy and Technology

The Disaster Management Policy and Technology Center (DMPTC) falls under VDDMA and was established in 2017 through the merger of a previous disaster management center, water resource consultant, and technology transfer center.[278] The DMPTC supports the state with natural disaster prevention, mitigation, and CCA. Its tasks are focused on formulating plans, collecting data, monitoring, conducting research, implementing projects, testing models, applying technology, organizing and conducting training, and sharing information.[279] DMPTC partners include the Asian Management and Development Institute (AMDI), American Red Cross, CARE international in Vietnam, Center for International Studies and Cooperation (CECI), Oxfam, Oxfam Quebec, Plan International, Vietnam Red Cross Society, the International

Federation of Red Cross and Red Crescent Societies (IFRC), Save the Children, UNDP, VWU, World Vision Vietnam, the Australian Embassy, SNV (Netherlands development organization), World Bank, JICA, Pacific Disaster Center (PDC), and Netherlands Red Cross.[280]

Vietnam Political-Social Organizations

Vietnam political-social organizations, many officially recognized by the government and working under the leadership of or in coordination with the ruling party, participate at local levels during response and recovery. These organizations play an important role in improving people's understanding of disaster risk. The VWU, the Youth Union, the Viet Nam Red Cross, the Viet Nam Chamber of Commerce and Industry (VCCI), the Fatherland Front, and the Viet Nam Farmers' Union (VNFU) have large public and community outreach, which helps them influence opinions and behaviors, particularly in disaster preparation and mitigation. VCCI has been increasingly active since 2015 in supporting DRR information sharing and policy advocacy in the business community. The organization supports its 500 members from the business community by raising DRR-related concerns and needs of the business community to the government.[281]

Vietnam Women's Union

The VWU plays a particularly important role among national political-social organizations, given its membership in the National Steering Committee for Natural Disaster Prevention and Control. VWU is a significant local responder during disaster events and often interacts with registered households and businesses, in coordination with local authorities.[282] VWU has been actively involved in collecting information about and raising awareness of women's concerns as they relate to DRR. VWU has conducted awareness-raising activities through engagements by various women's groups and during annual National DRR Weeks. From 2017 to 2022, it conducted more than 200,000 awareness-raising activities on DRR via mass media and social media.[283] Established in 1930, VWU is an organization within Vietnam's political system that works under the leadership of the Communist Party of Vietnam to organize women across society and represent their interests in development and sociopolitical activities. The mass organization has an extensive presence, with a membership of approximately 19 million women across the country at the central, provincial, district, and commune levels. VWU is a member of the Vietnam Fatherland Front, the Women's International Democratic Federation (WIDF), and the ASEAN Confederation of Women's Organizations (ACWO).[284]

The Vietnamese Diaspora

The Vietnamese diaspora is often active in remitting financial support following large-scale disasters. Following Typhoon Yagi, which made landfall in September 2024, Vietnamese communities abroad raised some VND 19 billion (US$779,000) within weeks to support those affected by the storm. The Vietnam Fatherland Front reported more than VND 600 million (US$24,600) in donations from the overseas community in response to Typhoon Yagi.[285]

The International Red Cross and Red Crescent Movement

International Committee of the Red Cross

The International Committee of the Red Cross (ICRC) is a private, independent humanitarian organization, headquartered in Geneva, Switzerland. The ICRC bases its activities on the provisions of International Humanitarian Law (IHL), and it is neutral in politics, religion, and ideology. The ICRC assists with the protection of civilian victims of armed conflict and internal strife and their direct results. Within these roles, it may take any humanitarian initiative as a neutral and independent intermediary.[286]

In Vietnam, the ICRC works closely with the armed forces to organize courses on IHL and annually sponsors high-ranking officers to participate in international conferences, including the Asia-Pacific regional seminar

on the Law of Armed Conflict at Sea. It also works with academic institutions in the country to incorporate IHL into curricula. The ICRC provides financial and technical support to the Vietnam Red Cross Society with a focus on mine risk education, support to victims of unexploded ordnance, building of post-disaster forensic capacity, correct use of Red Cross emblems in accordance with IHL, and the adoption of Safer Access Framework, which are guidelines to improve their safety in sensitive and insecure situations.[287] The ICRC also supports the national society in tracing missing persons and the restoration of family links, including the management of the restoring family links website.[288] Vietnam is covered by the ICRC's Regional Delegation in Bangkok.

International Federation of Red Cross and Red Crescent Societies

The IFRC is a humanitarian organization that aids and promotes humanitarian activities carried out by the National Societies, with a view to preventing and alleviating human suffering. IFRC was founded in 1919 and includes 191 National Societies. The IFRC carries out relief operations to assist victims of disasters and combines this work with development work to strengthen the capacities of its member National Societies.[289]

The ICRC, IFRC, and 191 National Societies together comprise the International Red Cross and Red Crescent Movement, which follows the seven fundamental principles of humanity, impartiality, neutrality, independence, voluntary service, unity, and universality.[290]

The IFRC supports the Vietnam Red Cross Society by providing technical assistance, financial support, and training on a wide range of topics relating to DRM and CCA. It supports capacity development with resource mobilization, monitoring and evaluation, and other activities.[291]

Vietnam Red Cross Society

The Vietnam Red Cross Society is a leading humanitarian actor in the country. Its programs and activities include disaster preparedness, response, and recovery; community-based health care; and first aid, among others.

The Vietnam Red Cross Society was founded on 23 November 1946, following which it signed the Geneva Convention and became a member of IFRC in November 1957. In 2008, the National Assembly of Vietnam approved the Law on Red Cross activities, and in 2011, the government issued a Decree detailing measures for implementation.[292] As with all national societies, the Vietnam Red Cross Society is an auxiliary to the government, and the development of the Red Cross Law strengthened the position of the National Society.[293]

The Vietnam Red Cross Society's mission, principles, and goal are:

- To be a social humanitarian organization that connects and encourages Vietnamese people at home and overseas to carry out humanitarian activities without discrimination of class, ethnicity, religion, or sex
- To promote humanity, peace, and friendship, with a view to building a powerful Vietnam with wealthy people, a strong nation, and an equitable, democratic, and civilized society that provides for a good life with freedom, well-being, and conditions for comprehensive development[294]

Its vision is, by 2030, to have become a professional humanitarian organization, playing a pivotal and coordinating role in humanitarian and charity activities in Vietnam, and effectively participating in international humanitarian activities. The vision includes, by 2045, becoming a strong national society in the Asia-Pacific region.[295]

There are 63 Vietnam Red Cross Society provincial chapters across the country's 63 provinces.[296] As of 2023, there were 17,024 national society staff, 421,220 national society volunteers, and 14,191 national society branches.[297] Additionally, there are 13 affiliated centers, including centers focused on nursing, first aid, social security service, humanitarian

aid, and community development, as well as a disaster relief warehouse.

The Vietnam Red Cross Society is a member of the Vietnam Fatherland Front and operates nationwide in accordance with the Constitution and laws of Vietnam, the National Society's statute, and the seven fundamental principles of the International Red Cross and Red Crescent Movement.[298]

The Vietnam Red Cross Society frequently responds to disasters, including Typhoon Yagi, which made landfall in Vietnam on 7 September 2024 as the strongest typhoon to hit the country in decades. By 26 September 2024, the Vietnam Red Cross Society had deployed emergency aid in cash and goods worth nearly VND 10 billion (US$4.3 million) to assist more than 10,300 households, equivalent to more than 41,500 beneficiaries, in 15 provinces and cities affected by the typhoon. The U.S. provided US$1 million in humanitarian assistance to support Vietnam's efforts to respond to the impacts of Typhoon Yagi; the aid built upon long-standing support to the GoV and Vietnam Red Cross Society.[299] The Vietnam Red Cross Society received a US$100,000 grant from the Red Cross Society of China; the grant was ceremonially handed over by the PRC's Ambassador on 23 September 2024. Vietnamese organizations, businesses, and individuals donated VND 16 billion (US$646,730) through the Vietnam Red Cross Society.[300]

The Vietnam Red Cross Society is also active in DRR activities. With support from the German Red Cross, it led a forecast-based financing (FbF) project, FbF Ready, to address the effects of heat waves in the urban areas of Hanoi, Haiphong, and Da Nang. FbF Ready uses the science of weather and climate to anticipate possible impacts in risk-prone areas and mobilize resources automatically before an event. Based on this, the FbF Ready project established a set of anticipatory actions linked to defined triggers to mitigate the growing impacts on vulnerable people of heat waves, which are increasing in frequency and severity in Vietnam due to urbanization and climate change.[301]

U.S. Government Agencies in Vietnam

The U.S. Mission to Vietnam manages six American Spaces that serve as outreach platforms for Vietnamese students, young professionals, and the wider community. They include the American Centers in Hanoi and Ho Chi Minh City, and four partner American Spaces in Hanoi, Thai Nguyen, An Giang, and Can Tho. In 2023, Vietnam's American Spaces welcomed approximately 40,000 students and young professionals with over 750 programs. The American Spaces in Vietnam are designed to highlight the close bilateral ties between the two countries and offer opportunities for Vietnamese people to build new skills, learn more about American culture, and access educational resources about the U.S.[302]

When the U.S. conducts Foreign Disaster Relief (FDR), per Joint Publication 3-29, the U.S. lead federal coordinator is the U.S. Agency for International Development (USAID). U.S. DoD support to disaster response operations can be requested on an as-needed basis, when the U.S. military can provide a unique capability that other first responders, including those of the host nation and international humanitarian partners, have insufficient capacity to provide. Relief supplies are pre-positioned primarily in implementing partners' warehouses and in five warehouses around the world to enable a rapid response to any location globally.

The U.S. will conduct FDR following a Declaration of Humanitarian Need (DHN) issued by the U.S. Ambassador or Chief of Mission in the affected country based on four criteria: 1) There is evidence of significant unmet humanitarian need; 2) U.S. Government humanitarian assistance will save lives, reduce human suffering, and mitigate the impact of humanitarian emergencies on the most vulnerable; 3) The host country requests or will accept international assistance; and 4) Responding aligns with U.S. Government interests and humanitarian objectives.

This DHN permits USAID to begin emergency response activities. When civilian

and host nation military response capacity is overwhelmed and the U.S. military has a unique capability, USAID may request supplemental FDR support from DoD for a limited period. These requests occur in less than 5% of all official U.S. Government responses. Interagency requests for DoD support to FDR are transmitted to the Secretary of Defense (SecDef) in an official memorandum (Executive Secretariat Memo), which is required to leverage such DoD support. With SecDef approval, DoD components may provide non-reimbursable foreign disaster relief support to USAID using available Overseas Humanitarian, Disaster, and Civic Aid (OHDACA) funds.

The DoD capabilities most requested by USAID during a disaster response are logistics and airlift support rather than direct assistance to beneficiaries. OHDACA steady-state projects are distinct from FDR activities, and their implementation requires approval by the relevant U.S. Ambassador and DoD combatant command and coordination with the local or regional USAID mission.

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Laws, Policies, and Plans on Disaster Management

Vietnam has a strong disaster risk reduction and management legal framework, which was strengthened significantly with the passage of the 2013 Law on Natural Disaster Prevention and Control. The cornerstone law provided the core principles and components of the DRM system, consisting of prevention, response, and remediation of disaster damage and consequences. It was the first law to cover all natural hazards in the country.[303] The 2013 law included important definitions, specified the roles, rights, and obligations of key stakeholders, outlined organizational cross-sectoral arrangements, and included provisions for international organizations. Prior to that, the 2006 Law on Dike Management and its amendments regulated aspects of flood control and prevention - planning, investment, management, repair, upgrading, protection, maintenance, and use of flood control infrastructure. This focus reflected the extent to which floods have dominated the hazards leading to disaster in Vietnam. Both the 2006 and 2013 laws were amended via Law No. 60/2020/QH14 on 17 June 2020;[304] the amendments addressed more areas of DRR in an overarching manner that aimed to bring together the main elements of the disaster response and risk management system.[305]

A new **2023 Civil Defense Law**, No. 18/2023/QH15, addressed preparation and mitigation of both conflict and natural disasters, including the provision to establish the National Steering Committee for Civil Defense.[306] During transition activities to establish the committee and fully implement the law, the national focal point for implementing disaster prevention activities continues to be MARD.[307] Moreover, MARD merged with MoNRE to become the MAE, operational 1 March 2025.[308]

All DRM legal documents are too numerous to completely list, as there are more than 150 documents or regulations related to flood and storm control alone. Many of the legal documents are sub-laws that address limited aspects of disaster impacts but not at the strategic level. Listed below are the more significant by-laws that have been revised and approved relating to DRR, DM, prevention, and control since the cornerstone 2013 Law on Natural Disaster Prevention and Control was passed:[309]

- Law on Hydrometeorology[310] (2015, amended 2016)[311]
- Law on Fire Prevention and Fighting (2001)[312]
- Law on Dikes (2006)[313]

- Law on Natural Disaster Prevention and Control (2013)[314]
- Policies to support poor households building storm- and flood-resistant houses (2014; 2024)[315]
- Decree on supporting agricultural production in areas damaged by natural disasters and epidemics (2017)[316]
- Decree on Regulation of Emergency Response and Search and Rescue (2017)[317]
- Law on Irrigation (2017)[318]
- Decision on Promulgation of Functions, Mandate and Responsibilities VDDMA (2017)[319]
- Decree on Civil Defense (2019)[320]
- Amended Law on Natural Disaster Management and Law on Dikes (2020)[321]
- Decree on Management of Foreign Grant Aid and Official Development Assistance (2020)[322]
- Decision on natural disaster forecast, warning, information transmission, and severity levels (2021)[323]
- Guidelines for Local Natural Disaster Management Planning (2021)[324]
- Decree Elaborating the Law on Natural Disaster Management and Law on Dikes (2021)[325]
- Decree on Establishment and Management of Disaster Management Funds (2021)[326]
- Guidance on Integration of Natural Disaster Prevention into Sectoral and Socioeconomic Development (2021)[327]
- Regulations on natural disaster prevention and control in natural resource exploitation zones, urban areas, tourism, historical relics, rural residential areas, and technical infrastructure (2021)[328]
- National program on community-based disaster risk management and awareness raising (2021)[329]
- The collection of statistics and assessment of damage caused by disasters (2015)[330]

The founding of VDDMA in 2017 helped significantly with DRM monitoring, coordination, and policy development. Within VDDMA, the Department of Science, Technology, and International Cooperation was established to support the implementation of new laws. The laws have facilitated better coordination and integration of the international community's support and funding, as evidenced during the 2020 floods in central Vietnam. DRM has also been better integrated into local socioeconomic development plans at the sub-national level.[331]

National Strategy on Natural Disaster Prevention and Control through 2030 with vision to 2050

The current national DRM strategy was approved in 2021. The **National Strategy on Natural Disaster Prevention and Control through 2030 with vision to 2050** reflects a shift from disaster relief and response to risk reduction, and it states key objectives and targets for reducing disaster risk and enhancing community resilience. The strategy strives to integrate DRR into state management functions, link DRR to socio-economic development, and promote a decentralized approach to DRR in line with the "four on-the-spot" motto (leadership, human resources, materials, and logistics on-the-spot). The NSNDPC also directly contributes to achieving the priorities and targets of the Sendai Framework and CCA objectives of the Paris Agreement and the Sustainable Development Goals. National strategy targets include:

- Reducing disaster damage
- Reducing the loss of lives due to flash floods and landslides by 50% compared to the 2011-2020 period
- Ensuring people's safety
- Having 100% of national, regional, and provincial directing and operating agencies for natural disaster prevention and control complete the natural disaster prevention database.[332]

The government has been implementing important actions laid out in the strategy, though technical and financial support is needed from the international community to reach all the goals and objectives by 2030. There are also numerous laws and by-laws relating to CCA, the main thrust of which is represented in the

National Strategy on Climate Change to 2050, which aims to enhance community resilience to the risks posed by hazards and climate change. [333]

National Programme on Community-Based Disaster Risk Management

The National Programme on Community-Based Disaster Risk Management has been supporting DRM capacity building at local levels. The program originally covered 2009-2020 but was extended to cover 2021-2030. At the sub-national level, it is the basis for inter-sectoral work, knowledge management, coordination, and identification of technical input needs. Feedback from international NGOs indicates the program substantially reduced disaster risk at the community level. Targets include:

- By 2025: Completion of research and finalization of documents guiding mechanisms and policies related to community awareness raising and community-based DRM activities from central to local levels.
- By 2025: Teachers and trainers at all levels are fully equipped with knowledge about disasters and have the capacity to organize and implement activities to raise awareness of disasters and disaster response skills in their communities.
- By 2025: People in areas with frequent storms, flash floods, landslides, floods, and inundation are equipped with knowledge and skills for prevention and response to disasters.
- By 2030: 100% of officials, public employees, and individuals of the four target groups participate in training on national defense and security; reputable people in the residential community disseminate and enhance knowledge on public awareness and community-based DRM in disaster prevention and control.
- By 2030: 100% of people in communes with frequent disasters (storms, flash floods, landslides, floods, inundations, droughts, saltwater intrusion, etc.) and at least 50% of people in other areas are provided with disaster knowledge and prevention skills, especially for frequently occurring hazards.
- By 2030: 100% of general educational institutions incorporate DRR into teaching curricula.
- By 2030: 100% of communes develop and approve disaster prevention and control plans with the involvement of the community.
- By 2030: 100% of households receive sufficient information on disasters and information on disaster prevention and control steering work.[334]

Disaster Management Communications

Vietnam has not only strengthened its early warning system (EWS) but has also developed robust community and social organizational networks that have been pivotal in raising community awareness about DRR. When disasters occur, Short Message Service (SMS) messages sent through telecommunications carriers and local social networks widely disseminate warnings and instructions to the potentially affected populations.

VDDMA implements the National Programme on Community Awareness Raising as well as community-based DRM programs and projects. Trainings are targeted at provincial-level DM personnel and community members. As of 2022, a reported 3,387 community trainings had been conducted, with a total of 3,725,629 participants. Social organizations, including the VWU, Youth Union, Vietnam Red Cross Society, Chamber of Commerce and Industry, Farmer's Union, and Fatherland Front, have large public and community outreach and play key roles in getting DRR messages out and improving disaster preparedness behavior.[335]

Early Warning Systems

Vietnam's EWS is part of a national network managed by the MoNRE,[336] which has merged with MARD to create the new MAE, scheduled to be operational 1 March 2025.[337] Vietnam has made significant improvements in multi-

hazard forecasting and monitoring, in line with the National Strategy on Disaster Risk Management, which highlighted the importance of strengthening forecasting for floods, storms, droughts, earthquakes, and tsunamis.[338] Many EWS improvements have been made through radar technology with multi-transmission capability, enabling data harmonization and exchange among regional, provincial, and local stations. Investment in specialized monitoring systems is required to address localized hazards such as flash floods. There is also a need to prioritize crucial early warnings to effectively reach vulnerable communities through avenues like community radio broadcasts and mobile phone alerts.[339]

Established in 2018, the **Viet Nam Disaster Monitoring System (VNDMS)** is an integrated platform that analyzes real-time data and provides early warning information for various stakeholders and decision-makers. It assists with applying new technology and digital transformation in DRM and connects to other integrated real-time and near-real-time nationwide monitoring databases, including:

- Nearly 30,000 database systems on hydrometeorology, reservoirs, surveillance cameras, and ships operating at sea
- Spatial and non-spatial data on housing, disaster prevention civil works, community centers, schools, hospitals, clean water, and sanitation facilities
- Data on damage, losses, and recovery needs

The national hydrometeorological forecasting and warning system is responsible for issuing bulletins, forecasting, and warnings of hydrometeorological events. The national system is organized into three levels — central, regional, and provincial. Since 2016, when MoNRE issued Circular 41/2016/TT-BTNMT regulating the technical process for forecasting and warning of dangerous hydrometeorological phenomena, the number of forecasted types of hazards has increased significantly.[340] As of 2022, the government had invested in the system contributing to upgrades of 10 weather radar stations and 18 lightning positioning stations. Storms, tropical depressions, heat waves, and cold waves are forecasted from one to three days in advance and warned from three to five days in advance. Flash floods, whirlwinds, thunderstorms, lightning, and hail are warned from 30 minutes to three hours before occurrence. Disaster forecast and warning information is provided in a timely manner to disaster prevention and control agencies and communities to significantly reduce human and property damage.[341] According to Decision No. 18/2021/QD-TTg passed in 2021, natural disasters that must be forecast and alerted include storms and tropical depressions, heavy rainfall, landslides, riverine floods, flash floods, extreme heat, droughts, saltwater intrusion, drought-induced ground subsidence, strong winds, fog, sea level rise, tornado, lightning, hail, damaging cold, frost, wild fires, earthquakes over 3.5 magnitude, and tsunamis.[342] As of March 2025, Vietnam's EWS included a network of 217 surface meteorological monitoring stations, 2,000 automatic rain stations, 426 hydrological stations, 27 oceanographic meteorological stations, and 10 weather radar stations.[343]

The EWS disseminates messages using emergency television and radio broadcasts, SMS texts, websites, and even loudspeakers when needed.[344] Some of the initial SMS disaster early warning initiatives grew out of Save the Children partnering with local government agencies and mobile companies in 2016 to provide weather information to the coastal provinces of Thua Thien Hue, Quang Nam, and Da Nang. In that pilot initiative, volunteer focal points, drawn from community disaster action team members and heads of households, monitored floodwater levels, received immediate SMS warnings, advised people on evacuation actions, and sent information back about conditions in their area to improve data collection, mapping, and government decision-making. Any member of the public can reach out to government agencies to register their mobile number to receive free SMS information.[345] According to the GoV in 2022, 129.26 million SMS text messages have been sent through telecommunication carriers and 242.4 million messages via the social

network Zalo to provide disaster warnings and instructions to subscribers in areas affected by heavy rains and storms.[346]

The **National Centre for Hydro-Meteorological Forecasting** (NCHMF) was established on 14 June 2023 by MoNRE Decision 1600/QD-BTNMT, which stipulated its tasks and authorities under the General Department of Hydrometeorology.[347] It is responsible for forecasting and early warning of hydrometeorological disasters. Since 2015, the NCHMF has continued to develop its capabilities to support greater risk understanding at the national, provincial, and community levels. Through its network across nine regions and 54 provinces, it provides reliable scientific data and hazard-specific and general forecast information to national sectors for nationwide policy and decision-making. The General Department of Meteorology and Hydrology has directed the national hydrometeorological forecasting and warning system to improve the form and content of the forecast and warning bulletins in a detailed manner, particularly at the district and commune level, toward impact-based forecasting and risk-based warning. It also provides hydrometeorological information to central ministries, agencies, and localities for decision and policymaking. With MoNRE and MARD having merged in March 2025, the NCHMF now falls under the new MAE.[348]

There are various initiatives underway to improve flood management, dam safety, and risk reduction. VDDMA is working with the Thua Thien Hue Provincial People's Committee on a flood-management project to improve the operation of reservoirs using a water-related DM information system. The University of Water Resources is implementing a Dam Safety Project that provides advanced tools to assess dam conditions and the resulting multi-hazard, disaster risk downstream – particularly landslides, waves, and floods – for further investment, maintenance, and management. VDDMA has conducted research and introduced an approach for child-centered risk assessments to include the development of accurate, child-specific indicators to analyze the risk to children when disasters occur. Training courses and pilot studies were conducted in numerous provinces covering multiple hazards, including drought, floods, landslides, and mudflows.[349]

Vietnam's **Institute of Meteorology, Hydrology and Climate Change** (IMHEN) in theory could issue hydrometeorological forecasts, but in practice such forecasts come from NCHMF.[350] IMHEN has been involved in numerous studies covering basic and theoretical research, as well as scientific and technological applications. Its studies have looked at climate change processes and modeling, Southeast Asian Monsoon, climate change and sea level rise scenarios, climate change impact assessments, climate risk reduction studies, and mainstreaming climate change into policies and development. IMHEN has also conducted and participated in sustainable development activities with specifically designed programs, such as assessments of climate change impacts on agriculture, water resources, and coastal zones.[351]

The Earthquake Information and Tsunami Warning Centre, under the Institute of Geophysics, was established in September 2007. The center represents Vietnam as a member state in the Pacific Tsunami Warning and Mitigation System (PTWS). It also serves as a national tsunami warning center in PTWS and has designated national contacts and focal points for receiving information on regional tsunami alerts, advisories, and mitigation activities from PTWS and Japan Meteorological Agency. The center's tasks include:

- Observing earthquake data and acquiring sea level and other data in Vietnam's territories and waters
- Analyzing, processing, controlling, and verifying data on earthquakes and tsunamis in Vietnam and adjacent regions
- Issuing earthquake and tsunami warning bulletins in accordance with government regulations
- Cooperating with regional and international earthquake information and tsunami warning systems
- Carrying out training and public awareness activities to provide communities with

knowledge and guidelines for earthquake and tsunami preparedness and prevention[352]

According to the Director of the Institute of Geophysics, the national earthquake monitoring system includes nearly 40 stations nationwide. Additionally, local stations monitor induced seismic activity from hydro-electric reservoirs in the northwest and Quang Nam Province. In Kon Tum Province, the Institute also established eight local monitoring stations, which provide rapid, accurate earthquake data that is essential for assessing seismic activity, dam safety, and reservoir operations.[353]

The **Disaster Management Policy and Technology Center (DMPTC)** was established by merging the Disaster Management Center and Water Resource Consultant and Technology Transfer Center, in accordance with Decision No.346/QĐ-PCTT dated 18 August 2017. DMPTC is responsible for supporting, implementation of State Management and specific tasks in natural disaster prevention, mitigation, and CCA nationwide.[354]

Emerging Trends in EWS

Impact-based Forecasting and Warning (IbFW) shifts the focus from predicting weather conditions to anticipating their potential impacts on society. Instead of providing data on temperature, precipitation, wind speed, etc., as traditional forecasts do, IbFW assesses the likely effects of these weather conditions on human activities, infrastructure, and the environment. This innovation provides more actionable information, enabling communities and decision-makers to better prepare for and mitigate the consequences of severe weather events. Vietnam participates in the World Meteorological Organization's (WMO) **Severe Weather Forecasting Programme** (SWFP) – Southeast Asia, which in recent years has focused on impact-based forecast and warning services and strengthening multi-hazard early warning systems.[355] The SWFP strengthens capacities of national meteorological and hydrological services in developing countries to deliver improved forecasts and warnings of severe weather to save lives and livelihoods and reduce damage. In 2011, the Viet Nam Meteorological and Hydrological Administration (VNMHA), based in Hanoi, was chosen to be a Regional Forecasting Support Center and, as such, provides guidance for short-range (1-2 days) and medium-range (3-5 days) warnings for strong wind and heavy rainfall.[356] Additionally, the Asian Disaster Preparedness Center (ADPC) supported the VNMHA and VDDMA to establish IbFW by piloting in two cities, My Tho and Nam Dinh. This brought sectoral agencies together to strengthen institutional partnerships and to maximize their existing expertise on hazard forecasting, risk assessment, and early warning. A readiness assessment indicated that improvement was needed with understanding risk, risk assessment, dissemination, and verification. As of July 2024, a decision support tool for IbFW was being trialed.[357]

In 2022, VNMHA launched the **Southeast Asia Flash Flood Guidance System** (SeAFFGS), in partnership with the WMO, to provide improved early warnings for flash floods. Operated by the VNMHA, the system will provide flash flood guidance and forecasts for Vietnam. Moreover, as VNMHA was designated the SeAFFGS regional center, it will provide forecasts, data, and training for Cambodia, Laos, and Thailand.[358] Flash floods are more difficult to accurately predict than large-river floods as they occur quickly and typically on smaller spatial scales. Flash flood forecasts are usually based on focusing on intense rainfall and rainfall on saturated soils. SeAFFGS is the first Flash Flood warning system to use extremely short forecast data and incorporate numerous data sources across Southeast Asia.[359]

Vietnam continues to make improvements to its EWS, in line with the UN's Early Warnings for All initiative, which facilitates the development of multi-hazard early warning systems. On 24 March 2025, NCHMF Director Mai Van Khiem stated, "The Center will further coordination with domestic agencies and strengthen international cooperation to

successfully implement the UN's Early Warning for All, aimed to ensure universal protection from hazardous weather, water, or climate events through life-saving early warning systems by the end of 2027."[360]

Information Sharing

Sharing information in disaster response is critical. No single responding entity, whether among the host government, international organizations, NGOs, or assisting governments, can be the source of all required information. Sharing information with other responders and disaster-affected people is crucial to a timely and effective response. This section provides country-specific, humanitarian, regional, and U.S. information sources.

Vietnam Information Sources

Viet Nam Red Cross Headquarters
No. 82, Nguyen Du, Hai Ba Trung District, Hanoi City
Tel: 024-3 8224030
Website: *https://redcross.org.vn/en/*
Email: *international@redcross.org.vn*
Facebook: *https://www.facebook.com/redcross.org.vn/*
TikTok: *https://www.tiktok.com/@hoichuthapdovietnam*
YouTube: *https://www.youtube.com/channel/UCXWWqglOirlUMy1cdKufsAQ/featured*

Vietnam Earthquake Information and Tsunami Warning Center
Building A8, 18 Hoang Quoc Viet Street, Cau Giay District, Hanoi, Vietnam
Tel: +84 (4) 39 94 03 17
Fax: +84 (4) 37 91 45 93
Website: *http://igp-vast.vn/index.php/en/organization/vietnam-earthquake-information-and-tsunami-warning-center*
Email: *dongdatsongthan@igp-vast.vn*

National Centre for Hydro-Meteorological Forecasting (NCHMF)
Floor 12, No. 8, Phao Dai Lang Street, Lang Thuong Ward, Dong Da District, Ha Noi City
Tel: +84-24-38244916; +84-24-32673199 (Line 701)
Website: *https://www.nchmf.gov.vn/kttv/*
Email: *vtttkttv@monre.gov.vn*

Institute of Meteorology, Hydrology and Climate Change (IMHEN)
No. 23, Lane 62 - Nguyen Chi Thanh Street - Lang Thuong Ward - Dong Da – Hanoi
Tel: +84 24 - 37 731 410 / +84 24 - 37 756 613
Website: *http://www.imh.ac.vn*
Email: *khoahoc.imhen@monre.gov.vn*; *khoahocimh@googlegroups.com*

Disaster Management Policy and Technology Center (DMPTC)
No.54 - 102 Truong Chinh Street, Dong Da, Ha Noi
Tel: +84-436291511, Fax: +84-437336647
Email: *trungtamcsktpctt@gmail.com*
Website: *www.dmptc.gov.vn*

International Humanitarian Information Sources

United Nations Office for the Coordination of Humanitarian Affairs (OCHA) Regional Office for Asia and the Pacific (ROAP)

UN OCHA's ROAP seeks to optimize the speed, volume, and quality of humanitarian assistance and coordinates emergency preparedness and response throughout the region in support of national governments. ROAP covers 41 countries with whom it partners for coordinated and effective international responses to emergency situations.
Website: *https://www.unocha.org/roap*
For OCHA situation reports, click on "Subscribe" button on bottom of page.
Facebook: *https://www.facebook.com/UNOCHA/*
X (formerly Twitter): @OCHAAsiaPac

United Nations Viet Nam Country Team
Green One UN House
304 Kim Ma, Ba Dinh, Hanoi, Viet Nam
Tel: +84-24-38500100
Website: *https://vietnam.un.org/en*

FAO Website: *https://www.fao.org/vietnam/en/*
IOM Website: *https://vietnam.iom.int/en*
UNDP Website: *https://www.undp.org/vietnam*
UNFPA Website: *https://vietnam.unfpa.org/en*
UNICEF Website: *https://www.unicef.org/vietnam/*
WHO Website: *https://www.who.int/vietnam*

ReliefWeb

ReliefWeb is a service of UN OCHA that consolidates information and analysis from organizations, countries, and disasters for the humanitarian community.

A subsection of ReliefWeb is ReliefWeb Response (RW Response). It aggregates operational content from other humanitarian action platforms to provide an authoritative source of information. The goal is to ensure that humanitarians can share, find, and re-use critical information quickly and efficiently.

Website: *https://reliefweb.int/*
RW Response: *https://response.reliefweb.int/*

PreventionWeb

PreventionWeb is provided by UNDRR to consolidate DRR information into an online, easy to understand platform.

Website: *https://www.preventionweb.net/*

International Federation of Red Cross and Red Crescent Societies

IFRC is the world's largest humanitarian organization, comprised of 191 National Societies, including the Vietnam Red Cross Society, a secretariat in Geneva, Switzerland, and over 60 delegations around the world. The IFRC carries out relief operations to assist victims of disasters and combines this with development work to strengthen the capacities of the National Societies. IFRC's work focuses on four core areas: promoting humanitarian values, disaster response, disaster preparedness, and health and community care.[361] The IFRC supports the Vietnam Red Cross Society by providing technical assistance, financial support, and training on a wide range of topics relating to DRM and CCA. It supports capacity development with resource mobilization, monitoring and evaluation, and other activities.[362]

Website: *https://media.ifrc.org/ifrc; https://go.ifrc.org/*
Facebook/Instagram/TikTok/LinkedIn/X/YouTube: @ifrc

International Committee of the Red Cross

ICRC is an impartial, neutral, and independent organization whose exclusively humanitarian mission is to protect the lives and dignity of victims of armed conflict and other situations of violence and to provide them with assistance. It also works to prevent suffering by promoting and strengthening humanitarian law and universal humanitarian principles.[363] In Vietnam, the ICRC provides financial and technical support to the Vietnam Red Cross Society, works with the armed forces to organize courses on international humanitarian law, and works with academic institutions to incorporate international humanitarian law into curricula.[364] Vietnam is covered by the ICRC's Regional Delegation in Bangkok.

Website: *https://www.icrc.org/en*
Instagram/Facebook/X/TikTok/LinkedIn: @ICRC
YouTube: @ICRCFilms

Global Disaster Alert and Coordination System (GDACS)

GDACS is a cooperation framework among the UN, the European Commission, and disaster managers worldwide to improve alerts, information exchange, and coordination in the first phase after major sudden-onset disasters.

Website: *https://www.gdacs.org/alerts/*

Virtual OSOCC

The Virtual OSOCC is a real-time online coordination tool for disaster response professionals from urban search and rescue teams, national authorities, and regional and international organizations.

Website: *https://vosocc.unocha.org/*
The latest alerts can be found here: *https://www.gdacs.org/Alerts/default.aspx*
To subscribe: *https://www.gdacs.org/About/contactus.aspx*

ThinkHazard!

ThinkHazard! is a website that provides detailed information on a country. Information is provided on Vietnam regarding hazards, country assessments, projects, EWS, and other resources.

Website: *https://thinkhazard.org*

Humanitarian Country Teams (HCT)

HCT is a strategic and operational decision-making and oversight forum established and led by the Humanitarian Coordinator in each country. It is generally comprised of representatives from UN agencies including the IOM, international NGOs, and the IFRC and the National Red Cross/Crescent Society. During a disaster response, HCTs often produce a Situation Report (SitRep), usually in conjunction with OCHA.

Most HCT SitReps can be found through ReliefWeb: *https://reliefweb.int/*

Humanitarian Data Exchange (HDX)

HDX is an open platform for sharing data across crises and organizations. Launched in 2014 with the goal of centralizing humanitarian data for easy access and analysis, HDX is managed by OCHA's Center for Humanitarian Data in The Hague.

Website: *https://data.humdata.org/*

Regional Information Sources

ASEAN Disaster Information Network (ADINet)

ADINet is owned by ASEAN member states and operated by the AHA Centre. It serves as a repository of information concerning hazards and disasters that have happened in the region. ADINet is open for public use, and the public can submit information about any hazard or disaster to the AHA Centre, which verifies and validates submitted information to ensure accuracy and may add new information when relevant and necessary. ADINet includes disasters that have occurred since 2012.[365] Vietnam is an ASEAN member state and publishes reports of Vietnam disasters, usually based upon information received from Vietnam government agencies.[366]

AHA Centre

Graha BNPB, 13th floor, Jl. Raya Pramuka Kav.38
East Jakarta 13120 Indonesia
Tel: 62-21-21012278 or 62-21-21012287
Email: info@ahacentre.org
Website: *www.ahacentre.org*
Facebook: ahacentre
X: @AHACentre
Instagram: @ahacentre

Changi Regional Humanitarian Assistance and Disaster Relief (HADR) Coordination Centre (RHCC)

Changi RHCC was launched in September 2014 to support the military of a disaster affected state in coordinating assistance with assisting foreign militaries. It aims to provide open, inclusive, and flexible platforms that allow both regional and extra-regional militaries to work together effectively in a multinational disaster response. Changi RHCC manages the OPERA CIS web portal to broadcast the updated situation status of multinational military disaster responses to minimize duplication and gaps in the provision of foreign military assistance. Vietnam is a Changi RHCC partner.

Website: *https://www.changirhcc.org/*
To subscribe to RHCC Weekly and Spot Reports, email: *Changi_RHCC@defence.gov.sg*

U.S. Government Sources

Pacific Disaster Center (PDC Global)

PDC's DisasterAWARE features a PDC-developed global exposure model, which is among the world's most powerful, to provide near real-time analytics about potential impacts, humanitarian needs, and other key indicators to enable effective anticipatory acti on during large-scale hazard events. The system includes global early warning, hazard monitoring, and situational awareness for all types of natural and technical hazards worldwide and is free to disaster management practitioners at: *https://disasteraware.pdc.org*

In coordination with Vietnam, in 2019, PDC published the Viet Nam National Disaster Preparedness Baseline Assessment and provincial risk profiles for all provinces in the country. They are available for download on PDC's website.

Vietnam risk profiles: *https://www.pdc.org/reports-and-publications/?_country_dropdown=vietnam*

PDC is also advancing the use of artificial intelligence for disaster risk reduction through its AI for Humanity™ initiative. It also supports the humanitarian and disaster response community with training, best practices, and exercise support.[367]

Website: *https://www.pdc.org/*

Joint Typhoon Warning Center

JTWC provides advanced warning for U.S. Government agencies and organizations.

Website: *https://www.metoc.navy.mil/jtwc/jtwc.html*

Daniel K. Inouye Asia-Pacific Center for Security Studies (DKI-APCSS)

DKI-APCSS is a U.S. DoD institute that addresses regional and global security issues by inviting military and civilian representatives of the U.S. and Asia-Pacific nations to its program of executive education and workshops.

Website: *https://dkiapcss.edu/*

The Center for Excellence in Disaster Management and Humanitarian Assistance

The CFE-DM is a U.S. DoD organization established by the U.S. Congress in 1994 and is a direct reporting unit to USINDOPACOM. CFE-DM provides training and education to help U.S. and foreign military personnel navigate complex issues in disaster management and humanitarian assistance. They produce country focused disaster management reference handbooks, after action reports, best practices, and lessons learned for advancement in response coordination. CFE-DM also works to improve cross-coordination, reduce duplication of efforts, and promote U.S. involvement in civil-military consultations and dialogues with relevant humanitarian and disaster response parties such as UN OCHA and the Changi RHCC. CFE-DM provides resources and updates at its website, as well as via their Facebook (cfedmha) and X (formerly Twitter) (@cfedmha) accounts.

Website: *https://www.cfe-dmha.org/*

Disaster Management Reference Handbooks are available for download at: *https://www.cfe-dmha.org/Publications/Disaster-Management-Reference-Handbooks*

Civil-Military Coordination in Foreign Disaster Relief Missions: Best Practices for Information Sharing is available here: *https://www.cfe-dmha.org/Publications/Best-Practices-Pamphlets*

Other best practices pamphlets and information resources are available at: *https://www.cfe-dmha.org/Publications*

INFRASTRUCTURE

GoV efforts to streamline its administrative apparatus extends to agencies managing infrastructure. In February 2025, the Commission for the Management of State Capital at Enterprises (CMSC) transferred the management of state-owned groups and corporations back to relevant ministries, notably to the Ministry of Finance, which merged with the Ministry of Planning and Investment and received 18 state-owned groups and corporations.[368]

Transport

There are five national plans related to transport, for roadways, aviation, seaports, waterways, and railways; they all lay out roadmaps for infrastructure development by 2030 and further expansion by 2050.[369]

Airports

The Civil Aviation Administration of Viet Nam (CAAV) handles civil aviation and falls under the Ministry of Transport. Vietnam has a network of at least 22 civil airports, including 10 international airports. However, in June 2023, the GoV approved the development of 30 airports by 2030 (14 international and 16 domestic) when it issued Decision 648/QD-TTg on the master plan on development of the national system of airports and airfields for the 2021-2030 period, with a vision toward 2050.[370] By 2050, Vietnam expects to have 33 airports including 14 international airports.[371] The two main transport hubs will continue to be in Hanoi and Ho Chi Minh City.[372] There are also numerous additional airstrips for military, police, or civil use.

In April 2024, the Ministry of Transport proposed accelerating the development of the 30 airports to be completed by 2025.[373] However, in November 2024 a revised plan was approved to extend to the end of 2026 the completion of Long Thanh international airport, which is under construction in Dong Nai Province's Long Thanh district, approximately 40 km (25 mi) east of Ho Chi Minh City.[374] Logistics centers will be set up around airports with cargo demand of more than 250,000 tons annually.[375]

Vietnam is the world's fifth fastest-growing aviation market and is forecast to cater to 150 million passengers by 2035. Noi Bai International Airport, near Hanoi, is the busiest airport in the north. A number of international and domestic airlines operate out of this airport, including Vietnam Airlines, Pacific Airlines, AirAsia, Cathay Pacific, Hong Kong Airlines, Thai Airways, Lao Airlines, and Tiger Airways.[376] The country's busiest airport is Tan Son Nhat International Airport, near Ho Chi Minh City. It accounts for nearly two-thirds of international arrivals.[377] The Hanoi – Ho Chi Minh City route was the world's fourth busiest domestic route in 2024, recording 10.6 million seats.[378]

Table 2 lists Vietnam's main international airports.[379] Not included are these planned airports intended for international use by 2030:

- Long Thanh international airport
- Tho Xuan airport — included in the domestic airport table; plans are to upgrade it to an international airport by 2030.
- Chu Lai airport — included in the domestic airport table; plans are to upgrade it to an international airport by 2030.

Table 3 lists Vietnam's main domestic airports.[380] Not included are the following planned airports for domestic civil use by 2030:

- Bien Hoa — this military airport is to be converted for both civil and military use by 2030. Located near Ho Chi Minh City, it may help alleviate the burden on Tan Son Nhat airport.[381]
- Thanh Son — this military airport in Ninh Thuan Province is to be converted for both civil and military use by 2030. It may help alleviate the burden on Cam Ranh airport, the nation's fourth busiest airport in the neighboring Khanh Hoa Province.
- Na San — this military airbase is to be

expanded into a 4C-class domestic airport in the northwest's Son La Province.
- Lai Chau — a 3C-class airport is to be built in Tan Uyen town, Lai Chau Province.
- Sa Pa — a 4C-class airport is to be constructed on 371 hectares in northwestern Vietnam's Lao Cai province.
- Quang Tri — airport construction began in July 2024 on 276 ha (916 acres) in central Vietnam's Quang Tri Province.
- Phan Thiet — plan to become a 4E-class airport in Binh Thuan Province in the southern central region.[382]
- Go Gang Airport – Ba Ria-Vung Tau

International Airport	Location	IATA/ ICAO Code	Runway Direction & Length	Runway Surface	Elevation	Notes
Noi Bai International Airport	Hanoi City, 45 km (28 miles) north of city center. 21°12'50.4"N, 105°48'10.8"E	HAN/ VVNB	11L/29R: 3,800 m (12,466 ft). 11R/29L: 3,800 m (12,466 ft).	Concrete	12 m (39 ft)	Largest airport in the north.
Tan Son Nhat International	Ho Chi Minh City, 6 km (4 mi) 10°49'08"N, 106°39'07"E	SGN/ VVTS	07L/25R: 3,048 m (10,000 ft) 07R/25L: 3,800 m (12,468 ft).	Concrete	10 m (33 ft)	Country's busiest airport. Capacity is 15-17 million passengers per year.
Da Nang	Da Nang, 2 km (1.2 mi). 16°02'38"N, 108°11'58"E	DAD/ VVDN	17L/35R: 3,500 m (11,483 ft). 17R/35L: 3,048 m (10,000 ft).	Asphalt	10 m (33 ft)	3rd busiest airport in Vietnam. Transportation hub in central region.
Cam Ranh	Cam Ranh town, 30 km (19 mi) from Nha Trang city, Khanh Hoa province. 11°59'53"N, 109°13'10"E	CXR/ VVCR	02/20: 3,048 x 46 m (10,000 x 150 ft).	Concrete	12 m (40 ft)	Handles all domestic and international flights to Nha Trang. Old Nha Trang airport, located in Nha Trang city, is not used for commercial flights.
Phu Quoc	Kien Giang, Phu Quoc Island, 10°10'18"N, 103°59'28"E	PQC/ VVPQ	10/28: 3,000 m (9,843 ft).	Asphalt	11.4 m (37.4 ft)	Main international airport on Phu Quoc Island.
Van Don	Doan Ket commune, Van Don district, Quang Ninh province, 50 km (31 mi) from Ha Long City 21° 7' 4" N, 107° 24' 51" E	VDO/ VVVD	3,600 x 45 m (11,811 x 148 ft).		8 m (26 ft)	Operational from December 2018. International flights currently operate as charter flights. Provides access to Ha Long Bay tourism destination; eased congestion via Noi Bai and Cat Bi airports. 4E ICAO standard. Grade II military airport.
Cat Bi	Hai Phong, 8 km (5 mi) 20° 49' 9" N, 106° 43' 29" E	HPH/ VVCI	07/25: 3,050 x 50 m (10,007 x 164 ft).	Asphalt	1.8 m (6 ft)	
Phu Bai	Hue, 15 km (9 mi) 16° 24' 6" N, 107° 42' 10" E	HUI/ VVPB	09/27: 2,675 x 40 m (8,776 x 131 ft).		15 m (49 ft)	
Can Tho	Can Tho, 8 km (5 mi) 10° 5' 7" N, 105° 42' 43" E	VCA/ VVCT	06/24: 3,000 x 45 m (9,843 x 148 ft).		3 m (9 ft)	Capacity: 3-5 million passengers annually. Formerly Tra Noc Airport.
Lien Khuong	Da Lat, 30 km (18 mi) Duc Trong District, Lam Dong Province 11° 45' 2" N, 108° 22' 25" E	DLI/ VVDL			962 m (3,156 ft)	Largest of four airports in Lam Dong Province.
Vinh Airport	Vinh City, Nghe An Province 18° 44' 12" N, 105° 40' 15" E	VII/ VVVH	17/35: 2400 x 45 m (7874 x 148 ft).		6 m (20 ft)	Majority of flights are domestic. US$39 million in upgrades planned, including runway repair and expansion of airport apron to accommodate 9 Code C aircraft. Construction to begin before 30 April 2025 and finish by December 2025.

Table 2: Overview of International Airports in Vietnam

Province authorities approved plans to construct a new airport on Go Gang Island, Long Son Commune, Vung Tau City.[383] The airport is planned on 250 ha (617 acres) to be capable of serving 100,000 passengers and 500 tons of cargo per year. It was proposed to replace the existing Vung Tau Airport in District 9 in the middle of the city.[384]

Domestic Airport	Location	IATA/ ICAO Code	Runway Direction & Length	Runway Surface	Elevation	Notes
Buon Ma Thuot (or Phung-Duc) Airport	Dak Lak 12° 40′ 5″ N, 108° 7′ 12″ E	BMV/ VVBM	09/27: 3,000 m (9,843 ft).	Asphalt	527 m (1,729 ft)	Air traffic control tower was upgraded and became operational 29 July 2024. A second, incomplete runway is not in use.
Ca Mau Airport	Ca Mau City, Ca Mau Province 9° 10′ 32″ N, 105° 10′ 46″ E	CAH/ VVCM	09/27: 1,500 x 30 m (4,921 x 98 ft).	Asphalt	2 m (6 ft)	Expansion project to be completed in late 2025 will allow larger aircraft.
Con Dao (or Co Ong, or Con Son) Airport	Con Son Island, Con Dao archipelago, Ba Ria-Vung Tau Province 8° 43′ 57″ N, 106° 37′ 44″ E	VCS/ VVCS	11/29: 1,830 x 30 m (6,004 x 98 ft).	Asphalt	6 m (20 ft)	Renovation project covering 2021-2030 may expand runway.
Chu Lai Airport	Tam Ky city, Quang Nam Province 15° 24′ 22″ N, 108° 42′ 20″ E	VCL/ VVCA	13/31: 3,050 x 45 m (10,007 x 148 ft).	Asphalt	3 m (10 ft)	Plan to become an international airport by 2025. Infrastructure investment plans to upgrade Chu Lai to 4F, ICAO's highest category.
Dien Bien Phu Airport	Dien Bien Phu 21° 23′ 50″ N, 103° 0′ 28″ E	DIN/ VVDB	16/34: 2,400 x 45 m (7,874 x 148 ft).	Concrete	483 m (1,585 ft)	Reopened December 2023 after eight months of upgrades.
Dong Hoi Airport	Dong Hoi city, 6 km (4 mi) Quang Binh Province 17° 30′ 54″ N, 106° 35′ 26″ E	VDH/ VVDH	11/29: 2,596 m (8,517 ft).		18 m (59 ft)	Construction project to expand airport underway from late 2024 until the first quarter of 2026.
Pleiku Airport	Pleiku city, Gia Lai Province 14° 0′ 16″ N, 108° 1′ 2″ E	PXU/ VVPK	9/27: 2,400 x 45 m (7,874 x 148 ft).	Asphalt	742 m (2,434 ft)	Planned upgrade to ICAO 4C classification and Level 2 military airport to allow capacity of 4 million passengers per year by 2030. Capacity increase planned to 5 million passengers per year by 2050. Currently serves 600,000 passengers per year.
Phu Cat Airport	Quy Nhon city, Binh Dinh Province 13° 57′ 18″ N, 109° 2′ 32″ E	UIH/ VVPC	15/33: 3,048 x 45 m (10,000 x 148 ft).	Concrete	24 m (79 ft)	Construction to add second runway scheduled to start August 2025 and be completed in 10 months.
Rach Gia Airport	Rach Gia, Kien Giang Province 9° 57′ 35″ N, 105° 8′ 2″ E	VKG/ VVRG	8/26: 1,500 x 30 m (4,921 x 98 ft).	Asphalt	2 m (6 ft)	
Tuy Hoa or Dong Tac Airport	Tuy Hoa, Phu Yen Province 13° 2′ 58″ N, 109° 20′ 1″ E	TBB/ VVTH	3/21: 2,902 x 45 m (9,521 x 148 ft).	Concrete	6 m (20 ft)	Upgrade planned to increase capacity to 3 million passengers per year by 2030 and 5 million passengers per year by 2050. Formerly Tuy Hoa Air Base
Tho Xuan Airport	Sao Vang town, Thanh Hoa City, 45 km (28 mi), Thanh Hoa Province 19° 54′ 6″ N, 105° 28′ 4″ E	THD/ VVTX	13/31: 3,200 × 50 m (10,499 x 164 ft).		18 m (59 ft)	Planned to become an international airport by 2030. Mixed-use military and civilian airport. Formerly Sao Vang military airport, or Thanh Hoa Air Base or Bai Thuong Air Base
Vung Tau Airport	Ba Ria-Vung Tau Province 10° 22′ 13″ N, 107° 5′ 36″ E	VTG/ VVVT	Runway status unverified.			Used mostly for helicopters serving the petroleum sector. Relocation of airport is being considered with proposed alternate site of Go Gang Island, Long Son commune, Vung Tau city.

Table 3: Overview of Domestic Airports in Vietnam

Seaports

As with its airports, Vietnam is currently upgrading many of its seaports. In September 2021, the Ministry of Transport's master plan on the development of the country's seaport system in the 2021-2030 period, with a vision towards 2050, was approved via Decision 1579/QD-TTg.[385] In May 2024, via Decision No. 442/QD-TTg, the master plan was adjusted to "green" its transportation sector, in line with the aim to achieve net-zero emissions by 2050. By 2030, Vietnam aims for its seaport system to handle 1.25-1.5 billion tons of cargo including 46-54 million twenty-foot equivalent units (TEU) of container cargo, which would exceed Singapore's current throughput,[386] as well as transport about 17.4-18.8 million passengers by 2030.[387] To achieve this, Vietnam needs to seek about US$12.8 billion (VND 313 trillion) in infrastructure investment, 95% of which would come from outside the state budget.[388]

The GoV categorized 34 seaports into several classifications in Decisions No. 804/QD-TTg (8 July 2022) and 76/2021/ND-CP (28 July 2021). Classification was determined by a score out of 100 points, which was assigned based on criteria including the port's socioeconomic influence, throughput of goods, and tonnage of ships received.[389] The highest-scoring ports were labeled special seaports (over 90 points), followed by class 1 (70-90), class 2 (50-70), and class 3 (below 50) seaports.[390]

- Special Seaports — Hai Phong and Ba Ria–Vung Tau
- Class 1 Seaports — Quang Ninh, Thanh Hoa, Nghe An, Ha Tinh, Da Nang, Quang Ngai, Binh Dinh, Khanh Hoa, Ho Chi Minh City, Dong Nai, and Can Tho
- Class 2 Seaports — Quang Binh, Quang Tri, Thua Thien Hue, Binh Thuan, Dong Thap, Hau Giang, and Tra Vinh
- Class 3 Seaports — Nam Dinh, Thai Binh, Quang Nam, Phu Yen, Ninh Thuan, Binh Duong, Long An, Tien Giang, Ben Tre, Soc Trang, An Giang, Vinh Long, Ca Mau, and Kien Giang

Approximately 80% of container imports and exports are handled by smaller ports and vessels in the country. Some ports face challenges with overwhelming shipment volumes, resulting in congestion and significant delays. The revised master plan prioritizes developing international gateway port clusters, including Hai Phong Province's Lach Huyen port, Ba Ria–Vung Tau Province's Cai Mep–Thi Vai port, and Ho Chi Minh City's Can Gio International Transshipment Port Cluster. There are study plans for the gradual development of Khanh Hoa Province's Van Phong International Transshipment Port and Soc Trang Province's Tran De Port. The revised master plan mandates green port standards by 2030 for all seaport planning, investment, construction, and operations. It encourages green and smart port models, utilizing clean energy and digital infrastructure. Several ports are also pursuing green initiatives, including transitioning to electric handling equipment instead of diesel-powered equipment, increasing operational efficiency with port management software, using barges instead of trucks for container movements to reduce dust and noise, and building on-site wastewater treatment and water recycling facilities.[391]

Three of Vietnam's 36 seaports were ranked among the top 50 globally for cargo throughput in 2024 — Ho Chi Minh City port (25th), Hai Phong port (33rd), and Vung Tau's Cai Mep port (34th).[392] These are among five major ports detailed below.

Hai Phong

Hai Phong has one of the largest seaport hubs of northern Vietnam and has some of Southeast Asia's most modern seaport facilities, with advanced navigation and networking facilities. This port cluster is close to the Red River Delta, which is a strategic point for trade and international affairs, is near the PRC border, and has excellent connectivity with Ho Chi Minh City, Can Tho, and Da Nang. In 2024, Hai Phong ports reported a cargo throughput of nearly 40 million tons.[393] Lach Huyen International

Port, an extension of Hai Phong port, had two berths completed and four under construction as of January 2025, and is designed for a total of 15 berths.[394] In February 2025, the Hateco Hai Phong International Container Port officially launched operations as the country's newest and most modern deep-water port. It features a 900-m (2,952-ft) wharf with depths ranging from 16.8 m to 18.4 m (55-60 ft). It is designed to accommodate two large container ships of up to 400 m (1,312 ft) in length simultaneously. It includes STS cranes, a NANIS N4 operations system, e-RTG systems, Optical Character Recognition (OCR) technology, a 5G network, and advanced surveillance cameras.[395]

Da Nang

Situated in central Vietnam's Da Nang Bay, Da Nang port is the terminus of the East-West Economic Corridor connecting Myanmar, Thailand, Laos, and Vietnam. It serves as the main gateway to the South China Sea, which Vietnam calls the East Sea, for the region.[396]

The port has three berth areas – Tien Sa-Son Tra, Tho Quang, and Lien Chieu. The port's western bank is dedicated to the Vietnamese Navy, while the eastern bank is utilized by commercial vessels. Channel depth ranges from 10 m to 17 m (33-56 ft).[397] The port is equipped to handle a variety of cargo types, including containers, bulk goods, and general cargo.

Ho Chi Minh (Saigon, Tan Can-Cat Lai Ports)

Ho Chi Minh City's port network includes Tan Cang-Cat Lai Port and Saigon Port and is the largest and most important seaport hub in southern Vietnam. Tan Cang-Cat Lai Port has the most container throughput in Vietnam, handling over 5 million TEUs annually.[398]Located on the Saigon River, the port hub is a primary gateway for imports and exports in the south, and particularly for Vietnam's top exports of electronics, textiles, and footwear.[399]

Vung Tau (including Cai Mep-Thi Vai Port)

Vung Tau City is the economic and cultural center of Ba Ria-Vung Tau Province, located near the mouth of the Saigon River, approximately 80 km (50 mi) south of Ho Chi Minh City. Vung Tau port is a cluster of seaports that is a hub for oil and gas trade and has a total length of 14 km (8.7 mi) and an average channel depth of 4.5 m (14.8 ft).[400] Notable among its cluster of ports is Cai Mep-Thi Vai, a deep-water port that can accommodate ultra large container vessels and predominantly serves Dong Nai and Binh Duong Provinces, which are major production centers in southern Vietnam.[401] This port cluster connects to about 35 sea routes, of which nine are intra-Asian, 21 are to the Americas, and five are to Europe.[402] The Tan Cang-Cai Mep International Terminal, which opened in 2011, features a main berth stretching 890 m (2,920 ft), three barge berths measuring 270 m (886 ft), a container yard spanning 55 ha (136 acres) with a capacity of over 50,000 TEUs, and advanced, efficient equipment and technology including STS cranes, e-RTG cranes, empty container handlers, and the Terminal Operations Package System.[403]

Quy Nhon (or Qui Nhon)

Quy Nhon Port in the Binh Dinh Province is a national focal port of the southern central region and a key hub for exporting agricultural products, minerals, and other goods.[404] Located in the Gulf of Quy Nhon, it is easily accessible for vessels to anchor in throughout the year. The port is well situated for Southeast and East Asia trade, with over 10 maritime routes connecting to countries including the Philippines, Singapore, Taiwan, Thailand, Japan, and Russia.[405] Its modern equipment and facilities enable it to handle different types of cargo, including bulk, containers, over-length, and overweight. It has a channel depth of 11 m (36 ft) and a maximum draft of 13.8 m (45 ft).[406] Its five berths range 170-480 m (558–1,575 ft) in length and 8.9–12.5 m (29.2–41.0 ft) in depth. Storage facilities span 31 ha (77 acres) and the total storage capacity is 200,000 metric tons (220,462 tons).[407]

Roads

Vietnam has at least 195,468 km (121,458 mi) of roadways, including at least

148,338 km (92,173 mi) of paved roads and approximately 47,130 km (29,285 mi) of unpaved roads.[408]

In September 2021, the Prime Minister approved the Ministry of Transport's Road Network Development Plan for the period 2021 - 2030, with a vision to 2050. The plan lays out a significant increase from the 3,841 km (2,387 mi) of expressways in 2021 to reach 5,000 km (3,107 mi) of expressways by 2030, which will require VND 396 trillion (US$17.2 billion), including VND 187 trillion (US$8.1 billion) from the national budget.[409] Planned expressways include 14 in the north running 2,305 km (1,432 mi), 10 in the central and central-highlands regions running 1,431 km (889 mi), and 10 in the south running 1,290 km (802 mi). Development focus will particularly be upon the Eastern Cluster of the North-South Expressway, running from the northern border town of Lang Son to the far southern Ca Mau (2,063 km; 1,282 mi), and the Western Cluster of the North-South Expressway (1,205 km; 759 mi). For national highways, the plan is for 172 routes with a total length of 29,795 km (18,514 mi), up from 5,474 km (3,401 mi) in 2021. The plan encompasses three urban beltways in Hanoi with a total length of 425 km (264 mi), two urban beltways in Ho Chi Minh City with a total length of 295 km (183 mi), and 3,034 km (1,885 mi) of coastal roads throughout 28 cities and provinces.[410]

Infrastructure investment has been a fundamental factor in Vietnam's impressive growth trajectory. One challenge has been a relatively high rate of traffic deaths. In 2023, there were approximately 11,628 deaths caused by traffic accidents in Vietnam.[411] In 2024, this number declined to 9,954 fatalities out of 21,000 traffic accidents. In 2025, authorities aim to reduce traffic violations and accidents through stricter regulations, including higher fines, vehicle confiscations, and license suspensions.[412]Another challenge is that roads in rural areas are in poorer condition and lack adequate links with schools, hospitals, markets, and other crucial centers of community. Another challenge with infrastructure development is that resources allocated for road and bridge maintenance are half of what is needed at national and local levels. Part of this shortfall can be attributed to Vietnam having exceptionally high infrastructure damage costs, due partially to disasters, which are worsening as natural hazards are exacerbated. Vietnam is one of the top 20 countries that bear the highest annual expected infrastructure damage costs in both absolute terms and relative to GDP. Some new rural infrastructure construction from 2016 to 2023 was supported by the World Bank and the Global Facility for Disaster Reduction and Recovery and resulted in more than 1,800 communes having reduced transport costs and improved access to schools, hospitals, and markets.[413]

Railways

Vietnam has approximately 2,600 km (1,616 mi) of railway as of 2021, of which 85% is 1,000-mm gauge, 6% is 1,435-mm gauge, and 9% is mixed gauge.[414] The country's main railway line weaves along the coast between Hanoi and Ho Chi Minh City. Trains also link Vietnam to southern PRC by connecting Hanoi to Kunming via Lao Cai.[415] The Vietnam Railway Administration formulates railway plans and organizes their implementation, and it advises and assists the Minister of Transport in management and organizing enforcement of specialized laws on railway transport nationwide.[416]

In October 2021, Prime Minister Pham Minh Chinh approved Decision 1769/QD-TTg 2021 for the master plan on the railway network for 2021-2030, with a vision toward 2050.[417] In addition to upgrading seven existing railway lines, the plan outlines the construction of nine new rail lines running 2,632 km (1,635 mi). An investment of VND 240 trillion (US$10.3 billion) will be needed to develop the 4,802 km (2,983 mi) cumulative length of railway. By 2030, railways are expected to handle 11.8 million metric tons (13 million tons) of freight and 460 million passengers. Four of the new railway lines will be linked to seaports. Urban railway is projected to meet 15–20% of the public

passenger transport demand in Hanoi and Ho Chi Minh City. Priority will be given to railway routes connecting major economic zones, such as Dong Ngoc Hoi - Lac Dao - Bac Hong; Thu Thiem - Long Thanh; and Ho Chi Minh City - Can Tho. The seven existing railway lines, all single-track, are to be upgraded by 2030; they are detailed in Table 4.[418]

The vision to 2050 includes the building of a high-speed north-south railway, with construction to start by late 2027 on the dual-track system with a 1,435-mm gauge designed for speeds up to 350 km/hour (217 mi/hour).[419]

Waterways

Vietnam's extensive rivers, canals, and other inland bodies of water earn the country the rank of third in the world, behind the much larger countries of Russia and Brazil.[420] Vietnam's 2,360 rivers and canals largely comprise nine main river systems, with the two biggest and most significant being the Red River system in the north and the Mekong River system in the south. The total navigable length used for waterway transportation is 26,506 km (16,470 mi), with 653 bridges, of which 251 have low air clearance or limited span.[421]

Vietnam has 45 major river transport routes, including 17 in the north, 10 in the central region, and 18 in the south. While most freight is transported by road, river transport is an estimated 30% less expensive. River transport is particularly efficient in the Mekong Delta, where agricultural goods make up a major percentage of freight. Shipments from other Southeast Asian countries often transit Vietnam via river to reach the South China Sea (locally referred to as the East Sea).[422] Passenger transport along the Mekong River also contributes significantly to Vietnam's tourism sector with visitors arriving from PRC, Thailand, and Laos.[423] In 2022, freight transportation via inland waterways in Vietnam reached 31.6 billion metric ton-kilometers (21.6 million ton-miles).[424]

Decision No. 1829/QD-TTg, dated 31 October 2021, was approved for the master plan to develop inland waterway infrastructure facilities for 2021-2030, with a vision toward 2050.[425] Between 2026 and 2030, investments to upgrade primary inland waterway routes nationwide will increase the air draft of railway bridges crossing national inland waterways and further expand inland waterway ports. The Ministry of Transport estimated that VND157 trillion (US$6.9 billion) would be required for inland waterway projects over the next decade. The state budget will allocate VND 29 trillion (US$1.27 billion) for constructing inland waterway routes, while an additional VND 128.6 trillion (US$5.64 billion) will be mobilized from private sources for port investments. The objective is to ensure that inland waterway corridors can accommodate the projected transportation demand, estimated at 715 million tons of goods and 397 million passengers by 2030, with expectations of further growth in the future.[426]

Priority waterway investments by 2030 include improving bridge clearances, logistics corridors, inland waterway ports, and improvement projects.[427]

Schools

Vietnam's education system is comprised of

Existing Railway Line to be Upgraded	Gauge (mm)	Length
Hanoi – Ho Chi Minh City	1,000	1,726 km (1,072 mi)
Hanoi – Lao Cai (includes construction of a 4.8-km (2.9-mi), dual gauge connection from Lao Cai to Ha Khau Bac, PRC)	1,000	296 km (184 mi)
Hanoi – Hai Phong	1,000	102 km (63 mi)
Hanoi – Thai Nguyen	1,000 & 1,435 dual gauge	55 km (34 mi)
Hanoi – Lang Son route from Hanoi station to Dong Dang station	1,000 & 1,435 dual gauge	167 km (104 mi)
Kep – Chi Linh	1,435	38 km (24 mi)
Kep – Luu Xa	1,435	56 km (35 mi)

Table 4: Existing Rail Lines to be Updated by 2030

a dual framework, which consists of public and private schools. Public schools operate under a curriculum prescribed by the Ministry of Education and Training (MOET). A significant disparity exists between educational resources in rural and urban areas, as public schools in rural regions frequently encounter challenges related to underfunding and inadequate resources compared to their urban counterparts.[428] However, Vietnam's overall literacy rate is relatively high; in 2023, the literacy rate for adults aged 15 years and older was approximately 96.6%, making Vietnam one of the countries with the highest adult literacy rates in the Asia-Pacific region.[429]

The management structure of the education sector is characterized by a centralized framework. MOET holds the primary responsibility for administration of and policy formulation for education at the national level. At the provincial level, each province's Department of Education and Training oversees upper secondary and professional secondary schools and ensures the implementation of national policies. The district-level Bureaus of Education and Training are tasked with management of lower secondary and primary schools.

The formal education system is structured into three stages: primary, secondary, and tertiary education. The foundational phase, basic education, consists of 12 years.[430] Pre-primary education, aimed at children aged three months to six years, is optional and is offered by both public and private sectors, including institutions such as day care centers and kindergartens.[431]

Disaster Risk Reduction in the Education Sector

The education sector has increasingly recognized the profound impact of natural disasters, particularly concerning damaged infrastructure and student casualties. VDDMA reported that between 2006 and 2020, a considerable number of child fatalities resulted from various disaster events, notably those induced by flooding and flash floods. Typhoons and flash floods were identified as primary factors damaging classroom infrastructure. In response to these challenges, MOET initiated the School Safety Program in 2007 to enhance safety measures nationwide across educational institutions. Building upon this foundation, in 2009, Vietnam endorsed the AADMER, which identified school safety as a strategic priority. In 2013, this commitment was further solidified by the establishment of the ASEAN Safe Schools Initiative (ASSI), and in 2018, ASSI introduced a regional Comprehensive School Safety Framework (CSSF), which contextualized the global framework to suit the specific needs of the ASEAN region. The implementation of this framework supports school safety measures at the regional, national, and institutional levels. The Vietnamese government has since adopted the CSSF as a comprehensive approach to enhancing disaster preparedness and response within the education sector. Founded by the Asia Pacific Coalition for School Safety in 2012, the CSSF has seen widespread adoption and adaptation by educational authorities in over 60 countries and received endorsement from Southeast Asian Ministers of Education, including from Vietnam. The CSSF is structured around three main pillars: safe school facilities, disaster management, and risk reduction and educational resilience. Additionally, a newly incorporated component emphasizes enabling systems and policies as a cross-cutting foundation for effective implementation.[432]

In 2018, MOET collaborated with MARD to initiate a comprehensive five-year program entitled "Strengthening Schools' Preparedness for Natural Disasters" (2018–2023). This program aimed to integrate DRM into national educational policies, adopting a proactive stance toward disaster preparedness. Through this program, MOET developed teaching materials tailored for various regions and age groups of students, based on the best available research, and integrated them into both the regular curriculum and extracurricular activities.[433] In 2019, the creation of Vietnam's first guideline for CSSF assessment and implementation was established.[434]

In 2017, VDDMA and UNDP initiated the "Schools of Son Tinh" campaign to enhance the resilience of approximately 5,000 students in regions susceptible to storm surges and flooding by equipping them with essential knowledge and skills for life preservation. Save the Children (SC) complemented this initiative by focusing on developing DRR capacity among children and educators, thereby fostering connections between communities and educational institutions. SC's objectives include the integration of disaster preparedness into school curricula. As part of this endeavor, SC produced guidebooks designed to incorporate DRR into educational programs. In areas that are particularly vulnerable to disasters, SC specifically emphasized providing children with life-saving swimming skills, alongside the introduction of floating backpacks as a protective measure for pupils residing in flash flood zones.[435]

In alignment with global and regional initiatives to enhance school safety, the IFRC collaborates with the Viet Nam Red Cross Society to implement comprehensive measures designed to bolster disaster preparedness in educational institutions. This collaboration focuses on critical initiatives such as disaster preparedness training, the establishment of EWS, and the execution of community awareness campaigns. The IFRC facilitates the formulation of response plans for schools addressing natural disasters, including floods, typhoons, and earthquakes. These plans encompass evacuation procedures and the provision of emergency kits. In tandem, efforts are directed at educating local communities, particularly parents and students, regarding disaster risks and associated safety measures, thus fostering a culture of preparedness within the community. Additionally, the IFRC undertakes the training of educators and school personnel in areas such as first aid, disaster response, and psychological support, equipping them to assist students in times of emergency. The Viet Nam Red Cross is key in coordinating with local governments and MOET to integrate school safety protocols into national disaster management frameworks.[436]

Communications

The information and communications technology (ICT) infrastructure is undergoing substantial growth, propelled by rapid technological transformation, increasing internet penetration, and governmental initiatives aimed at modernizing the telecommunications framework in response to ongoing urbanization and the development of smart cities.

Vietnam's susceptibility to various natural hazards and climatic conditions poses significant risks to telecom networks and infrastructure. Such vulnerabilities can result in service outages and communication breakdowns during emergencies. The threats to the ICT infrastructure from natural disasters are exacerbated by factors such as aging infrastructure, insufficient maintenance, and inadequate backup systems. Additionally, the rapid pace of urbanization and changes in land use elevate the risks of infrastructure damage and disruptions in connectivity, particularly in densely populated urban areas.[437]

The Ministry of Information and Communications (MIC) is the policy making and regulatory body for the press; publishing; posts; telecommunications; radio frequency; information technology; electronics; broadcasting; media; foreign information; domestic information; and national information and communication infrastructure. MIC's duties include submitting ICT-related draft legislation to the National Assembly; submitting draft plans, strategies, programs, and decisions to the Prime Minister; and providing guidance on legal enforcement and implementation of development strategies.[438]

Telephones

According to the MIC, in 2024, among the 120 million mobile subscriptions, approximately 84% are smartphone users.[439] Mobile subscriptions are projected to grow by 1.7% from 2024 to 2031, while fixed broadband subscriptions are expected to rise by 2.8%. Mobile revenue is increasing faster than subscription growth, driven by the

transition from 2G and 3G to 4G data services. Vietnam completed its 2G shutdown in October 2024, with 3G expected to follow by 2028.[440]

State-owned enterprises (SOE), specifically Viettel and the Vietnam Posts and Telecommunication Group (VNPT) - VinaPhone, are the predominant providers of telecommunications services. Viettel operates under the auspices of the MND and leads the mobile-cellular service sector with over 50% of the total market share. Together, Viettel and VNPT capture approximately 80% of the broadband service market. Beyond Vietnam, Viettel established mobile phone services in Laos, Cambodia, and Timor-Leste. Additionally, foreign companies conduct joint ventures with local enterprises, including Vietnamobile, GMobile, and Telecom, to provide telecommunication services to the Vietnamese population.[441] Established on 16 April 1993, MobiFone is Vietnam's first mobile service provider. On 1 December 2014, MobiFone transitioned into MobiFone Telecommunications Corporation under the MIC, and in November 2018, the ownership representative rights were transferred to the State Capital Management Committee.[442]

Internet Access

The telecommunications sector provides extensive internet coverage across the country. As a result of an emphasis on mobile internet accessibility, mobile network technologies, including 3G and 4G, now reach a substantial majority of the Vietnamese population. Additionally, there has been a parallel increase in terrestrial fixed-line broadband subscribers. In alignment with the national agenda to attain 100% coverage by 2030, the Vietnamese government devised a comprehensive strategy to implement and commercialize 5G networks.[443] In September 2022, Viettel and Infinera established a strategic partnership aimed at enhancing 5G services through the deployment of Infinera's Optical Timing Channel 2.0 solution.[444]

In 2024, Vietnam recorded approximately 78.44 million internet users, an internet penetration rate of 79.1% of the total population. The median mobile internet connection speed via cellular network is reported at 47.06 megabits per second (Mbps), while the median speed for fixed internet connections is 105.04 Mbps. The number of fixed broadband subscriptions reached 23.5 per 100 people as of 30 June 2024, a year-on-year increase of 6.8%. Approximately 82.2% of households have fiber-optic connections.[445] According to MIC, in 2024, the internet usage rate is estimated to reach 78.1% and mobile broadband subscriptions increased by 7.6% compared to the same period in 2023; the average of all forms of internet access stands at 91.9%, which exceeded the ministry's target of 87.5% for the year.[446] Vietnam's strategic landing points for submarine cable systems—including SeaMeWe-3, APG, SJC2, AAE-1, AAG, and TGN-IA—facilitate global connectivity.[447]

Mass Media

The media landscape in Vietnam includes newspapers, radio, television, and digital media. The government, through MIC, exercises control over all forms of broadcast media. Vietnam Television, the state-run national television provider, operates a comprehensive network of channels supported by regional broadcasting centers. The programming from these channels is disseminated nationwide through provincial and municipal television stations. The Voice of Vietnam, the national radio broadcaster, also operates under government control and transmits across multiple channels accessible via AM, FM, and shortwave frequencies throughout the country. While social media has become increasingly prevalent, the government implements stringent measures to limit political discourse.[448] In January 2024, Vietnam had approximately 72.70 million social media users, representing 73.3% of the population.[449] In 2024, the leading social media platforms used widely were Facebook, Zalo, YouTube, TikTok, Instagram, and X (formerly Twitter).[450]

Post

VNPT operates the national postal system, while postal services at the regional level are managed by the Vietnam Post. Each city and

province has a central post office, accompanied by numerous smaller postal facilities. Many of these post offices offer express mail services.[451] Established in 1997, Viettel Post, a subsidiary of the Viettel Group, has rapidly emerged as a leading enterprise in the delivery sector. Viettel Post specializes in domestic and international express delivery and logistics services, extending its operations to neighboring countries such as Cambodia and Myanmar.[452] Primary international couriers that serve Vietnam include FedEx, DHL, and UPS.[453]

Utilities

The energy sector is experiencing transformative changes, with an increasing emphasis on renewable energy sources, such as solar and wind power. Despite this shift, there remains a significant reliance on coal as a primary energy source to support the expanding infrastructure. In 2022, coal, oil, and natural gas were predominant energy sources.[454] Between 2015 and 2023, solar and wind energy use witnessed a tenfold increase, reaching 13% of electricity generation, which aligns with the global average.[455]

Vietnam has made notable progress in improving access to water, sanitation, and hygiene (WASH); however, the existing water supply and treatment facilities are inadequate and face increasing strain from the growing populations in urban areas and heightened water demand from both industrial and agricultural sectors.[456] Approximately 100% of urban residents have access to reliable water services, whereas around 44% of the rural population has access to centralized water supply systems. Furthermore, 56% of individuals in rural areas rely on unsafe water, and only 15% of municipal wastewater is treated effectively.[457]

Power

Vietnam's power sector has experienced significant growth over the past two decades; it expanded from a total installed capacity of 11 gigawatts (GW) in 2005 to 77 GW in 2022. During this period, coal and hydropower played pivotal roles, with their capacities increasing by 25 GW and 22 GW, respectively. Furthermore, the country has made strides in scaling up its renewable energy capacity, particularly in solar power. From virtually no wind and solar capacity in 2018, within three years, the country saw an expansion to 21 GW, approximately one-quarter of the nation's total installed capacity. However, the pace of this growth has decelerated since 2021. Despite the increasing share of renewable energy sources, their contribution to actual power generation remains modest at 12% of total generation due to the inherent variability of these sources. Notwithstanding the rapid expansion of renewable energy, Vietnam has continued to augment its coal-fired power generation, with installed capacity increasing fivefold over the past decade. Consequently, coal remains the dominant and emission-intensive power source within the country's energy mix.[458]

As of 2022, 100% of the population had access to electricity in both urban and rural areas.[459] The largest electricity buyer and supplier is the SOE Vietnam Electricity (EVN), which operates under the regulatory oversight of the Ministry of Industry and Trade (MOIT) and maintains direct reporting lines to the Prime Minister. EVN is responsible for managing and operating the national electricity network and holds a monopoly over the transmission and distribution sectors. The company has branches throughout the country and maintains offices in major urban centers.[460] Remaining shares in power generation are held by other large SOEs, including PetroVietnam, which operates gas-fired power plants, and Vinacomin, which operates coal-fired power plants.[461] The Directorate General of Electricity and Renewable Energy, a department within the MOIT, is tasked with overall energy planning and policy formulation. Additionally, the Electricity Regulatory Authority of Vietnam plays a critical role in establishing and supervising the power market, including responsibilities for power planning, tariff regulation, and licensing.[462]

Water and Sanitation

Extreme weather events significantly stress

Vietnam's water resources, particularly during the dry season when hydrological flows are substantially reduced. In 2019, water levels in the Mekong River reached their lowest recorded levels in over a century and water supplies critical for agricultural and industrial activities were substantially disrupted. Similarly, in 2022, Northern Vietnam suffered energy shortages due to diminished water levels in the Red River, highlighting the challenges within the country's hydrological infrastructure.[463]

At the national level, managing water resources, supply, sanitation, and flood control is a collaborative effort involving MoNRE, MARD, and the Ministry of Construction (MOC). MoNRE and MARD merged to become the MAE, operational 1 March 2025. Water utilities responsible for water distribution are managed by provincial authorities, which monopolize water distribution within their respective jurisdictions. Local water utility companies are transforming to become more autonomous and service-oriented entities. The water sector has made significant strides in commercial transformation, equitization, and operational expansion.[464] On 27 November 2023, the 15th National Assembly enacted the Law on Water Resources No. 28/2023/QH15 providing a regulatory framework for the management, protection, exploitation, and utilization of water resources, as well as measures for the prevention, mitigation, and remediation of adverse effects caused by water-related issues in the country.[465]

On 22 December 2021, MARD, in collaboration with UNICEF, unveiled the National Strategy on Rural Water Supply and Sanitation, aiming for implementation by 2030 and extending its vision to 2045. This strategy is pivotal in steering Vietnam towards realizing the Sustainable Development Goals (SDG) and fulfilling national objectives concerning rural water supply and sanitation.[466]

The World Bank, through the Global Water Security and Sanitation Partnership (GWSP), collaborates with the GoV to enhance water security, focusing on integrated water resources management and the improvement of water services across urban and rural landscapes. This partnership aids the GoV in addressing environmental challenges related to pollution, flooding, and drought. In 2022, the GoV approved Conclusion 36, titled "Ensuring Water Security and Safety of Dams and Reservoirs by 2030, with a Vision to 2045." The GWSP is instrumental in several critical projects, including the development and implementation of the Integrated Mekong Delta Regional Master Plan, the revision of the National Law on Water Resources, and the provision of technical assistance related to nature-based solutions for integrated urban flood management in Ho Chi Minh City and Phu Quoc Island.[467] The Vinh Phuc Flood Risk and Waste Management project is designed to improve urban living conditions, mitigate flood risks for over 632,000 residents, and enhance sanitary facilities for an additional 121,000 individuals.[468]

Ho Chi Minh City is actively expanding its wastewater treatment infrastructure, reflecting the government's commitment to enhancing environmental sustainability and public health. The Nhieu Loc —Thị Nghe wastewater treatment plant, which is projected to have a treatment capacity of 480,000 cubic meters (126.8 million gallons) per day, is anticipated to be operational by 2025. The wastewater treatment plan is expected to address approximately 71% of the city's current wastewater treatment demands upon completion. In addition, Ho Chi Minh City's Department of Construction has proposed a significant expansion of the city's wastewater treatment facilities. This expansion plan encompasses the construction of six new treatment plants and the upgrading of an existing facility. This initiative is particularly crucial in light of the challenge of water pollution, which is exacerbated by agricultural, industrial, and urban activities—especially pollution from hazardous chemicals. The rapid development of industrial parks within the region has further complicated the wastewater treatment landscape. Consequently, there is an urgent need to implement appropriate equipment and technological advancements to mitigate the adverse effects of wastewater on the environment.[469]

HEALTH

Vietnam is experiencing significant epidemiologic and demographic transitions, with an expanding aging population and accelerated urbanization. In 2024, the life expectancy at birth was 76 years.[470] In 2022, Vietnam's healthcare expenditures amounted to approximately US$18.5 billion, accounting for 4.6% of the country's GDP.[471] The country is working toward Universal Health Coverage (UHC), and approximately 90% of the Vietnamese population is covered by health insurance.[472]

The health sector grapples with myriad challenges that impact the effectiveness and efficiency of the healthcare system. Key issues encompass the increase in demand for higher quality healthcare services, prevalence of non-communicable diseases (NCD), an aging population, emerging health security threats, and the cost of health care. There have been significant improvements in training healthcare professionals, and the healthcare sector is keeping pace with necessary advancements in managing training quality and integrating criteria for international integration.[473]

Health Care System Structure

Vietnam's healthcare system administration encompasses four levels: national, provincial, district, and commune. Each of the country's 63 provinces has a provincial department of health; these provincial departments collectively oversee approximately 700 districts and more than 11,000 communes.[474] A provincial health department typically administers 10 to 20 districts, each containing numerous communes. District health centers and commune health stations are often termed "grassroots health care systems" or "primary health service delivery" mechanisms.[475]

The Ministry of Health (MoH) is responsible for formulating and administering health policies at the national level.[476] The MoH implements a structured health service delivery system on three levels: the primary level, which functions at the district and commune levels; the secondary level, situated within provincial jurisdictions; and the tertiary level, managed by national institutions under the auspices of the central government.[477] Figure 6 illustrates the MoH's organizational structure.[478]

Significant strides have been made towards realizing UHC, mainly through enacting the Law on Social Health Insurance in 2008, with subsequent revisions in 2014. This legislative framework aims to expand healthcare coverage to traditionally marginalized populations, including single mothers, individuals from low-income households, and members of ethnic and linguistic minorities.[479] This initiative ensures equitable access to primary healthcare services for all individuals. In addition to delivering essential, patient-centered health care, the government emphasizes health promotion and disease prevention, encompassing public awareness campaigns to enhance knowledge of critical health issues and promote well-being. Notable focus areas include tobacco cessation and HIV/AIDS prevention through pre-and post-exposure prophylaxis.[480]

The healthcare system comprises both public and private sectors. Public hospitals deliver a significant majority, approximately 86%, of healthcare services. Despite the extensive network of public healthcare facilities, the sector faces challenges, including the prevalence of outdated medical equipment, chronic overcrowding in health facilities, dependence on state budgets for hospital financing, and a critical shortage of qualified medical personnel.[481] The country's healthcare system has experienced considerable advancements in medical product development, vaccine production, and healthcare technologies. A key contributing factor to this progress is the private sector's active engagement and substantial investment, which has been instrumental in establishing private hospitals and expanding the pharmaceutical industry.

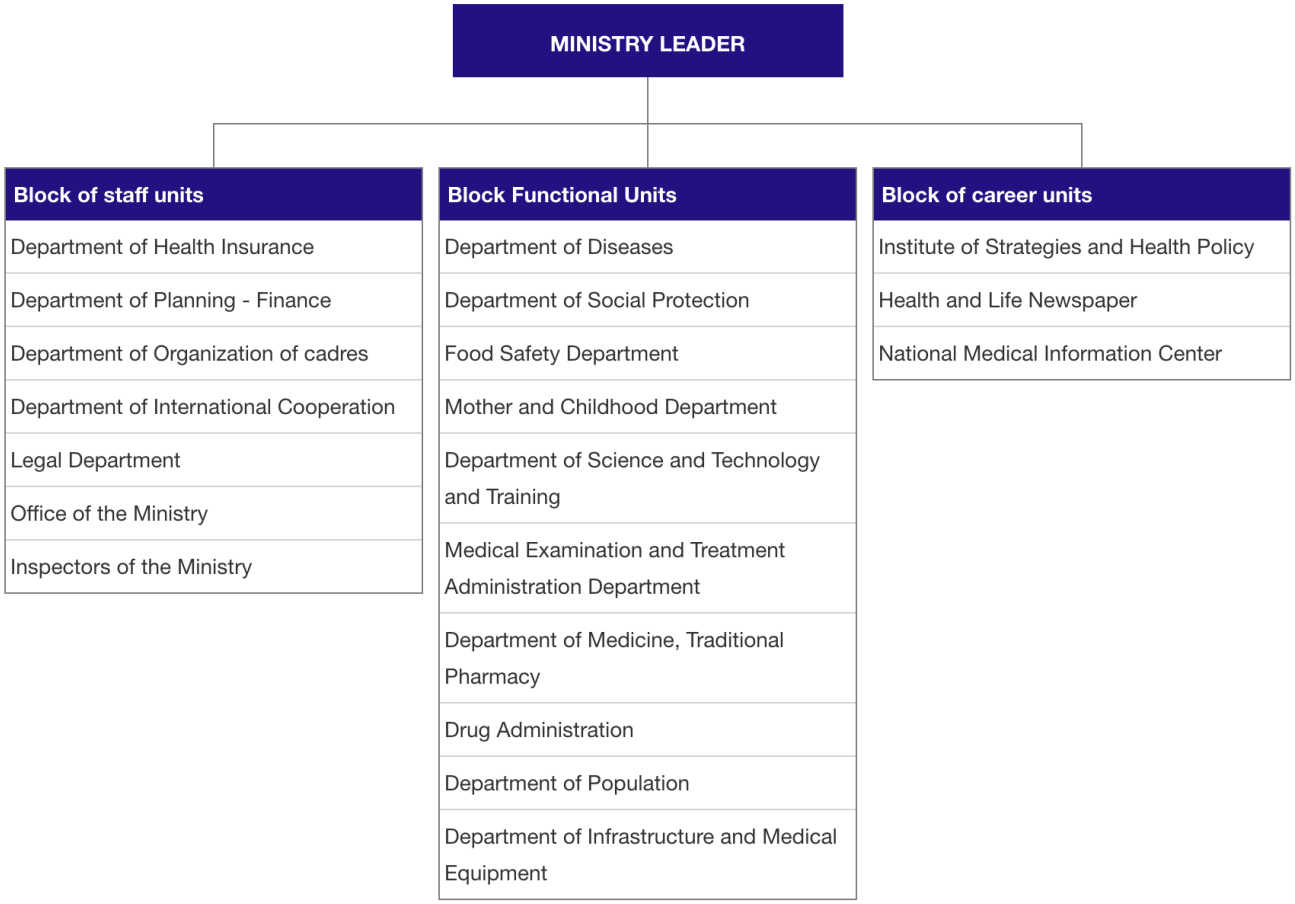


Figure 6: Ministry of Health Organizational Structure

Furthermore, enhancing domestic research and development capabilities has facilitated remarkable improvements in the manufacturing processes of generic drugs, vaccines, bioproducts, and other medical products.[482]

Health Strategies and Surveillance

On 23 January 2024, the Prime Minister endorsed the National Strategy for Protecting, Caring for, and Improving People's Health, which is designed to guide developments in the health sector until 2030, with a vision to 2045. This strategic framework aims to ensure that all individuals have access to high-quality healthcare services, reside in safe communities, and achieve optimal physical and mental development.[483]

The WHO's Country Cooperation Strategy (CCS) is a strategic guiding document that aligns with and complements the government's ongoing health system development initiatives, offering technical expertise and policy support. The CCS consists of four strategic priorities:

- Strengthening the building blocks of the human and animal health systems
- Policy advice and technical support provided to improve evidence, prevent, and effectively manage non-communicable conditions at national and sub-national levels
- National and sub-national capacities enhanced to improve evidence, prevent, and control communicable diseases of humans and animals
- National and sub-national capacities enhanced to strengthen evidence and improve universal access to and utilization of a quality and gender-sensitive package of nutrition as well as sexual and reproductive, adolescent, maternal, neonatal, and child health care and services[484]

Since 1998, the U.S. Centers for Disease Control and Prevention (CDC) has collaborated

extensively with the MoH and various partner organizations to enhance the detection, prevention, and control of infectious disease outbreaks while strengthening the country's fundamental public health capabilities. These capabilities encompass critical domains such as data collection and surveillance, laboratory infrastructure, workforce development, institutional capacity, prevention and response strategies, innovation and research initiatives, and policy communications and diplomacy. The CDC offers technical assistance and expertise to the MoH to fortify the health system and address pressing public health issues, including antimicrobial resistance, emergency response protocols, immunization strategies, and managing diseases such as HIV/AIDS, TB, and influenza.[485]

In the 2021 Global Health Security Index, Vietnam scored 42.9 out of 100, with 100 representing the most favorable health security conditions and 0 representing the least favorable conditions. As a result, Vietnam was positioned 65th among the 195 countries assessed in the Index. Vietnam's scores in the 'Detect' and 'Respond' domains were 55.1 and 30.6, respectively. The 'Detect' score surpasses the global average of 32.3 and indicates a relatively robust capacity for disease detection. Conversely, the 'Respond' score falls below the global average of 37.6 and highlights that there are areas for improvement in the country's health response capabilities.[486]

Communicable Diseases

Vietnam is burdened with the following communicable diseases:

Coronavirus Disease 2019

On 23 January 2020, Vietnam reported its first COVID-19 cases. In response to the outbreak, the government implemented several prevention and control measures, including restrictions on international flights, movement restrictions, contact tracing, quarantine and social distancing, lockdown, and increasing public health measures. In mid-2020, the government implemented lockdown responses due to increased case transmissions from international flights.[487] The GoV's prompt response to the outbreak was attributable to the lessons learned from the country's response to the 2003 severe acute respiratory syndrome (SARS) epidemic and human cases of avian influenza between 2004 and 2010.[488]

The government implemented a comprehensive, whole-of-society strategy that actively engaged multiple sectoral stakeholders in the decision-making processes related to pandemic management.[489] The National Steering Committee, chaired by the Ministerial Board, oversaw the direction and assessment of COVID-19 control initiatives on behalf of the government. The COVID-19 prevention steering committees were established at various administrative levels, from provincial to commune. The MoH was pivotal in coordinating COVID-19 measures across its affiliated sub-agencies and ministries. In coordination with the National Response Plan, grounded in the guidelines set forth by WHO, the MoH updated response protocols and prioritized COVID-19 vaccinations following global guidance. Moreover, the MoH established a specialized unit, led by the Vice Minister, dedicated to mobilizing and managing healthcare personnel. This unit was instrumental in devising strategies to control outbreaks in hotspot areas, utilizing resources from hospitals and academic institutions.[490] The provincial government and local commune health centers were key in providing health education to residents, participating in contact tracing efforts, and delivering primary healthcare services to the community.[491]

The COVID-19 pandemic precipitated various adverse effects, necessitating a governmental focus on vaccination initiatives to improve the public's perception of vaccination and influence health behavior. Vaccination emerged as a critical and mandatory measure for mitigating the spread of the virus and curbing the pandemic's impacts. By March 2022, the nation achieved a vaccination coverage of 80% among the

population, with 60% having received booster doses.[492] On 9 February 2025, the country's cumulative total of confirmed COVID-19 cases reached 116,612,400.[493]

Dengue

Dengue is endemic in Vietnam, particularly in the southern and central coastal regions, as well as in populous urban areas like Ho Chi Minh City and Hanoi.[494] Cases of the dengue virus, which is transmitted by Aedes aegypti and Aedes albopictus mosquitoes, typically peak during the rainy season from June to October. However, transmission occurs throughout the year, with national averages reported to be between 80,000 to 100,000 cases annually.[495] Preventive strategies are essential for controlling the spread of dengue. Recommendations for prevention include the application of mosquito repellent, ensuring that windows and doors are secured during dawn and dusk—the peak activity times for Aedes mosquitoes—and minimizing the presence of stagnant water in containers, which serve as breeding sites for mosquito populations.[496]

In 2006, Vietnam's MoH partnered with the World Mosquito Program to employ innovative methodologies, utilizing the naturally occurring Wolbachia bacteria to modify mosquito populations. The release of Wolbachia-infected mosquitoes aims to have them breed with local wild populations to diminish their capacity to transmit dengue viruses and mitigate the risk of outbreaks. Since 2013, such Wolbachia Aedes aegypti mosquitoes have been systematically released in high-risk locales, including Tri Nguyen Island, Binh Duong Province, and Tien Giang Province.[497]

Malaria

Malaria is a parasitic disease primarily transmitted by Anopheles mosquitoes that harbor the malaria parasite.[498] The predominant malaria species identified in Vietnam are Plasmodium vivax and Plasmodium falciparum. The most effective therapeutic approach for treating P. falciparum malaria is the utilization of artemisinin-based combination therapies. Vietnam has made significant strides toward eliminating malaria by building upon decades of public health advances. This progress is primarily the result of robust leadership at various levels of governance, mainly through the National Malaria Control Program, which collaborates with the military medical department of the Vietnam People's Army. Additionally, support from international donors, including the Global Fund, the U.S. President's Malaria Initiative, and the Bill & Melinda Gates Foundation, has played a crucial role in these efforts. The malaria infection rate in Vietnam declined 97.76% from 2014 to 2024, from 15,752 cases to 353 cases per year. In 2024, the MoH reported 353 cases, a year-on-year decrease of 21%.[499] Malaria transmission is predominantly observed in rural areas, with isolated cases occurring in the Mekong and Red River Deltas.[500] Furthermore, malaria risk is heightened in remote or hazardous environments, such as forested areas and mobile labor-intensive sectors, including mining and agricultural plantations.[501]

Tuberculosis

TB is an infectious disease caused by the bacterium Mycobacterium tuberculosis, which predominantly affects the pulmonary system. Vietnam exhibits a significant burden of TB, alongside a notable prevalence of multidrug-resistant tuberculosis (MDR-TB). In 2023, TB was reported to be 182 cases per 100,000 population.[502] In the same year, WHO reported 9.9 cases per 1,000 population with MDR-TB, a variant that poses more significant challenges for diagnosis, treatment, and resolution.[503] Statistics from 2022 indicate that TB remained the leading cause of mortality among communicable, maternal, neonatal, and nutritional diseases.[504] According to the MoH, Vietnam ranks 16th among 30 countries assessed for drug-susceptible TB cases and 13th globally for MDR-TB. A research study conducted by the Oxford University Clinical Research Unit in Vietnam highlighted significant risk factors associated with the TB burden in Ho Chi Minh City; it found that the majority of cases occurred among

middle-aged males, with an increasing burden correlated with advancing age.[505]

The Vietnamese government has demonstrated its commitment to the WHO's End TB Strategy, which effectively aims to eliminate TB by 2030. In August 2020, aligned with governmental efforts, USAID launched the Support to End Tuberculosis project, Double X. This initiative seeks to enhance TB detection through rapid diagnostic technologies, facilitating quicker and more accurate diagnoses. Furthermore, the Support to End Tuberculosis project promotes the National Tuberculosis Program by equipping mobile health units with advanced artificial intelligence software to improve the accuracy and efficiency of reading large volumes of X-ray images during community-based health initiatives.[506]

HIV/AIDS

Vietnam has demonstrated significant advancements in its response to human immunodeficiency virus / acquired immunodeficiency syndrome (HIV/AIDS), and it has aligned its efforts with the Joint United Nations Programme on HIV/AIDS (UNAIDS) 95-95-95 targets. In 2023 in Vietnam, approximately 250,000 individuals were living with HIV, with 94% aware of their status, 83% who know their status receiving treatment, and 94% of those on treatment achieving viral suppression (targets are 95% in each area).[507] This progress has been pivotal in reducing both new infections and AIDS-related mortality, and successes are attributed mainly to targeted interventions aimed at key populations. The number of individuals living with HIV declined to 240,000 in 2024.

Public health initiatives promoting pre-exposure prophylaxis and effective antiretroviral therapy have significantly contributed to the reduction of new HIV infections over the past two decades. On 22 January 2025, the MoH approved the Action Plan to implement public health response solutions to HIV clusters (2025-2030), contributing to the national strategic goal of ending the AIDS epidemic by 2030.[508]

Since its inception in 2004, the U.S. President's Emergency Plan for AIDS Relief (PEPFAR) has played a pivotal role in supporting the national response to the HIV/AIDS epidemic in Vietnam. This initiative encompasses comprehensive service delivery, technical assistance, and the strengthening of health systems. PEPFAR invested approximately US$1 billion in interventions aimed at both the prevention and treatment of HIV/AIDS from fiscal year (FY) 2004 to FY2024. The Country Operational Plan — which was developed collaboratively with the GoV, Global Fund, UNAIDS, and various community stakeholders — is designed to facilitate a coordinated and effective response to the epidemic.[509]

Non-Communicable Diseases

In 2024, NCDs including hypertension, diabetes, and cervical cancer, represented a predominant source of mortality and morbidity; they accounted for approximately 81% of total deaths.[510] This underscores the dual challenge posed by NCDs — the healthcare system's capacity to prevent, detect, and treat these conditions is strained even as these conditions pose significant risk to the sustainability of human capital and overall economic development. Effective control and management of NCDs require the establishment of comprehensive screening protocols, early diagnostic measures, appropriate treatment strategies, and robust follow-up procedures. According to the Institute for Health Metrics and Evaluation, the top 10 risk factors contributing to death and disability combined are high blood pressure, tobacco, air pollution, high blood sugar, dietary risks, high alcohol use, kidney dysfunction, malnutrition, high cholesterol, and occupational risks.[511] In 2021, the top causes of death, mostly attributable to NCDs, are stroke, ischemic heart disease, chronic obstructive pulmonary disease, diabetes, cirrhosis liver, chronic kidney disease, and lung cancer.[512]

Vietnam is committed to partnering with

WHO to prevent and control NCDs through strategic initiatives, such as integrating NCD management into primary health care, particularly through the enhancement of commune health stations. These stations are responsible for managing up to 80% of individuals with mild to moderate NCDs. This management relies on the utilization of national standardized protocols and tools that have been developed with WHO support. Among these tools are comprehensive training packages focused on the management of hypertension and diabetes and an online NCD reporting system designed to facilitate tracking and evaluation of progress in NCD control. The integrated approach optimizes health system resources and seeks to improve overall population health outcomes. Since 2022, WHO has extended support to 10 out of 22 district health centers and 43 out of 310 commune health stations in Ho Chi Minh City as part of a pilot project; this initiative aims to refine the model for broader application across all commune health stations in Vietnam, with plans for further integration of care for additional chronic conditions, including depression, HIV/AIDS, chronic obstructive pulmonary disease, and asthma.[513]

Training for Health Professionals

Between 1986 and 2021, the number of medical doctors in Vietnam surged from 15,000 to over 109,500, an increase facilitated by the expansion of medical universities offering accredited Doctor of Medicine programs. Concurrently, the government has initiated various postgraduate training and continuous professional development programs for healthcare workers to enhance their skills. However, there is a notable imbalance in the distribution of healthcare professionals, with a higher concentration in urban areas and a shortage in rural regions. National and provincial governments and local healthcare organizations have implemented strategies to address this disparity; they include financial incentives for healthcare workers to relocate to underserved areas. Telemedicine has also emerged as a viable solution for providing primary healthcare services in these regions.[514] On 21 February 2025, the MoH approved a project to bolster clinical pharmacy training and ensure adequate numbers of clinical pharmacists in medical facilities to support drug management and clinical pharmacy activities.[515]

In 2007, the MoH established the Vietnam Field Epidemiology Training Program (FETP) in response to the evolving demands of preventive medicine and public health training and to enhance the nation's health security. This program is strategically situated within the General Department of Preventive Medicine under the MoH, and it includes a steering committee, a dedicated management unit, and an administrative office. The FETP curriculum is a comprehensive two-year course encompassing seven to eight theoretical modules complemented by essential fieldwork components. The fieldwork includes practical experiences such as outbreak investigations, disease surveillance, field research, and the analysis of surveillance data. This integrative approach equips trainees with theoretical knowledge and emphasizes the applicability of learned concepts in real-world public health scenarios to foster a robust framework for epidemiological training.[516]

WOMEN, PEACE AND SECURITY

Vietnam has undertaken several significant initiatives in terms of women's inclusion, justice, and security. These activities are in line with the international Women, Peace and Security (WPS) agenda, which covers a wide range of efforts to increase women's meaningful participation in the promotion of sustainable peace and security through conflict prevention and resolution, peace negotiation, peacebuilding, peacekeeping, humanitarian response, relief aid, and economic recovery and development.

In 2000, UN Security Council Resolution (UNSCR) 1325 on WPS was adopted; it marked the first formal acknowledgment by the Council of the distinct impact of armed conflict on women.[517] Subsequently, the emphasis on women's security has been bolstered by the passing of UNSCRs 1820 (2008), 1888 (2008), 1889 (2009), 1960 (2010), 2106 (2013), 2122 (2013), 2242 (2015), 2467 (2019), and 2493 (2019).[518] These UNSCRs address security issues such as stopping gender-based violence (GBV) and promoting women's roles in conflict resolution, recovery, and peacebuilding. The WPS agenda has expanded to include women's and men's meaningful participation in humanitarian assistance, disaster management, DRR, and climate security. In 2015, the UN Entity for Gender Equality and the Empowerment of Women (UN Women) carried out a comprehensive global review of UNSCR 1325. The recommendations from the global study underscored the necessity to facilitate the meaningful involvement of women in peace processes, with a focus on safeguarding the well-being of women and girls during humanitarian crises and augmenting women's leadership and decision-making roles in endeavors aimed at the prevention and mitigation of violent extremism.[519]

On 17 February 1982, Vietnam ratified the Convention on the Elimination of All Forms of Discrimination Against Women (CEDAW).[520] The Vietnamese government is obligated to report to the CEDAW Committee every four years; its report must detail progress and challenges in the implementation of the convention's provisions. The CEDAW is a landmark international agreement that affirms the principles of fundamental human rights and equality for women worldwide. As of April 2022, a total of 189 countries were parties to the CEDAW, a total that highlights collective commitment at the international level.[521] National policies have supported various pillars and activities related to the WPS agenda. Passed in 2006, the Law on Gender Equality guarantees equal rights to women and called for gender strategies for each government ministry. Furthermore, the National Strategy on Gender Equality for Viet Nam was adopted in 2010 for the period 2011-2020 and renewed in 2021 for the period 2021-2030, respectively.[522]

On 21 January 2024, Vietnam became the third ASEAN member state to adopt a national action plan (NAP) on WPS. Following the launch of ASEAN's regional WPS plan in 2022, Vietnam's NAP covers the period 2024-2030 and aligns with the National Strategy on Gender Equality (2021-2030). The NAP focuses on addressing GBV, integrating WPS into disaster recovery, and enhancing international cooperation. Key goals include increasing Vietnamese women's participation in politics, foreign relations, defense, and security. In August 2024, the Ministry of Foreign Affairs, with support from UN Women, held a workshop to develop the NAP's Delivery Plan.[523]

Serving as the 2020 ASEAN Chair, Vietnam hosted the 20th anniversary commemoration of UNSCR 1325 through an international conference culminating in the signing of the Hanoi Commitment to Action, a commitment to accelerating meaningful implementation of the

WPS agenda. Vietnam also hosted the ASEAN Ministerial Dialogue on Strengthening Women's Role for Sustainable Peace and Security, focusing on the promotion and implementation of WPS in ASEAN.[524]

Various global indices endeavor to assess progress toward the objectives of the WPS agenda. The WPS Index, published by the Georgetown Institute for Women, Peace and Security, positions Vietnam at 78th among 177 countries assessed with an index score of 0.707 on a scale of 0 to 1, where 0 signifies minimum achievement and 1 indicates maximum achievement. The WPS Index measures variables such as inclusion, justice, and security within the national context.[525]

Vietnam's Nationally Determined Contributions (NDC) and National Action Plan on Climate Change (NAP) 2022-2030 both emphasize mainstreaming gender into all climate actions, recognizing the specific vulnerabilities and needs of women in the context of climate change.[526]

UN Women supports the Vietnamese government in achieving its national development priorities so that no woman or girl is left behind. UN Women focuses on four thematic areas: gender and climate change, humanitarian action, and DRR; women's economic empowerment; ending violence against women and girls; and WPS. Furthermore, UN Women works with international and national stakeholders to address GBV and promote behavioral and social norms change.[527]

The VWU is a member of the Vietnam Fatherland Front, the Women's International Democratic Federation, and the ASEAN Confederation of Women's Organizations and has a network that operates throughout the country at the central, provincial, district, and commune levels.[528] Utilizing mass and social media platforms, the VWU has significantly promoted women's roles in DRR through over 200,000 awareness-raising activities from 2017 to 2022. VWU has also developed guidance for integrating WPS into disaster prevention and risk reduction efforts.[529]

Civil society organizations, like the Center for Environment and Community Research (CECR), established in October 2009, play a significant role in promoting women's leadership and participation in DRR. CECR focuses on community-based environmental protection and empowering women in decision-making.[530] Since 2019, CECR coordinates a Network of Women Pioneer CSOs in Climate Change and DRR, which includes 25 organizations working in mainstreaming gender in water conservation, waste management, and disaster risk reduction. On 5 December 2024, UN Women, in collaboration with the VWU and CECR, held a workshop with national and international stakeholders to further enhance women's roles in DRR amid environmental changes.[531]

Photo 1 shows the UN Women Vietnam Country Representative and Ambassador of Japan to Vietnam assisting a Vietnamese beneficiary with delivering a water tank. Water storage tanks and filtration systems were delivered in November and December 2024 to Ca Mau and Ninh Thuan provinces, which experienced a severe drought and significant saltwater intrusion.[532]



Photo 1: Drought-stricken Provinces Receive Water Tanks

CONCLUSION

Vietnam has steadily improved its disaster management system, as seen in its enhanced responses from the 1999 floods to the 2020 flooding in central Vietnam. Prior to September 2024, when Typhoon Yagi made landfall as one of the most destructive tropical cyclones in decades, the GoV took decisive action to mitigate potential impacts. Mitigation activities included issuing warnings and recommendations for strengthening home and community defenses and pre-emptively evacuating over 130,000 people from flood-prone areas; these actions significantly reduced casualties and minimized damage.[533]

Since the 2013 passage of its cornerstone Law on Natural Disaster Prevention and Control and its 2020 amendment, Vietnam has increasingly worked to bring together disaster response, risk reduction, and prevention in its DM system. This progression is happening alongside a national master development plan (2021-2030) that aims to increase the average income, economic growth, and infrastructure capacity, with a vision to be a high-income, developed nation by 2050.[534] Efforts across development, DRR, and DM are reinforcing each other. Vietnam frequently experiences floods, which alone are expected to decrease the country's GDP by US$2.6 billion annually. Floods, landslides, storms, droughts, and epidemics pose significant challenges to the country, and with the increasing severity of climate risks, these hazards are expected to intensify in the future.[535]

Vietnam, with its strong agrarian roots, has historically focused on rural development. In DM, this has included a focus on disaster risks experienced in rural areas, especially flooding. However, recent decades have brought rapid urbanization, which is revealing growing flood risks in urban areas due to a combination of increased urban populations and reduced drainage or soil absorption capacity when construction hinders drainage pathways. Flooding and other hazards have caused significant damage to livelihoods and economic loss; that Vietnam is still one of the region's fastest growing economies is a testament to its drive toward economic development. The country continues to address Mekong-related challenges that are interconnected with its Southeast Asian neighbors to balance economic competition and growth, water management, and sustainable ecologies.[536]

Vietnam has made efforts to streamline its multi-agency approach to DM, which is led by the VDDMA, and this reform occurs in line with larger steps to consolidate government agencies. Until recently, VDDMA fell within the MARD; however, MARD and MoNRE merged in March 2025 to become the new MAE. The creation of the new ministry is seen as a strategic shift to streamline government administration and bring more DM activities under one umbrella. The 2023 Law on Civil Defense also mandated the merging of the National Steering Committee for Natural Disaster Prevention and Control (NSCNDPC) and the National Committee for Incident, Disaster Response, and Search and Rescue (VINASARCOM) to form the National Steering Committee for Civil Defense. As of early 2025, the transition is still underway for the new civil defense committee to take shape and become operational.

As Vietnam moves forward, the country is becoming a leader in regional development and has substantive bilateral and multilateral engagements, including robust participation in ASEAN. Vietnam strives for more effective integration of DRM across forecasting and warning capabilities, in local government plans, and in information sharing with its population and in international cooperation forums.[537]

APPENDICES

DoD DMHA Engagements in the Past Five Years (FY 2020-2025)

The list below describes the DMHA engagements that the U.S. has had with Vietnam in the last five years.

Cobra Gold – October 2025

Cobra Gold 2025, the 44th iteration of the annual multinational military exercise co-hosted by Thailand and the United States, took place from 25 February to 7 March 2025, in Thailand. The exercise involved over 8,200 personnel from approximately 30 countries, including Indonesia, Japan, Malaysia, Singapore, and South Korea. The exercise focused on enhancing regional security cooperation and strengthening military interoperability, and it included activities like field training exercises, humanitarian assistance, and disaster relief operations. Notably, Vietnam participated as an observer, reflecting its ongoing engagement in regional security initiatives. Overall, the exercise reinforced the commitment of allied and partner nations to a free and open Indo-Pacific region.[538]

USINDOPACOM Commander Visits Vietnam – December 2024

Admiral (Adm) Samuel Paparo, commander of U.S. INDOPACOM, traveled to Vietnam for the first time on 19 December 2024. He attended the Vietnam International Defense Expo, met with Vietnamese Minister of National Defense General (Gen) Phan Van Giang, Chief of the General Staff Senior Lieutenant (Lt) Gen. Nguyen Tan Cuong, U.S. Ambassador to Vietnam Marc Knapper, and other senior leaders to strengthen cooperation through the U.S.-Vietnam Comprehensive Strategic Partnership. They discussed bilateral cooperation, maritime security, and military modernization efforts. Separately, Adm. Paparo also met with the Cambodian Minister of Defense and Laos Deputy Minister of Defense to discuss military cooperation and exchanges on humanitarian assistance and disaster response, demining, and removal of unexploded ordnance.[539]

19th ASEAN Defence Ministers' Meeting-Plus Experts' Working Group on Military Medicine – October 2024

In October 2024, a U.S. delegation, including CFE-DM, attended the 19th Meeting of the ASEAN Defence Ministers' Meeting-Plus Experts' Working Group (ADMM-Plus EWG) on Military Medicine. Most member states of ASEAN, including Vietnam, attended, and participants provided their respective views on the challenges of the role of military medicine during disasters. Notably, ASEAN shared that it had established medical assistance protocols and procedures through Liaison Officers (LO) in each ASEAN member state. Within their role, the LOs can offer assistance to the National Focal Point of an affected country and facilitate communication with the AHA Centre.[540]

Pacific Partnership & Pacific Angel – August 2024

Vietnam hosted the multilateral Pacific Partnership mission and the Pacific Angel humanitarian response mission in August 2024, and throughout 2024, the U.S. Navy's 7th Fleet conducted port visits to Cam Ranh, Vietnam. The combined Pacific Partnership 2024-2 (PP24-2) and Pacific Angel 2024-3 (PA24-3) event took place 19–31 August in Quang Ngai, Vietnam, and included participation from the U.S., Vietnam, Australia, Chile, Japan, and the United Kingdom. During the event, U.S. and Vietnamese officials exchanged best practices and lessons learned on critical issues like forest fire prevention, coastal erosion, and natural disaster management. A site survey of the Nghia An anti-erosion embankment offered opportunities to strengthen coastal community resilience and international cooperation. Medical professionals conducted

40 subject matter expert exchanges and training sessions at various hospitals and medical centers, and they reached more than 180 health care professionals and nearly 100 Vietnamese patients. Construction efforts were a cornerstone of the mission, with renovations and repairs enhancing local facilities, including schools and medical stations.[541] Pacific Partnership is the largest annual multinational humanitarian assistance and disaster response preparedness exercise in the Indo-Pacific.

Vietnam Disaster Management Engagement Activity – June 2024

Vietnam hosted the 2024 Disaster Management Engagement Activity (DMEA) between the Oregon National Guard (ORNG) and VINASARCOM, with support from CFE-DM. The DMEA occurred 10-14 June 2024 as the latest iteration of the event between VINASARCOM and ORNG, which have had an ongoing partnership since 2012 as part of the U.S. National Guard State Partnership Program (SPP). This year marked CFE-DM's second consecutive year participating in the DMEA, in which CFE-DM facilitated, presented, and helped lead a table-top exercise (TTX) featuring a landslide and resultant flooding. Photo 2 depicts VINASARCOM and ORNG personnel deliberating the scenario, facilitated by CFE-DM.[542]



Photo 2: VINASARCOM and U.S. Troops in Tabletop Exercise

Exercise Cobra Gold – February 2024

Vietnam participated as an observer in Cobra Gold 2024, one of the largest annual multinational military exercises in the Indo-Pacific. It held in February 2024, co-hosted by Thailand and the United States. The exercise focused on enhancing interoperability, regional security, humanitarian assistance, and disaster response operations. Over 30 nations participated, including Japan, South Korea, Indonesia, and Malaysia, who robustly participated in training activities by conducting joint drills such as amphibious assaults, cyber defense, and humanitarian aid simulations. Vietnam's participation signaled its growing engagement in regional security cooperation. The 2024 iteration also emphasized responses to non-traditional security challenges, including pandemics and humanitarian crises.[543]

Indo-Pacific Military Health Exchange – September 2023

Vietnam participated in the Indo-Pacific Military Health Exchange (IPMHE), an annual military multilateral regional conference led by the U.S. INDOPACOM Surgeon's Office and jointly organized by the Malaysian Armed Forces' Health Services. The event took place 26-29 September 2023 in Kuala Lumpur, Malaysia, with the theme of "Achieving Health Solutions through Diversity and Inclusivity" and with the aim of fostering knowledge exchange, strengthening global partnerships, and facilitating dialogues among military medicine practitioners, medical agencies, and healthcare industry vendors.[544]

Pacific Partnership – August 2023

Pacific Partnership 2023 (PP23) commenced in Tuy Hoa, Vietnam, on 9 August 2023. This iteration marked the 12th time the mission had returned to Vietnam. Activities included medical exchanges, engineering projects, and community outreach events, aiming to enhance regional interoperability and disaster response capabilities. PP23 conducted 120 subject matter expert exchanges in public

health and preventive medicine at community health events. PP23 served more than 500 patients, conducted 93 surgeries, and trained 70 personnel in basic life support and 55 personnel in advanced life support. The medical training culminated in a mass casualty training exercise. Pacific Partnership works collectively with host and partner nations to enhance regional interoperability and disaster response capabilities, increase security and stability, and foster friendships in the region.[545]

Disaster Management Engagement Activity – May 2023

The DMEA is an annual event between the ORNG and VINASARCOM, which have shared a partnership since 2012. The first DMEA event began with introductory Incident Command System (ICS) classes. Events have since expanded, and in May 2023, the DMEA, supported by CFE-DM, consisted of two different disaster scenarios and demonstrations on how the two parties would respond in those scenarios. The event lasted one week and included case studies covering topics such as medical evacuation, search and rescue, communications, hazardous material, COVID-19, and landslide responses.

Exercise Cobra Gold – February 2023

Cobra Gold 2023 was held in February and March 2023 in Thailand. The annual multinational military exercise was co-hosted by Thailand and the U.S., and aimed to strengthen regional security, improve interoperability among participating forces, and enhance capabilities in areas such as humanitarian assistance, disaster response, and amphibious operations. Approximately 7,000 personnel from seven primary nations — including Thailand, the United States, Japan, South Korea, Indonesia, Singapore, and Malaysia — participated directly, with about 30 nations involved as participants or observers. Vietnam joined as an observer, a position that allows it to continue military cooperation while engaging more with regional security dialogues. Cobra Gold 2023 also emphasized joint responses to humanitarian crises and non-traditional security threats, such as pandemics and natural disasters.[546]

Trauma Care Training Development – September 2022

In September 2022, the ORNG began assisting Vietnam in establishing its first International Trauma Life Support (ITLS) training chapter. This initiative aimed to equip Vietnamese medical personnel with the skills necessary for effective trauma care, particularly for those deploying on United Nations peacekeeping missions. The collaboration involved multiple training phases, with Oregon instructors working alongside Vietnamese medical professionals to develop a sustainable ITLS program within the country. Vietnamese medical personnel deploy on an annual United Nations peacekeeping mission to South Sudan to staff a Level 2 hospital. Certification in ITLS meets the UN pre-deployment requirement for trauma training. Photo 3 depicts ORNG providing trauma care training to Vietnamese medical personnel.[547]

Pacific Partnership – July 2022

Pacific Partnership 2022 (PP22) marked the resumption of full operations following a suspension of activities in previous years due to the COVID-19 pandemic. In July 2022, the Vietnam phase of PP22 concluded in Phu Yen and included representatives from the U.S., Australia, Japan, and the United Kingdom.



Photo 3: Oregon National Guard Provides Trauma Care Training to Vietnamese Medical Personnel

During the mission, 23 medical procedures were performed aboard USNS MERCY by U.S., Australian, Japanese, and Vietnamese doctors and nurses, and 650 patients were seen in total. The mission involved 115 subject-matter expert exchanges and a variety of activities including construction, health care, exchange of expertise on disaster prevention and response processes and procedures, and community exchange events.[548]

Disaster Management Engagement Activity – June 2022

In June 2022, members of the ORNG traveled to Hanoi to participate in the annual DMEA with Vietnam's VINASARCOM. The event focused on sharing best practices and improving readiness for natural disasters. The engagement provided a platform for both parties to exchange knowledge and strategies, with a focus on the ICS and best readiness practices. The event was followed by a delegation from Vietnam's VINASARCOM who visited Oregon to celebrate the 10th Anniversary of the partnership.[549]

Secretary of Defense Austin's Visit to Vietnam – July 2021

Defense Secretary Austin traveled to Vietnam on 21 July 2021 to meet with Vietnam President Nguyen Xuan Phuc, Prime Minister Pham Minh Chinh, and National Defense Minister Phan Van Giang. During his visit, Secretary Austin highlighted the U.S. support to Vietnam in combatting COVID-19, including the donation of 5 million doses of the Moderna vaccine. The meetings also included discussion of the Vietnam Wartime Accounting Initiative between the two countries.[550]

Virtual Knowledge Exchange – May 2021

In May 2021, Airmen from the U.S. Pacific Air Forces (PACAF) Surgeon General office and members of the Vietnamese Military Medical University took part in a virtual knowledge exchange to discuss topics related to aerospace and expeditionary medicine. The exchange highlighted Vietnam's COVID-19 prevention and management initiatives. The discussion also focused on the relation of aerospace medicine and aeromedical evacuation to humanitarian assistance and disaster response operations.[551]

Rim of the Pacific Exercise – August 2020

In 2020, Vietnam joined more than 20 other countries at Rim of the Pacific Exercise (RIMPAC) 20, from 17 through 31 August. The exercise was an at-sea event only, with no social events due to concerns over the COVID-19 pandemic. The exercise included multinational anti-submarine warfare, maritime intercept operations, a live-fire training event, and other cooperative training opportunities. After sending observers in 2012 and 2016, Vietnam was invited as a full participant for the first time in 2018, when it sent eight naval officers. Vietnam's involvement in RIMPAC 20 marked a significant step forward in Vietnam and U.S. military relations.[552]

Exercise Cobra Gold – February to March 2020

Vietnam was an observer at Cobra Gold 2020, which was held from 24 February to 6 March 2020 across Thailand. The 39th iteration of the annual multinational military exercise was the largest at the time, with more than 9,600 soldiers from 29 countries participating. The exercise addressed reconnaissance, cyberspace, and humanitarian civic assistance. Cobra Gold reflects the cooperative alliance between the U.S. and Thailand, with Indonesia, Japan, Malaysia, Singapore, and South Korea also participating in the main exercise portions. Australia, Bangladesh, Canada, Fiji, France, Mongolia, Nepal, New Zealand, the Philippines, and the United Kingdom participated in multinational planning elements. Vietnam, along with Brunei, Burma, Cambodia, Germany, Israel, Laos, Pakistan, Sweden, and Switzerland attended as observers.[553]

International/Foreign Relations

Vietnam has established diplomatic relations

with more than 180 countries and all permanent members of the United Nations Security Council. Vietnam maintains a "multi-aligned foreign policy," in which the country strives to engage multiple countries and great powers while at the same time keeping its commitment to the principles of independence, neutrality, and non-alignment. For example, in a period less than one year, during 2023 and 2024, the GoV hosted state-level visits from the U.S., PRC, and Russia.[554] Vietnam's diplomatic balancing has been guided for decades by the principle of "bamboo diplomacy," a term coined by Vietnam's previous Communist Party General Secretary Nguyen Phu Trong, who emphasized the importance of maintaining core foreign policy objectives while being open to flexible tactics in the pursuit of these goals.[555] Vietnam uses three classifications for its diplomatic relations – Comprehensive and Strategic Partnership (CSP), Strategic Partnership, and Comprehensive Partnership. CSPs signify mutual long-term interests and extensive collaboration across multiple sectors, including politics, economics, and defense and security. Vietnam has nine CSPs with the following countries: Australia, France, India, Japan, Malaysia, PRC, Russia, South Korea, and the U.S.

U.S. – Vietnam

In 2023, the U.S. and Vietnam elevated their relationship to the level of a CSP, reaffirming the importance of trade and investment between the two countries and highlighting innovation-driven economic growth. The U.S. is Vietnam's largest export market and a major source of FDI. Defense and security cooperation between the U.S. and Vietnam has deepened in recent years, as the two countries agree on a common vision for a free and open Indo-Pacific region. At the 2021 Party Congress, Vietnam initiated a widescale modernization of its military forces, and the U.S. has sought to improve Vietnam's ability to maintain maritime domain awareness and patrol its coastal waters. In total, the U.S. has provided Vietnam with 24 new coast guard patrol vessels, unmanned aircraft systems, coastal radar, and two decommissioned U.S. Coast Guard Hamilton-class cutters, Vietnam's largest coast guard ships.[556] Additionally, bilateral cooperation in remediation for Vietnam War-era damage by the U.S. and the military personnel missing in action (MIA) program have been important centerpieces of the bilateral relationship between the U.S. and Vietnam.[557]

PRC - Vietnam

Vietnam's relationship with the PRC is one of its most important bilateral relationships, and the PRC is Vietnam's largest trading partner. The two countries have Communist Party-led political systems that provide a party-to-party communication channel and engender similar official worldviews. In 2023, Vietnam welcomed President Xi Jinping to Hanoi, where the two countries signed over 30 cooperation agreements, and in 2024 General Secretary To Lam visited Beijing. The Sino-Vietnamese relationship, however, is prone to tension, particularly over the two countries' competing claims in the South China Sea and Chinese dams on the upper Mekong River, which affect Vietnam's agricultural center.[558]

Vietnam's approach toward the PRC is nuanced by a desire for strong political and economic cooperation, even as Vietnam resists PRC policies in the areas of security and defense. The PRC is a main export destination for Vietnam, and U.S.-PRC trade tensions plus rising labor costs in the PRC, have resulted in a more favorable FDI climate in Vietnam.[559] However, Vietnam strongly resists PRC encroachment on the South China Sea and has done so by increasing and improving its navy and coast guard, seeking closer security cooperation with the U.S. and other regional partners, and participating in maritime security engagements with countries such as the Philippines and Indonesia.[560]

Russia – Vietnam

Vietnam established relations with Russia in 1950, and the Soviet Union was a key military and economic partner. According to the SIPRI Arms Transfers Database, Russia provided approximately 81% of Vietnam's arms imports

during the period 1995-2023. The largest spike in Vietnamese imports of Russian arms was registered in the period between 2011 and 2016 when diplomatic tensions between Hanoi and Beijing heightened over the disputed waters in the South China Sea. Russia is not only Vietnam's biggest supplier of military equipment, but Russian oil exploration technologies help maintain Vietnam's sovereignty claims in the contested South China Sea, and Vietnam has also licensed the Russian state-controlled oil company, Zarubezhneft, to develop an offshore block off its southeastern coast.[561]

The two countries have continued to strengthen their ties with high-level visits and numerous agreements. In 2023, the Deputy Chairman of Russia's Security Council visited Vietnam and, in 2024, Russian President Vladimir Putin made a state visit to Vietnam. During the latter visit, the two countries also signed more than 12 agreements in the areas of education, science and technology, oil and gas exploration, and clean energy. [562] Importantly, the two countries have pledged to "further cooperate in defense and security to cope with non-traditional security challenges."[563]

India – Vietnam

India and Vietnam share close and cordial bilateral relations and consider one another allies in the national struggle for independence. Diplomatic relations between the two countries were upgraded in 2007, to Strategic Partnership, and again in 2016, to a CSP.[564] Two State visits occurred in 2024 – in August, when Prime Minister Pham Minh Chinh visited India, and in September, during the Summit of the Future at the UN General Assembly in New York, when Prime Minister Narendra Modi met with General Secretary of the Communist Party of Viet Nam To Lam.[565] Trade between India and Vietnam has seen steady growth over the years, with a stable demand for Vietnam's industrial products and a growing interest in diversified goods. While high-tech products and agricultural goods are key focus areas, Vietnam's exports to India are diversifying, and in 2024, other export sectors saw double-digit growth, including tea, timber and wood products, seafood, bamboo, rattan, sedge and carpets, rubber products, confectionery and cereals, and textiles and garments.[566] India has a long-standing development partnership with Vietnam and has made positive contributions towards capacity building, the SDGs, and socioeconomic development.[567]

South Korea – Vietnam

Economic collaboration is at the forefront of Vietnam-South Korea relations, and the two countries elevated their relationship to a CSP in 2022. Vietnam is South Korea's fourth-largest trading partner and cumulatively the third-largest recipient of South Korean FDI. Recent state visits include the official visit of Prime Minister Pham Minh Chinh to South Korea in June 2024, and the attendance of South Korean Prime Minister Han Duck-soo at the State Funeral of General Secretary of the Communist Party, Nguyen Phu Trong, in July 2024. In 2023, the two countries signed nine cooperation documents related to development, trade and investment, small and medium-sized enterprises, innovation and entrepreneurship, environment, competition and consumer protection, and education, and agreed to increase trade to US$150 billion by 2030, reflecting a strong commitment to the Vietnam-Korea Free Trade Agreement signed in 2015.[568]

Participation in International Organizations

Vietnam is a member of, participates in, or cooperates with the following international organizations and agreement frameworks either as a government or via a national NGO or other entity:

Asian Development Bank (ADB), Asia-Pacific Economic Cooperation (APEC), ASEAN Regional Forum (ARF), Association of Southeast Asian Nations (ASEAN), Conference on Interaction and Confidence Building

Measures in Asia (CICA), Colombo Plan (CP), East Asia Summit (EAS), Food and Agriculture Organization of the United Nations (FAO), Group of 77 (G-77), International Atomic Energy Agency (IAEA), International Bank for Reconstruction and Development (IBRD), International Civil Aviation Organization (ICAO), International Chamber of Conference (ICC-national committees), Institute of Catastrophe Risk Management (ICRM), International Development Association (IDA), International Fund for Agricultural Development (IFAD), International Finance Corporation (IFC), International Federation of Red Cross and Red Crescent Societies (IFRCS), International Labour Organization (ILO), International Monetary Fund (IMF), International Maritime Organization (IMO), International Mobil Satellite Organization (IMSO), International Criminal Police Organisation (INTERPOL), International Olympic Committee (IOC), UN International Organization for Migration (IOM), Inter-Parliamentary Union (IPU), International Organization for Standardization (ISO) correspondent, International Telecommunications Satellite Organization (ITSO), International Telecommunications Union (ITU), Multilateral Investment Guarantee Agency (MIGA), Non-Aligned Movement (NAM), International Organization of La Francophonie (OIF), Organisation for the Prohibition of Chemical Weapons (OPCW), Permanent Court of Arbitration (PCA), United Nations (UN), United Nations Conference on Trade and Development (UNCTAD), UN Educational, Scientific, and Cultural Organization (UNESCO), United Nations High Commissioner for Refugees (UNHCRT), UN Industrial Development Organization (UNIDO), United Nations Office for Outer Space Affairs (UNOOSA), World Tourism Organization (UNWTO), Universal Postal Union (UPU), World Customs Organization (WCO), The World Federation of Trade Unions (WFTU NGOs), World Health Organization (WHO), World Intellectual Property Organization (WIPO), World Meteorological Organization (WMO), and World Trade Organization (WTO).[569]

UN peacekeeping missions that Vietnam is contributing personnel to, as of August 2024:[570]

- United Nations Multidimensional Integrated Stabilization Mission in the Central African Republic (MINUSCA) – 1 expert on mission, 7 staff officers
- United Nations interim Security Force for Abyei (UNISFA) – 2 experts on mission, 3 individual police, 6 staff officers, 184 troops
- United Nations Mission in the Republic of South Sudan (UNMISS) – 4 experts on mission, 6 individual police, 1 staff officer, 63 troops

Force Protection/Pre-Deployment Information

The following information is provided for pre-deployment planning and preparations. Visit www.travel.state.gov prior to deployments for further up-to-date information. DoD personnel must review the Foreign Clearance Guide (FCG) for travel to COUNTRY (www.fcg.pentagon.mil). All official travel and personal travel for active duty personnel must be submitted through an APACS request. Contact information for the Defense Attaché Office can be found in the FCG if you have additional questions.

Passport/Visa

Arriving visitors must have a valid passport and a visa (or pre-approval for a visa on arrival) to enter Vietnam. The passport must be valid for six months beyond the planned stay, and must have at least one blank visa page (not including the endorsement page). The U.S. Mission to Vietnam cannot assist U.S. citizens who arrive in Vietnam without required visas. U.S.-Vietnam dual nationals should consult the Department of State's information page for Travelers with Dual Nationality and the Embassy of Vietnam for travel requirements. Visitors must enter and exit Vietnam on the same passport. If using a Vietnamese passport to enter and exit the country, your passport must have at least six

months' validity from your return date to the United States.

Travel on Diplomatic or Official Passports: U.S. citizens traveling to or through Vietnam on diplomatic or official passports are required to obtain a visa before travel.

The Government of Vietnam requires a "visa sponsor" for all visa categories except for E-visa. A visa sponsor is a local business or travel agent to apply for a pre-approval letter with a Vietnamese Immigration Office in Vietnam on behalf of the traveler. Only on receipt of the pre-approval letter can a foreigner apply for an appropriate visa at a Vietnamese Embassy or Consulate abroad, or for a visa on arrival. For more information about this process, please visit the website of the Vietnamese Embassy: (https://travel.state.gov/content/travel/en/international-travel/International-Travel-Country-Information-Pages/Vietnam.html#ExternalPopup).

The Government of Vietnam has authorized some businesses and travel agencies to arrange for pre-approval for a "visa on arrival" at the airport. On a receipt of a pre-approval letter, travelers may then travel to Vietnam and apply for a visa upon landing to Vietnam. Please be advised that travelers should not travel to Vietnam without having been issued a pre-approval letter, as it may result in a denial of entry by immigration authorities. To avoid having to rearrange the travel date, please do not make travel arrangement before receiving the pre-approval letter.

Safety and Security

Small-scale, peaceful protests occasionally occur in Vietnam's major cities, but large-scale demonstrations are rare. As in any country, you should avoid large protests, which can become violent with little or no warning.

The Government of Vietnam may not allow or authorize travel to certain areas of the country that are deemed sensitive. Check with local authorities before visiting border areas to see if you need to obtain a travel permit issued by local authorities. U.S. citizens have been detained after traveling in areas close to the Vietnamese borders with the People's Republic of China, Cambodia, and Laos. These areas are not always marked, and there are no warnings about prohibited travel.

Safety standards in Vietnam are not at the same level as those in the United States and vary greatly from company to company and province to province. This is especially true for fire safety codes. Travelers should be aware that many buildings, including hotels, shops, and restaurants, have limited or no fire safety equipment or emergency exits. Ground and water transportation also lack safety regulations.

Travelers to Vietnam should have no expectation of privacy and should safeguard all personal documents and electronic devices. Exercise caution when discussing sensitive or proprietary information.

Crime: Crime in Vietnam is rated high. Exercise vigilance and the same commonsense security precautions you would in any major metropolitan city in the United States. Violent crime against foreigners is rare; however, petty crimes, such as theft, bag grabs, and pickpocketing occur regularly, especially in crowded areas and tourist locations. Typically, there is a rise in petty crime during the Christmas and Tet (Lunar New Year) holiday seasons, including during the day and in well-lit areas. Motorcyclists are known to snatch bags, cameras, cell phones, and other valuables from individuals riding or walking on the street. If you are targeted by thieves, do not resist, and report the incident immediately to local police and to the U.S. Embassy in Hanoi or the U.S. Consulate General in Ho Chi Minh City. Keep a tight hold on bags as you enter and exit vehicles and as you walk around. Hold tightly to cell phones when using them outside and lock and stow phones until you actually need to use them. Keep your passport and other important valuables in your hotel in a safe or another secured location at all times and carry both photo and digital copies of your passport. You should immediately report the loss or theft of your U.S. passport to the local police and the U.S. Embassy or the U.S. Consulate General.

Victims of Crime: Vietnam's local equivalent of an emergency line is 113. In the event you are a victim of a crime, local police will issue a report of a crime, but generally will only initiate investigations for crimes they determine serious, which do not always equate with U.S. standards. Investigations can take several months or even years to complete.

While the overall situation is improving, some police have asked for bribes, ostensibly to support local police efforts or to facilitate investigation of a crime. If you are involved in a situation where a police officer is soliciting money, contact American Citizen Services at the U.S. Embassy or Consulate General.

For U.S. victims of crime, the U.S. Embassy can:

- Help you find appropriate medical care
- Assist you in reporting a crime to the police
- Contact relatives or friends with your written consent
- Provide general information regarding the victim's role during the local investigation and following its conclusion
- Provide a list of local attorneys
- Provide information on victim's compensation programs in the United States
- Provide an emergency loan for repatriation to the United States and/or limited support in cases of destitution
- Help you find accommodation and arrange flights home
- Replace a stolen or lost passport

Domestic Violence: U.S. citizen victims of domestic violence are encouraged to contact the Embassy or Consulate General for assistance.

Tourism: The tourism industry is unevenly regulated, and safety inspections for equipment and facilities do not commonly occur. Hazardous areas/activities are not always identified with appropriate signage, and staff may not be trained or certified either by the host government or by recognized authorities in the field. In the event of an injury, appropriate medical treatment is typically available only in/near major cities. First responders are generally unable to access areas outside of major cities to provide urgent medical treatment. U.S. citizens are encouraged to purchase medical evacuation insurance.

Emergency Contact Information

The local equivalents to the number "911" line in Vietnam are 113 for police calls, 114 for fire and 115 for ambulance.

U.S. Embassy in Hanoi
Consular Section,
Rose Garden Building
Second Floor, 170 Ngoc Khanh Street
Hanoi, Vietnam
Mailing Address:
Consular Section
U.S. Embassy in Hanoi
7 Lang Ha Street, Hanoi, Vietnam
Website: *https://vn.usembassy.gov/*

U.S. Consulate General in HCMC
American Citizen Services
4 Le Duan Blvd., Dist. 1
Ho Chi Minh City, Vietnam

Currency Information

Vietnamese dong (VND or ₫ or informally đ and sometimes Đ)

VND 1.00 = US$0.000039 or VND 25,436 = US$1.00 (as of 9 January 2025)[571]

Travel Health Information

The CDC provides guidance that all travelers to Vietnam should be up to date on routine vaccinations. The following are additional recommendations for travel to Vietnam. The information in Table 5 is taken directly from the CDC website under the Travelers Health Section (*https://wwwnc.cdc.gov/travel/destinations/list/*).[572]

Health Alerts for Vietnam: At the time of writing this handbook (9 January 2025), there is not a health risk alert for Vietnam.

Measles	When traveling to Vietnam, travelers should ensure up-to-date measles-mumps-rubella (MMR) vaccine before travel as follows: • Infants (6 through 11 months old): 1 dose of measles-mumps-rubella (MMR) vaccine before travel. This dose does not count as the first dose in the routine childhood vaccination series. • People 12 months old or older, with no evidence of immunity or no written documentation of any doses: 2 doses of MMR vaccine before travel. The 2 doses must be given 28 days apart. • People 12 months old or older who have written documentation of 1 dose and no other evidence of immunity: 1 additional dose before travel, at least 28 days after the previous dose
Routine vaccines (for all travelers)	Make sure you are up-to-date on routine vaccines before every trip. These vaccines include the MMR vaccine, diphtheria-tetanus-pertussis vaccine, varicella (chickenpox) vaccine, polio vaccine, shingles, and your yearly flu shot.
COVID-19	All eligible travelers should be up to date with their COVID-19 vaccines
Chikungunya	There has been evidence of chikungunya virus transmission in Vietnam within the last five years. Chikungunya vaccination may be considered for the following travelers: • People aged 65 years or older, especially those with underlying medical conditions, who may spend at least 2 weeks (cumulative time) in indoor or outdoor areas where mosquitoes are present in Vietnam, OR • People planning to stay in Vietnam for a cumulative period of 6 months or more
Hepatitis A (for most travelers)	The CDC recommends this vaccine because you can get hepatitis A through contaminated food or water in Vietnam, regardless of where you are eating or staying.
Hepatitis B	You can get hepatitis B through sexual contact, contaminated needles, and blood products, so the CDC recommends this vaccine if you might have sex with a new partner, get a tattoo or piercing, or have any medical procedures.
Japanese Encephalitis (for some travelers)	You may need this vaccine if your trip will last more than a month, depending on where you are going in Vietnam, and what time of year you are traveling. You should also consider this vaccine if you plan to visit rural areas in Vietnam or will be spending a lot of time outdoors, even for trips shorter than a month. Your doctor can help you decide if this vaccine is right for you based on your travel plans.
Malaria (for some travelers)	When traveling in Vietnam, you should avoid mosquito bites to prevent malaria. You may need to take prescription medicine before, during, and after your trip to prevent malaria, depending on your travel plans, such as where you are going, when you are traveling, and if you are spending a lot of time outdoors or sleeping outside.
Rabies (for some travelers)	Rabies can be found in dogs, bats, and other mammals in Vietnam, so the CDC recommends this vaccine for the following groups: • Travelers involved in outdoor and other activities (such as camping, hiking, biking, adventure travel, and caving) that put them at risk for animal bites. • People who will be working with or around animals (such as veterinarians, wildlife professionals, and researchers). • People who are taking long trips or moving to Vietnam • Children, because they tend to play with animals, might not report bites, and are more likely to have animal bites on their head and neck.

Table 5: CDC Travel Health Information for the Vietnam

The following actions you can take to stay healthy and safe on your trip include:

Eat and Drink Safely

Unclean food and water can cause travelers' diarrhea and other diseases. Reduce your risk by sticking to safe food and water habits.

Eat

- Food that is cooked and served hot
- Hard-cooked eggs
- Fruits and vegetables, you have washed in clean water or peeled yourself
- Pasteurized dairy products

Don't Eat

- Food served at room temperature
- Food from street vendors
- Raw or soft-cooked (runny) eggs
- Raw or undercooked (rare) meat or fish
- Unwashed or unpeeled raw fruits and vegetables
- Unpasteurized dairy products
- "Bushmeat" (monkeys, bats, or other wild game)

Drink

- Bottled water that is sealed
- Water that has been disinfected
- Ice made with bottled or disinfected water
- Carbonated drinks
- Hot coffee or tea
- Pasteurized milk

Don't Drink

- Tap or well water
- Ice made with tap or well water
- Drinks made with tap or well water (such as reconstituted juice)
- Unpasteurized milk

Take Medicine

Talk with your doctor about taking prescription or over-the-counter drugs with you on your trip in case you get sick. If you are going to a high-risk area, fill your malaria prescription before you leave, and take enough with you for the entire length of your trip. Follow your doctor's instructions for taking the pills; some need to be started before you leave.

Prevent Bug Bites

Bugs (like mosquitoes, ticks, and fleas) can spread a number of diseases. Many of these diseases cannot be prevented with a vaccine or medicine. You can reduce your risk by taking steps to prevent bug bites.

To prevent bug bites:

- Cover exposed skin by wearing long-sleeved shirts, long pants, and hats.
- Use an appropriate insect repellent (see below).
- Use permethrin-treated clothing and gear (such as boots, pants, socks, and tents). Do not use permethrin directly on skin.
- Stay and sleep in air-conditioned or screened rooms.
- Use a bed net if the area where you are sleeping is exposed to the outdoors.

For protection against ticks and mosquitoes:

Use a repellent that contains 20 percent or more DEET for protection that lasts up to several hours.

For protection against mosquitoes only:

Products with one of the following active ingredients can also help prevent mosquito bites. Higher percentages of active ingredient provide longer protection.

- DEET
- Picaridin (also known as KBR 3023, Bayrepel, and Icaridin)
- Oil of lemon eucalyptus (OLE) or para-Menthane-3,8-diol (PMD)
- IR3535
- 2-undecanone

If you are bitten by bugs:

- Avoid scratching bug bites and apply hydrocortisone cream or calamine lotion to reduce the itching.
- Check your entire body for ticks after outdoor activity. Be sure to remove ticks properly.
-

Safety and Security

Note that conditions can change rapidly in a country at any time. To receive updated Travel Advisories and Alerts for the countries you choose, sign up at *step.state.gov*.

Sendai Framework

The Sendai Framework for Disaster Risk Reduction 2015-2030 is the global blueprint and 15-year plan to build the world's resilience to natural disasters.[573] The Sendai Framework is the successor instrument to the Hyogo Framework for Action 2005-2015: Building the Resilience of Nations and Communities to Disasters.[574] Adopted at the Third United Nations World Conference on Disaster Risk Reduction in Sendai, Japan, in 2015, the Framework aims to achieve the substantial reduction of disaster risk and losses in lives, livelihoods, and health and in the economic, physical, social, cultural, and environmental assets of persons, businesses, communities, and countries by 2030.[575]

The Framework outlines seven targets and four priorities for action to prevent new and reduce existing disaster risks.

The Seven Global Targets include:

- Substantially reduce global disaster mortality by 2030, aiming to lower average per 100,000 global mortality rates in the decade 2020-2030 compared to the period 2005-2015.
- Substantially reduce the number of affected people globally by 2030, aiming to lower average global figure per 100,000 in the decade 2020 -2030 compared to the period 2005-2015.
- Reduce direct disaster economic loss in relation to global GDP by 2030.
- Substantially reduce disaster damage to critical infrastructure and disruption of basic services, among them health and educational facilities, including through developing their resilience by 2030.
- Substantially increase the number of countries with national and local DRR strategies by 2020.
- Substantially enhance international cooperation to developing countries through adequate and sustainable support to complement their national actions for implementation of this Framework by 2030.
- Substantially increase the availability of and access to multi-hazard early warning systems and disaster risk information and assessments to the people by 2030.[576]

The Four Priorities of Action include:

- Understanding disaster risk
- Strengthening disaster risk governance to manage disaster risk
- Investing in disaster reduction for resilience; and
- Enhancing disaster preparedness for effective response and to "Build Back Better" in recovery, rehabilitation, and reconstruction.

Figure 7 shows the Sendai DRR Framework.[577]

In December 2022, Vietnam published its voluntary Mid-Term Review of The Sendai Framework for Disaster Risk Reduction. The below text is taken directly from the voluntary mid-term review (MTR) and details Vietnam's progress toward its Sendai Framework commitments. The complete report can be found at *https://www.preventionweb.net/*.[578]

Priority 1 – Understanding disaster risk

The understanding of disaster risk is evolving in Vietnam. There is still a misperception that disasters are natural and inevitable. Continued work on capacity building for improved risk understanding is required. However, there is evidence of an improved enabling environment and strengthened institutional arrangements for DRR.

Considerable advances have been made in gender mainstreaming and the collection and use of disaggregated data. The NSCNDPC and other organizations have provided significant leadership and support to improve people's understanding of disaster risk, and there have been advancements made in formal education and public awareness activities to improve children's understanding of risk. In terms of early warning systems (EWS) and information sharing, Viet Nam has made significant progress in improving multi-hazard forecasting and monitoring. Finally, there is evidence of improvements in scientific understanding for natural hazard exposure and in the use of new

Chart of the Sendai Framework for Disaster Risk Reduction
2015-2030

Scope and Purpose
The present framework will apply to the risk of small-scale and large-scale, frequent and infrequent, sudden and slow-onset disasters, caused by natural or manmade hazards as well as related environmental, technological, and biological hazards and risks. It aims to guide the multi-hazard management of disaster risk in development at all levels as well as within and across all sectors
Expected Outcome
The substantial reduction of disaster risk and losses in lives, livelihoods, and health and in the economic, physical, social, cultural, and environmental assets of persons, businesses, communities, and countries
Goal
Prevent new and reduce existing disaster risk through the implementation of integrated and inclusive economic, structural, legal, social, health, cultural, educational, environmental, technological, political, and institutional measures that prevent and reduce hazard exposure and vulnerability to disaster, increase preparedness for response and recovery, and thus strengthen resilience

Targets						
Substantially reduce global disaster mortality by 2030, aiming to lower average per 100,000 global mortality during 2020-2030 compared to 2005-2015	Substantially reduce the number of affected people globally by 2030, aiming to lower the average global figure per 100,000 during 2020-2030 compared to 2005-2015	Reduce direct disaster economic loss in relation to global GDP by 2030	Substantially reduce disaster damage to critical infrastructure and disruption of basic services, among them health and educational facilities, including through developing their resilience by 2030	Substantially increase the number of countries with national and local disaster risk reduction strategies by 2020	Substantially enhance international cooperation to developing countries through adequate and sustainable support to complement their national actions for implementation of this framework by 2030	Substantially increase the availability of and access to multi-hazard early warning systems and disaster risk information and assessments to people by 2030

Priorities for Action

There is a need for focused action within and across sectors by States at local, national, regional, and global levels in the following four priority areas.

Priority 1	Priority 2	Priority 3	Priority 4
Understanding disaster risk	Strengthening disaster risk governance to manage disaster risk	Investing in disaster risk reduction for resilience	Enhancing disaster preparedness for effective response, and to "Build Back Better" in recovery, rehabilitation, and reconstruction
Disaster risk management needs to be based on an understanding of disaster risk in all its dimensions of vulnerability, capacity, exposure of persons and assets, hazard characteristics, and the environment	Disaster risk governance at the national, regional, and global levels is vital to the management of disaster risk reduction in all sectors and ensuring the coherence of national and local frameworks of laws, regulations, and public policies that, by defining roles and responsibilities, guide, encourage, and incentivize the public and private sectors to take action and address disaster risk	Public and private investment in disaster risk prevention and reduction through structural is non-structural measures are essential to enhance the economic, social, health, and cultural resilience of persons, communities, countries, and their assets, as well as the environment. These can be drivers of innovation, growth, and job creation. Such measures are cost-effective and instrumental to save lives, prevent and reduce losses, and ensure effective recovery and rehabilitation	Experience indicates that disaster preparedness needs to be strengthened for more effective response and to ensure capacities are in place for effective recovery. Disasters have also demonstrated that the recovery, rehabilitation, and reconstruction phase, which needs to be prepared ahead of the disaster, is an opportunity to "Build Back Better" through integrating disaster risk reduction measures. Women and persons with disabilities should publicly lead and promote gender-equitable and universally accessible approaches during the response and reconstruction phases

Figure 7: UN Sendai Framework for Disaster Risk Reduction 2015-2030

technology for decision-making and policy.

In terms of legal and institutional capacities for management, coordinated disaster risk information collection, monitoring and sharing, and public awareness and education for the masses, the 2017 establishment of VNDMA with dual functions of policy advisory and coordination supports decision-making and inter-sectoral policy work and provides a mechanism for synergies in the technical guidance for provincial work. It has rapidly become a powerhouse for risk information sharing, DRM monitoring, data collection and research, and the restructuring of VNDMA in 2025 intends to streamline these efforts further.[579]

In 2018, the VNDMA established the Vietnam Disaster Monitoring System (VNDMS), an integrated platform that analyses real-time data and provides early warning information for various stakeholders and decision-makers. The VNDMA has also provided guidance to the provincial and city-level Committees for Disaster Prevention and Search and Rescue to develop local monitoring systems connected with the central system.

Priority 2 – Strengthening disaster risk governance to manage disaster risk

Important advances have been made in disaster risk governance in Vietnam. There is a comprehensive legal framework in place for DRR, and the institutional setup for DRR has advanced, including for coordination and policymaking (e.g., VNDMA, Disaster Risk Prevention Partnership, Disaster Management Working Group, Climate Change Working Group of non-governmental organizations, Association of Southeast Asian Nations, etc.). Additionally, inter-sectoral policy and strategies, guidance for funding, and risk governance are clearly advancing at the national, provincial, and local levels (e.g., the National Programme on Community-Based Disaster Risk Management, which has been actively supporting DRM capacity building).

Risk governance requires robust risk assessments to ensure informed and coordinated risk reduction interventions at different levels. Currently the two inter-connected sectors of DRR and Climate Change Adaptation are managed by two separate ministries, MARD and MONRE. This presents significant challenges, because risk governance requires robust risk assessments to ensure informed and coordinated risk reduction interventions at different levels. At the time of this publication (2025), the ministries of MARD and MONRE are being merged and streamlined.[580] There have been important advances in the application of DRM and CCA policies, including the integration of long term financing and the development of a community-based disaster risk assessments (CBDRA) methodology, which has been endorsed by the national government and applied by local authorities.

Inter-sectoral policies and strategies are also in place to provide guidance for funding and risk governance at all levels. These policies include:

- Target Programme for Climate Change Adaption and Green Growth for the 2016 – 2020 period (October 2017)
- National plan for climate change adaptation for the period of 2021-2030 - Vision to 2050 (July 2020)
- National Strategy on Disaster Prevention and Control to 2030 - Vision to 2050 (March 2021)
- Government Programme on Community Awareness Raising and Community Based Disaster Risk Management to 2030 (April 2021)
- Indicators for Assessment of Provincial Disaster Prevention and Control and Implementation Plan for 2021-2025 (December 2021)

Priority 3 – Investing in disaster risk reduction for resilience

Public and private investment in DRR has steadily increased in Vietnam but is falling short of covering the growing needs caused by medium- to large-scale disasters impacting communities more frequently and intensely due to the changing climate. There have been improvements in legislation and regulation for risk financing operations to help address the persistent financing gap following large scale events in Vietnam, and there is local support

for risk financing options and DRR. However, stakeholders have emphasized that all investment efforts need to be better coordinated and monitored to ensure efficiency and to avoid overlap.

The GoV and its development partners are investing in building stronger resilient housing, schools, and health facilities. The government has been paying attention to the resilience of infrastructure and safe housing in disaster-prone areas by increasing funding for upgrades and repairs, including: investing in and allocating funds to repair and upgrade the system of river dikes, sea dikes, and reservoirs for irrigation and hydroelectricity; ensuring the operation of 71 boat anchorages to avoid storms; allocating 1.22 trillion VND (US$ 47.7 million) to repair and restore the transportation system, ensuring smooth and safe traffic; and developing a program to support poor households with storm- and flood-resilient housing in the central region and a program on residential clusters in the Mekong Delta.

The partnership between MARD and MOC on resilient housing models highlights a notable contribution to resilient infrastructure. As of 2022, over 4,000 houses had been built, and more than 3,300 houses had received resilient repairs in the aftermath of the historical floods and storms in 2020. Plans have been underway to scale up the successful resilient housing model especially in vulnerable coastal regions.

With the support of development partners, VNDMA is also implementing a number of projects on flood risk reduction. One of these is a project for strengthening the capacity of the Northern Mountainous Region to cope with and minimize damage caused by flash floods and landslides. The project has been piloted in Yen Bai and Son La provinces and focuses on both structural and non-structural measures, in addition to conducting sediment disaster risk analyses and examining sediment DRR plans. VNDMA is also working on elaborating a comprehensive flood management plan for key rivers in the Central Region.

There are four main sources of financing for DRR and CCA works in Vietnam. These include: 1) the state budget, 2) the DRM Fund which covers the national and provincial levels, 3) international ODA and non-ODA assistance, 4) and local charity organizations and individual contributions.

Priority 4 – Enhancing disaster preparedness for effective response, and to "Build Back Better" in recovery, rehabilitation, and reconstruction

Disaster preparedness and investments in response and recovery are increasingly recognized in Vietnam as effective solutions for enhancing adaptive capacity. Local agencies are providing critical support to help communities "Build Back Better" and advocating for the instrumental role of women and small businesses in resilience programming. Additionally, youth and community are playing an increasingly large role in disaster preparedness and response. Finally, the role of the private sector in DRR has been improved including participation in developing a disaster monitoring network.

All provinces have set up first responder teams in all disaster-prone communities around the country, and there has been an improvement in the availability of emergency shelters, including emergency drills, simulations, training, and educational support for community. As of 2020, Vietnam had consolidated grassroots disaster response teams in nearly 11,000 communes (accounting for 95%) to act as a rapid response force to promptly handle emergency situations from the first hour before the approach of outside forces.

Procedures for rapid assessments following disaster events have also improved. VNDMA has developed technical guidelines for post-disaster needs assessments, which cover the provision of assistance in emergency response and recovery for communities affected by disasters. Joint Assessment teams consisting of government and development partners have been established and successfully activated following the drought and saltwater intrusion in the Mekong Delta in January 2020 and the tropical storms and typhoons that hit the Central Region in October and November 2020.

Country Profile

The information in the Country Profile section is sourced directly from the CIA World Fact book for Vietnam. Additional numbers on country comparison to the world can be found by going directly to the CIA website (*https:/www.cia.gov*). It discusses topics including geography, people and society, government, economy, energy, communications, military and security, transportation, terrorism, and transnational issues.[581]

Background

Vietnam's early history included periods of occupation by outside forces and eventual power consolidation under Vietnamese dynastic families. A succession of Han Chinese emperors ruled the area, which was centered on the Red River Valley, until approximately the 10th century. The Ly Dynasty (11th-13th century) created the first independent Vietnamese state, which was known as Dai Viet, and established their capital at Thang Long (Hanoi). Under the Tran Dynasty (13th-15th century), TRAN Hung Dao, one of Vietnam's national heroes, led Dai Viet forces to fight off Mongol invaders in 1279. After a brief Chinese occupation in the early 1400s, Vietnamese resistance leader LE Thai To made himself emperor and established the Le Dynasty, which lasted until the late 18th century despite decades of political turmoil, civil war, and division. During this period, Dai Viet expanded southward to the Central Highlands and Mekong Delta, reaching the approximate boundaries of modern-day Vietnam by the 1750s. Dai Viet suffered additional civil war and division in the latter half of the 18th century, but it was reunited and renamed Vietnam under Emperor NGUYEN Phuc Anh (aka Gia Long) in 1802.

France began its conquest of Vietnam in 1858 and made Vietnam part of French Indochina in 1887. Vietnam declared independence after World War II, but the French continued to rule until communist forces under Ho Chi MINH defeated them in 1954. Under the Geneva Accords of 1954, Vietnam was divided into the communist North and anti-communist South. Fighting erupted between the two governments shortly afterwards with the North supporting communist rebels in the South and eventually committing thousands of combat troops. The US provided to the South significant economic and military assistance, including large numbers of US military forces, which reached a peak strength of over 500,000 troops in 1968. US combat forces were withdrawn following a cease-fire agreement in 1973. Two years later, North Vietnamese forces overran the South, reuniting the country under communist rule. The conflict, known as the Second Indochina War (1955-1975), caused more than 58,000 US combat and non-combat deaths and created deep domestic divisions in the US. It also devastated Vietnam, spilled over into the neighboring countries of Cambodia and Laos, and is estimated to have resulted in the deaths of up to 3 million Vietnamese civilians and soldiers.

Despite the return of peace, the country experienced little economic growth for over a decade because of its diplomatic isolation, leadership policies, and the persecution and mass exodus of citizens, many of them successful South Vietnamese merchants. However, since the enactment of Vietnam's "doi moi" (renovation) policy in 1986, the economy has seen strong growth, particularly in agricultural and industrial production, construction, exports, foreign investment, and tourism. Nevertheless, the Communist Party maintains tight political and social control of the country, and Vietnam faces many related challenges, such as rising income inequality and corruption.

Geography

Location

Southeastern Asia, bordering the Gulf of Thailand, Gulf of Tonkin, and South China Sea, as well as China, Laos, and Cambodia

Geographic coordinates

16 10 N, 107 50 E

Area
total: 331,210 sq km
land: 310,070 sq km
water: 21,140 sq km
comparison ranking: total 67

Area - comparative
about three times the size of Tennessee; slightly larger than New Mexico

Land boundaries
total: 4,616 km
border countries (3): Cambodia 1,158 km; China 1,297 km; Laos 2,161 km

Coastline
3,444 km (excludes islands)

Maritime claims
territorial sea: 12 nm
contiguous zone: 24 nm
exclusive economic zone: 200 nm
continental shelf: 200 nm or to the edge of the continental margin

Climate
tropical in south; monsoonal in north with hot, rainy season (May to September) and warm, dry season (October to March)

Terrain
low, flat delta in south and north; central highlands; hilly, mountainous in far north and northwest

Elevation
highest point: Fan Si Pan 3,144 m
lowest point: South China Sea 0 m
mean elevation: 398 m

Natural resources
antimony, phosphates, coal, manganese, rare earth elements, bauxite, chromate, offshore oil and gas deposits, timber, hydropower, arable land

Land use
agricultural land: 34.8% (2018 est.)
arable land: 20.6% (2018 est.)
permanent crops: 12.1% (2018 est.)
permanent pasture: 2.1% (2018 est.)
forest: 45% (2018 est.)
other: 20.2% (2018 est.)

Irrigated land
46,000 sq km (2012)

Major rivers (by length in km)
Song Tien Giang (Mekong) river mouth (shared with China [s], Burma, Laos, Thailand, Cambodia) - 4,350 km; Pearl river source (shared with China [m]) - 2,200 km; Red river mouth (shared with China [s]) - 1,149 km
note – [s] after country name indicates river source; [m] after country name indicates river mouth

Major watersheds (area sq km)
Pacific Ocean drainage: Mekong (805,604 sq km)

Population distribution
though it has one of the highest population densities in the world, the population is not evenly dispersed; clustering is heaviest along the South China Sea and Gulf of Tonkin, with the Mekong Delta (in the south) and the Red River Valley (in the north) having the largest concentrations of people

Natural hazards
occasional typhoons (May to January) with extensive flooding, especially in the Mekong River delta

Geography note 1: extending 1,650 km north to south, the country is only 50 km across at its narrowest point

Geography note 2: Son Doong in Phong Nha-Ke Bang National Park is the world's largest cave (greatest cross sectional area) and is the largest known cave passage in the world by volume; it currently measures a total of 38.5 million cu m

(about 1.35 billion cu ft); it connects to Thung cave (but not yet officially); when recognized, it will add an additional 1.6 million cu m in volume; Son Doong is so massive that it contains its own jungle, underground river, and localized weather system; clouds form inside the cave and spew out from its exits and two dolines (openings, or sinkhole skylights, created by collapsed ceilings that allow sunlight to stream in)

People and Society

Population
total: 105,758,975
male: 53,109,175
female: 52,649,800 (2024 est.)
comparison rankings: female 16; male 16; total 16

Nationality
noun: Vietnamese (singular and plural)
adjective: Vietnamese

Ethnic groups
Kinh (Viet) 85.3%, Tay 1.9%, Thai 1.9%, Muong 1.5%, Khmer 1.4%, Mong 1.4%, Nung 1.1%, other 5.5% (2019 est.)
note: 54 ethnic groups are recognized by the Vietnamese Government

Languages
Vietnamese (official); English (often as a second language); some French, Chinese, and Khmer; mountain-area languages (including Mon-Khmer and Malayo-Polynesian)
major-language sample(s):
Dữ kiện thế giới, là nguồn thông tin cơ bản không thể thiếu. (Vietnamese)

Religions
Catholic 6.1%, Buddhist 5.8%, Protestant 1%, other 0.8%, none 86.3% (2019 est.)
note: most Vietnamese are culturally Buddhist

Demographic profile

When Vietnam was reunified in 1975, the country had a youthful age structure and a high fertility rate. The population growth rate slowed dramatically during the next 25 years, as fertility declined and infant mortality and life expectancy improved. The country's adoption of a one-or-two-child policy in 1988 led to increased rates of contraception and abortion. The total fertility rate dropped rapidly from nearly 5 in 1979 to 2.1 or replacement level in 1990, and at 1.8 is below replacement level today. Fertility is higher in the more rural central highlands and northern uplands, which are inhabited primarily by poorer ethnic minorities, and is lower among the majority Kinh, ethnic Chinese, and a few other ethnic groups, particularly in urban centers. With more than two-thirds of the population of working age (15-64), Vietnam has the potential to reap a demographic dividend for approximately three decades (between 2010 and 2040). However, its ability to do so will depend on improving the quality of education and training for its workforce and creating jobs. The Vietnamese Government is also considering changes to the country's population policy because if the country's fertility rate remains below replacement level, it could lead to a worker shortage in the future.

Vietnam has experienced both internal migration and net emigration, both for humanitarian and economic reasons, for the last several decades. Internal migration – rural-rural and rural-urban, temporary and permanent – continues to be a means of coping with Vietnam's extreme weather and flooding. Although Vietnam's population is still mainly rural, increasing numbers of young men and women have been drawn to the country's urban centers where they are more likely to find steady jobs and higher pay in the growing industrial and service sectors.

The aftermath of the Vietnam War in 1975 resulted in an outpouring of approximately 1.6 million Vietnamese refugees over the next two decades. Between 1975 and 1997, programs such as the Orderly Departure Program and the Comprehensive Plan of Action resettled hundreds of thousands of Vietnamese refugees abroad, including the United States (880,000),

China (260,000, mainly ethnic Chinese Hoa), Canada (160,000), Australia (155,000), and European countries (150,000).

In the 1980s, some Vietnamese students and workers began to migrate to allied communist countries, including the Soviet Union, Czechoslovakia, Bulgaria, and East Germany. The vast majority returned home following the fall of communism in Eastern Europe in the early 1990s. Since that time, Vietnamese labor migrants instead started to pursue opportunities in Asia and the Middle East. They often perform low-skilled jobs under harsh conditions for low pay and are vulnerable to forced labor, including debt bondage to the private brokers who arrange the work contracts. Despite Vietnam's current labor surplus, the country has in recent years attracted some foreign workers, mainly from China and other Asian countries.

Age structure
0-14 years: 23.2% (male 12,953,719/female 11,579,690)
15-64 years: 68.5% (male 36,591,845/female 35,887,201)
65 years and over: 8.3% (2024 est.) (male 3,563,611/female 5,182,909)

Figure 8 is the 2023 population pyramid for Vietnam. A population pyramid illustrates the age and sex structure of a country's population and may provide insights about political and social stability, as well as economic development. The shape of a population pyramid gradually evolves over time based on fertility, mortality, and international migration trends.[582]

Dependency ratios
total dependency ratio: 45.6
youth dependency ratio: 32.8
elderly dependency ratio: 12.7
potential support ratio: 7.8 (2021 est.)

Median age
total: 33.1 years (2024 est.)
male: 32 years
female: 34.2 years
comparison ranking: total 113

Population growth rate
0.89% (2024 est.)
comparison ranking: 102

Birth rate
14.9 births/1,000 population (2024 est.)
comparison ranking: 111

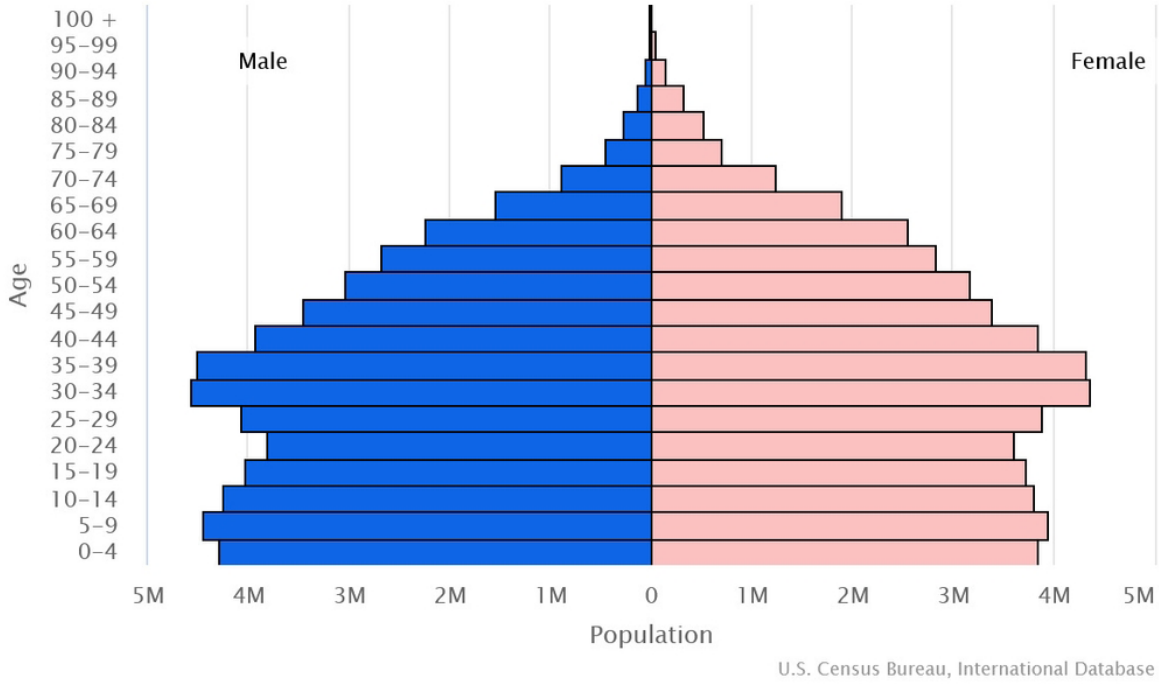


Figure 8: Population Pyramid, Vietnam (2023)

Death rate
5.8 deaths/1,000 population (2024 est.)
comparison ranking: 165

Net migration rate
-0.2 migrant(s)/1,000 population (2024 est.)
comparison ranking: 106

Population distribution
though it has one of the highest population densities in the world, the population is not evenly dispersed; clustering is heaviest along the South China Sea and Gulf of Tonkin, with the Mekong Delta (in the south) and the Red River Valley (in the north) having the largest concentrations of people

Urbanization
urban population: 39.5% of total population (2023)
rate of urbanization: 2.7% annual rate of change (2020-25 est.)
total population growth rate v. urban population growth rate, 2000-2030

Major urban areas - population
9.321 million Ho Chi Minh City, 5.253 million HANOI (capital), 1.865 million Can Tho, 1.423 million Hai Phong, 1.221 million Da Nang, 1.111 million Bien Hoa (2023)

Sex ratio
at birth: 1.1 male(s)/female
0-14 years: 1.12 male(s)/female
15-64 years: 1.02 male(s)/female
65 years and over: 0.69 male(s)/female
total population: 1.01 male(s)/female (2024 est.)

Maternal mortality ratio
124 deaths/100,000 live births (2020 est.)
comparison ranking: 62

Infant mortality rate
total: 14.1 deaths/1,000 live births (2024 est.)
male: 14.4 deaths/1,000 live births
female: 13.7 deaths/1,000 live births
comparison ranking: total 99

Life expectancy at birth
total population: 76.1 years (2024 est.)
male: 73.5 years
female: 78.9 years
comparison ranking: total population 115

Total fertility rate
2.03 children born/woman (2024 est.)
comparison ranking: 102

Gross reproduction rate
0.96 (2024 est.)

Contraceptive prevalence rate
72.8% (2020)

Drinking water source
improved: urban: 99.2% of population
rural: 95.5% of population
total: 96.9% of population
unimproved: urban: 0.8% of population
rural: 4.5% of population
total: 3.1% of population (2020 est.)

Current health expenditure
4.7% of GDP (2020)

Physician density
0.83 physicians/1,000 population (2016)

Hospital bed density
3.2 beds/1,000 population (2013)

Sanitation facility access
improved: urban: 98.7% of population
rural: 90% of population
total: 93.3% of population
unimproved: urban: 1.3% of population
rural: 10% of population
total: 6.7% of population (2020 est.)

Obesity - adult prevalence rate
2.1% (2016)
comparison ranking: 192

Alcohol consumption per capita
total: 3.41 liters of pure alcohol (2019 est.)
beer: 3.18 liters of pure alcohol (2019 est.)
wine: 0.02 liters of pure alcohol (2019 est.)
spirits: 0.21 liters of pure alcohol (2019 est.)
other alcohols: 0 liters of pure alcohol (2019 est.)
comparison ranking: total 105

Tobacco use
total: 24.8% (2020 est.)
male: 47.4% (2020 est.)
female: 2.2% (2020 est.)
comparison ranking: total 51

Children under the age of 5 years underweight
11.6% (2020)
comparison ranking: 51

Currently married women (ages 15-49)
72.6% (2023 est.)

Child marriage
women married by age 15: 1.1%
women married by age 18: 14.6%
men married by age 18: 1.9% (2021 est.)

Education expenditures
4.1% of GDP (2020 est.)
comparison ranking: 113

Literacy
definition: age 15 and over can read and write
total population: 95.8%
male: 97%
female: 94.6% (2019)

Environment

Environment - current issues
logging and slash-and-burn agricultural practices contribute to deforestation and soil degradation; water pollution and overfishing threaten marine life populations; groundwater contamination limits potable water supply; air pollution; growing urban industrialization and population migration are rapidly degrading environment in Hanoi and Ho Chi Minh City

Environment - international agreements
party to: Biodiversity, Climate Change, Climate Change-Kyoto Protocol, Climate Change-Paris Agreement, Comprehensive Nuclear Test Ban, Desertification, Endangered Species, Environmental Modification, Hazardous Wastes, Law of the Sea, Ozone Layer Protection, Ship Pollution, Tropical Timber 2006, Wetlands
signed, but not ratified: none of the selected agreements

Climate
tropical in south; monsoonal in north with hot, rainy season (May to September) and warm, dry season (October to March)

Land use
agricultural land: 34.8% (2018 est.)
arable land: 20.6% (2018 est.)
permanent crops: 12.1% (2018 est.)
permanent pasture: 2.1% (2018 est.)
forest: 45% (2018 est.)
other: 20.2% (2018 est.)

Urbanization
urban population: 39.5% of total population (2023)
rate of urbanization: 2.7% annual rate of change (2020-25 est.)
total population growth rate v. urban population growth rate, 2000-2030

Revenue from forest resources
1.49% of GDP (2018 est.)
comparison ranking: 43

Revenue from coal
0.35% of GDP (2018 est.)
comparison ranking: 16

Air pollutants
particulate matter emissions: 20.89 micrograms per cubic meter (2019 est.)
carbon dioxide emissions: 192.67 megatons (2016 est.)
methane emissions: 110.4 megatons (2020 est.)

Waste and recycling
municipal solid waste generated annually: 9,570,300 tons (2011 est.)
municipal solid waste recycled annually: 2,201,169 tons (2014 est.)
percent of municipal solid waste recycled: 23% (2014 est.)

Major rivers (by length in km)
Sông Tiên Giang (Mekong) river mouth (shared with China [s], Burma, Laos, Thailand, Cambodia) - 4,350 km; Pearl river source (shared with China [m]) - 2,200 km; Red river mouth (shared with China [s]) - 1,149 km
note – [s] after country name indicates river source; [m] after country name indicates river mouth

Major watersheds (area sq km)
Pacific Ocean drainage: Mekong (805,604 sq km)

Total water withdrawal
municipal: 1.21 billion cubic meters (2020 est.)
industrial: 3.07 billion cubic meters (2020 est.)
agricultural: 77.75 billion cubic meters (2020 est.)

Total renewable water resources
884.12 billion cubic meters (2020 est.)

Geoparks
total global geoparks and regional networks: 3
global geoparks and regional networks: Dak Nong; Dong Van Karst Plateau; Non nuoc Cao Bang (2023)

Government

Country name
conventional long form: Socialist Republic of Vietnam
conventional short form: Vietnam
local long form: Cong Hoa Xa Hoi Chu Nghia Viet Nam
local short form: Viet Nam
former: Democratic Republic of Vietnam (North Vietnam), Republic of Vietnam (South Vietnam)
abbreviation: SRV
etymology: "Viet nam" translates as "Viet south," where "Viet" is an ethnic self identification dating to a second century B.C. kingdom and "nam" refers to its location in relation to other Viet kingdoms

Government type
communist party-led state

Capital
name: Hanoi (Ha Noi)
geographic coordinates: 21 02 N, 105 51 E
time difference: UTC+7 (12 hours ahead of Washington, DC, during Standard Time)
etymology: the city has had many names in its history going back to A.D. 1010 when it first became the capital of imperial Vietnam; in 1831, it received its current name of Ha Noi, meaning "between the rivers," which refers to its geographic location

Administrative divisions
58 provinces (tinh, singular and plural) and 5 municipalities (thanh pho, singular and plural)
provinces: An Giang, Bac Giang, Bac Kan, Bac Lieu, Bac Ninh, Ba Ria-Vung Tau, Ben Tre, Binh Dinh, Binh Duong, Binh Phuoc, Binh Thuan, Ca Mau, Cao Bang, Dak Lak, Dak Nong, Dien Bien, Dong Nai, Dong Thap, Gia Lai, Ha Giang, Ha Nam, Ha Tinh, Hai Duong, Hau Giang, Hoa Binh, Hung Yen, Khanh Hoa, Kien Giang, Kon Tum, Lai Chau, Lam Dong, Lang Son, Lao Cai, Long An, Nam Dinh, Nghe An, Ninh Binh, Ninh Thuan, Phu Tho, Phu Yen, Quang Binh, Quang Nam, Quang Ngai, Quang Ninh, Quang Tri, Soc Trang, Son La, Tay Ninh, Thai Binh, Thai Nguyen, Thanh Hoa, Thua Thien-Hue, Tien Giang, Tra Vinh, Tuyen Quang, Vinh Long, Vinh Phuc, Yen Bai
municipalities: Can Tho, Da Nang, Ha Noi (Hanoi), Hai Phong, Ho Chi Minh City (Saigon)

Independence
2 September 1945 (from France)

National holiday
Independence Day (National Day), 2 September (1945)

Legal system
civil law system; note - the civil code of 2005 reflects a European-style civil law

Constitution
history: several previous; latest adopted 28 November 2013, effective 1 January 2014
amendments: proposed by the president, by the National Assembly's Standing Committee, or by at least two thirds of the National Assembly membership; a decision to draft an amendment requires approval by at least a two-thirds majority vote of the Assembly membership, followed by the formation of a constitutional drafting committee to write a draft and collect citizens' opinions; passage requires at least two-thirds majority of the Assembly membership; the Assembly can opt to conduct a referendum

International law organization participation
has not submitted an ICJ jurisdiction declaration; non-party state to the ICCt

Citizenship
citizenship by birth: no
citizenship by descent only: at least one parent must be a citizen of Vietnam
dual citizenship recognized: no
residency requirement for naturalization: 5 years

Suffrage
18 years of age; universal

Executive branch
chief of state: President Luong CUONG (since 21 Oct 2024)

head of government: Prime Minister Pham Minh CHINH (since 26 July 2021)

cabinet: Cabinet proposed by the prime minister, confirmed by the National Assembly, and appointed by the president

elections/appointments: president indirectly elected by the National Assembly from among its members for a single 5-year term; prime minister recommended by the president and confirmed by the National Assembly; deputy prime ministers confirmed by the National Assembly and appointed by the president
note: in August 2024, To LAM was elected general secretary of the Central Committee of the Communist Party of Vietnam, the country's most powerful position

Legislative branch
description: unicameral National Assembly or Quoc Hoi (500 seats; members directly elected in multi-seat constituencies by absolute majority vote; members serve 5-year terms)

elections: last held on 23 May 2021 (next to be held in spring 2026)

election results: percent of vote by party - CPV 97.2%, 2.8% non-party; seats by party - CPV 486, non-party 14; composition- 342 men, 151 women, percentage women 30.6%

Judicial branch
highest court(s): Supreme People's Court (consists of the chief justice and 13 judges)

judge selection and term of office: chief justice elected by the National Assembly upon the recommendation of the president for a 5-year, renewable term; deputy chief justice appointed by the president from among the judges for a 5-year term; judges appointed by the president and confirmed by the National Assembly for 5-year terms

subordinate courts: High Courts (administrative, civil, criminal, economic, labor, family, juvenile); provincial courts; district courts; Military Court; note - the National Assembly Standing Committee can establish special tribunals upon the recommendation of the chief justice

Political parties
Communist Party of Vietnam or CPV
note: other parties proscribed

International organization participation
ADB, APEC, ARF, ASEAN, CICA, CP, EAS, FAO, G-77, IAEA, IBRD, ICAO, ICC (NGOs), ICRM, IDA, IFAD, IFC, IFRCS, ILO, IMF, IMO, IMSO, Interpol, IOC, IOM, IPU, ISO, ITSO, ITU, MIGA, NAM, OIF, OPCW, PCA, UN, UNCTAD, UNESCO, UNHRC, UNIDO, UNOOSA, UNWTO, UPU, WCO, WFTU (NGOs), WHO, WIPO, WMO, WTO (2024)

Diplomatic representation in the US
chief of mission: Ambassador Nguyen Quoc DZUNG (since 19 April 2022)
chancery: 1233 20th Street NW, Suite 400, Washington, DC 20036
telephone: [1] (202) 861-0737
FAX: [1] (202) 861-0917
email address and website:
vanphong@vietnamembassy.us
http://vietnamembassy-usa.org/
consulate(s) general: Houston, San Francisco
consulate(s): New York

Diplomatic representation from the US
chief of mission: Ambassador Marc KNAPPER (since 11 February 2022)
embassy: 7 Lang Ha Street, Hanoi
mailing address: 4550 Hanoi Place, Washington, DC 20521-4550
telephone: [84] (24) 3850-5000
FAX: [84] (24) 3850-5010
email address and website:
ACShanoi@state.gov
https://vn.usembassy.gov/
consulate(s) general: Ho Chi Minh City

Flag description
red field with a large yellow five-pointed star in the center; red symbolizes revolution and blood, the five-pointed star represents the five elements of the populace - peasants, workers, intellectuals, traders, and soldiers - that unite to build socialism

National symbol(s)
yellow, five-pointed star on red field; lotus blossom; national colors: red, yellow

National anthem
name: "Tien quan ca" (The Song of the Marching Troops)
lyrics/music: Nguyen Van CAO
note: adopted as the national anthem of the Democratic Republic of Vietnam in 1945; it became the national anthem of the unified Socialist Republic of Vietnam in 1976; although it consists of two verses, only the first is used as the official anthem

National heritage
total World Heritage Sites: 8 (5 cultural, 2 natural, 1 mixed)
selected World Heritage Site locales: Complex of Hué Monuments (c); Ha Long Bay (n); Hoi An Ancient Town (c); My Son Sanctuary (c); Phong Nha-Ke Bang National Park (n); Imperial Citadel of Thang Long - Hanoi (c); Citadel of the Ho Dynasty (c); Trang An Landscape Complex (m)

Economy

Economic overview
lower middle-income socialist East Asian economy; rapid economic growth since Đổi Mới reforms; strong investment and productivity growth; tourism and manufacturing hub; TPP signatory; declining poverty aside from ethnic minorities; systemic corruption

Real GDP (purchasing power parity)
$1.354 trillion (2023 est.)
$1.289 trillion (2022 est.)
$1.192 trillion (2021 est.)
note: data in 2021 dollars
comparison ranking: 24

Real GDP growth rate
5.05% (2023 est.)
8.12% (2022 est.)
2.55% (2021 est.)
note: annual GDP % growth based on constant local currency
comparison ranking: 54

Real GDP per capita
$13,700 (2023 est.)
$13,100 (2022 est.)
$12,200 (2021 est.)
note: data in 2021 dollars
comparison ranking: 130

GDP (official exchange rate)
$429.717 billion (2023 est.)
note: data in current dollars at official exchange rate

Inflation rate (consumer prices)
3.25% (2023 est.)
3.16% (2022 est.)
1.83% (2021 est.)
note: annual % change based on consumer prices
comparison ranking: 62

Credit ratings
Fitch rating: BB (2018)
Moody's rating: Ba3 (2018)
Standard & Poors rating: BB (2019)
note: The year refers to the year in which the current credit rating was first obtained.

GDP - composition, by sector of origin
agriculture: 12% (2023 est.)
industry: 37.1% (2023 est.)
services: 42.5% (2023 est.)
note: figures may not total 100% due to non-allocated consumption not captured in sector-reported data
comparison rankings: services 181; industry 39; agriculture 67

GDP - composition, by end use
household consumption: 54.8% (2022 est.)
government consumption: 8.9% (2022 est.)
investment in fixed capital: 30.8% (2022 est.)
investment in inventories: 1.8% (2022 est.)
exports of goods and services: 93.8% (2022 est.)
imports of goods and services: -90% (2022 est.)
note: figures may not total 100% due to rounding or gaps in data collection

Agricultural products
rice, vegetables, sugarcane, cassava, maize, pork, fruits, bananas, coffee, coconuts (2022)
note: top ten agricultural products based on tonnage

Industries
food processing, garments, shoes, machine-building; mining, coal, steel; cement, chemical fertilizer, glass, tires, oil, mobile phones

Industrial production growth rate
3.74% (2023 est.)
note: annual % change in industrial value added based on constant local currency
comparison ranking: 86

Labor force
56.149 million (2023 est.)
note: number of people ages 15 or older who are employed or seeking work
comparison ranking: 13

Unemployment rate
1.6% (2023 est.)
1.54% (2022 est.)
2.39% (2021 est.)
note: % of labor force seeking employment
comparison ranking: 17

Youth unemployment rate (ages 15-24)
total: 6.2% (2023 est.)
male: 6.5% (2023 est.)
female: 5.9% (2023 est.)
note: % of labor force ages 15-24 seeking employment
comparison ranking: total 165

Population below poverty line
4.8% (2020 est.)
note: % of population with income below national poverty line

Gini Index coefficient - distribution of family income
36.1 (2022 est.)
note: index (0-100) of income distribution; higher values represent greater inequality
comparison ranking: 68

Average household expenditures
on food: 31.1% of household expenditures (2022 est.)
on alcohol and tobacco: 2.1% of household expenditures (2022 est.)

Household income or consumption by percentage share
lowest 10%: 2.6% (2022 est.)
highest 10%: 28.1% (2022 est.)
note: % share of income accruing to lowest and highest 10% of population

Remittances
3.26% of GDP (2023 est.)
3.22% of GDP (2022 est.)
3.47% of GDP (2021 est.)
note: personal transfers and compensation between resident and non-resident individuals/households/entities

Budget
revenues: $42.247 billion (2014 est.)
expenditures: $38.025 billion (2014 est.)
note: central government revenues and expenses (excluding grants/extrabudgetary units/social security funds) converted to US dollars at average official exchange rate for year indicated

Public debt
58.5% of GDP (2017 est.)
note: official data; data cover general government debt and include debt instruments issued (or owned) by government entities other than the treasury; the data include treasury debt held by foreign entities; the data include debt issued by subnational entities, as well as intragovernmental debt; intragovernmental debt consists of treasury borrowings from surpluses in the social funds, such as for retirement, medical care, and unemployment; debt instruments for the social funds are not sold at public auctions
comparison ranking: 83

Taxes and other revenues
24.8% (of GDP) (2017 est.)
comparison ranking: 49

Current account balance
$25.09 billion (2023 est.)
$1.402 billion (2022 est.)
-$4.628 billion (2021 est.)
note: balance of payments - net trade and primary/secondary income in current dollars
comparison ranking: 21

Exports
$374.265 billion (2023 est.)
$385.241 billion (2022 est.)
$340.126 billion (2021 est.)
note: balance of payments - exports of goods and services in current dollars
comparison ranking: 24

Exports - partners
US 29%, China 15%, South Korea 6%, Japan 6%, Hong Kong 3% (2022)
note: top five export partners based on percentage share of exports

Exports - commodities
broadcasting equipment, garments, telephones, integrated circuits, machine parts (2022)
note: top five export commodities based on value in dollars

Imports
$339.767 billion (2023 est.)
$369.746 billion (2022 est.)
$338.327 billion (2021 est.)
note: balance of payments - imports of goods and services in current dollars
comparison ranking: 24

Imports - partners
China 38%, South Korea 17%, Japan 5%, Taiwan 4%, Thailand 4% (2022)
note: top five import partners based on percentage share of imports

Imports - commodities
integrated circuits, broadcasting equipment, refined petroleum, telephones, fabric (2022)
note: top five import commodities based on value in dollars

Reserves of foreign exchange and gold
$86.54 billion (2022 est.)
$109.371 billion (2021 est.)
$94.834 billion (2020 est.)
note: holdings of gold (year-end prices)/foreign exchange/special drawing rights in current dollars
comparison ranking: 30

Exchange rates
dong (VND) per US dollar -
Exchange rates:
23,787.319 (2023 est.)
23,271.213 (2022 est.)
23,159.783 (2021 est.)
23,208.368 (2020 est.)
23,050.242 (2019 est.)

Energy
Electricity access
electrification - total population: 100% (2022 est.)

Electricity
installed generating capacity: 85.04 million kW (2022 est.)
consumption: 251.549 billion kWh (2022 est.)
exports: 628.664 million kWh (2022 est.)
imports: 1.515 billion kWh (2022 est.)
transmission/distribution losses: 17.084 billion kWh (2022 est.)
comparison rankings: transmission/distribution losses 187; imports 68; exports 73; consumption 19; installed generating capacity 17

Electricity generation sources
fossil fuels: 56.8% of total installed capacity (2022 est.)
solar: 11.2% of total installed capacity (2022 est.)
wind: 1.3% of total installed capacity (2022 est.)
hydroelectricity: 29.6% of total installed capacity (2022 est.)
biomass and waste: 1.1% of total installed capacity (2022 est.)

Coal
production: 43.614 million metric tons (2022 est.)
consumption: 83.116 million metric tons (2022 est.)
exports: 1.032 million metric tons (2022 est.)
imports: 40.534 million metric tons (2022 est.)
proven reserves: 3.36 billion metric tons (2022 est.)

Petroleum
total petroleum production: 187,000 bbl/day (2023 est.)
refined petroleum consumption: 494,000 bbl/day (2022 est.)
crude oil estimated reserves: 4.4 billion barrels (2021 est.)

Natural gas
production: 7.676 billion cubic meters (2022 est.)
consumption: 7.676 billion cubic meters (2022 est.)
proven reserves: 699.426 billion cubic meters (2021 est.)

Carbon dioxide emissions
297.826 million metric tonnes of CO2 (2022 est.)
from coal and metallurgical coke: 219.167 million metric tonnes of CO2 (2022 est.)
from petroleum and other liquids: 63.759 million metric tonnes of CO2 (2022 est.)
from consumed natural gas: 14.9 million metric tonnes of CO2 (2022 est.)
comparison ranking: total emissions 22

Energy consumption per capita
39.117 million Btu/person (2022 est.)
comparison ranking: 103

Communications
Telephones - fixed lines
total subscriptions: 2.391 million (2022 est.)
subscriptions per 100 inhabitants: 2 (2022 est.)
comparison ranking: total subscriptions 48

Telephones - mobile cellular
total subscriptions: 137.412 million (2022 est.)
subscriptions per 100 inhabitants: 140 (2022 est.)
comparison ranking: total subscriptions 13

Telecommunication systems
general assessment: even with Covid-19 pandemic-related mobility restrictions in place, Vietnam's economy has continued to outperform the rest of the region in 2020 and 2021; the telecom sector essentially spent most of this period in a holding pattern, focusing on maintaining service throughout the crisis while preparing for some major changes to come in the mobile market in 2022; both fixed-line telephony and mobile have experienced small drops in subscriber numbers since the start of the pandemic, but the similarities between the two markets end there; fixed-line teledensity continued its downwards trajectory towards virtual oblivion, with just 3% penetration (around 3 million subscribers) at the start of 2021; the mobile market has lost about the same number of subscribers since the end of 2019, but has been sitting on much higher penetration levels around 130% for many years; growth is expected to kick in again in 2022 following the anticipated launch of commercial 5G mobile services along with a range of government-led schemes to move consumers completely off 2G and 3G; one example is the planned redistribution of GSM/3G bandwidth to LTE; in addition to propelling Vietnam into having one of the most advanced mobile markets in the world, this should also spur on the mobile broadband segment; with a penetration level of just over 70%, mobile broadband has considerable room to grow; increasing economic prosperity coupled with the latest smartphone technology and networks should see mobile broadband underwriting the country's telecommunications sector for at least the next few years; this report includes the regulator's market data to July 2021, telcos' financial and operating data updates to June 2021, Telecom Maturity Index charts and analyses, assessment of the global impact of Covid-19 on the telecoms sector, and other recent market developments (2021)

domestic: fixed-line is 3 per 100 and mobile-cellular is 140 per 100 (2021)

international: country code - 84; landing points for the SeaMeWe-3, APG, SJC2, AAE-1, AAG and the TGN-IA submarine cable system providing connectivity to Europe, Africa, the Middle East, Asia, Southeast Asia, Australia, and the US; telecom satellite earth stations - 2, (Vinasat 1 and Vinasat 2) (Indian Ocean region) (2023)

Broadcast media
government controls all broadcast media exercising oversight through the Ministry of Information and Communication (MIC); government-controlled national TV provider, Vietnam Television (VTV), operates a network of several channels with regional broadcasting centers; programming is relayed nationwide via a network of provincial and municipal TV stations; law limits access to satellite TV but many households are able to access foreign programming via home satellite equipment; government-controlled Voice of Vietnam, the national radio broadcaster, broadcasts on several channels and is repeated on AM, FM, and shortwave stations throughout Vietnam (2018)

Internet country code
.vn

Internet users
total: 71.78 million (2021 est.)
percent of population: 74% (2021 est.)
comparison ranking: total 12

Broadband - fixed subscriptions
total: 16,699,249 (2020 est.)
subscriptions per 100 inhabitants: 17 (2020 est.)
comparison ranking: total 14

Transportation
National air transport system
number of registered air carriers: 5 (2020)
inventory of registered aircraft operated by air carriers: 224
annual passenger traffic on registered air carriers: 47,049,671 (2018)
annual freight traffic on registered air carriers: 481.37 million (2018) mt-km

Civil aircraft registration country code prefix
VN

Airports
42 (2024)
comparison ranking: 98

Heliports
25 (2024)

Pipelines
72 km condensate, 398 km condensate/gas, 955 km gas, 128 km oil, 33 km oil/gas/water, 206 km refined products, 13 km water (2013)

Railways
total: 2,600 km (2014)
standard gauge: 178 km (2014) 1.435-m gauge; 253 km mixed gauge
narrow gauge: 2,169 km (2014) 1.000-m gauge
comparison ranking: total 64

Roadways
total: 195,468 km
paved: 148,338 km
unpaved: 47,130 km (2013)
comparison ranking: total 27

Waterways
47,130 km (2011) (30,831 km weight under 50 tons)
comparison ranking: 3

Merchant marine
total: 1,973 (2022)
by type: bulk carrier 117, container ship 45, general cargo 1,176, oil tanker 134, other 501
comparison ranking: total 13

Ports
total ports: 16 (2024)
large: 0
medium: 1
small: 6
very small: 9
ports with oil terminals: 12
key ports: Da Nang, Hai Phong, Nghe Tinh, Nha Trang, Thanh Ho Chi Minh, Vinh Cam Ranh, Vung Tau

Military and Security
Military and security forces
People's Army of Vietnam (PAVN; aka Vietnam People's Army, VPA): Ground Forces, Navy (includes naval infantry), Air Defense Force, Border Defense Force, Vietnam Coast Guard

Vietnam People's Ministry of Public Security; Vietnam Civil Defense Force (2024)

note 1: the People's Public Security Ministry is responsible for internal security and controls the national police, a special national security investigative agency, and other internal security units, including specialized riot police regiments

note 2: the Vietnam Coast Guard was established in 1998 as the Vietnam Marine Police and renamed in 2013; Vietnam officially established a maritime self-defense force (civilian militia) in 2010 after the National Assembly passed the Law on Militia and Self-Defense Forces in 2009; the Vietnam Department of Fisheries Resources Surveillance (DFIRES; under the Ministry of Agriculture and Rural Development), established

in 2013, is responsible for fisheries enforcement, aquatic conservation roles, and is designated as Vietnam's standing agency for combating illegal, unregulated, and unreported fishing; it is armed, allowed to use force if necessary, and works in tandem with the Vietnam Coast Guard

Military expenditures
1.8% of GDP (2023 est.)
2.3% of GDP (2022 est.)
2.3% of GDP (2021 est.)
2.4% of GDP (2020 est.)
2.3% of GDP (2019 est.)
comparison ranking: 76

Military and security service personnel strengths
information is limited and varied; estimated 450,000 active-duty troops; estimated 40,000 Border Defense Force and Coast Guard (2023)

Military equipment inventories and acquisitions
the PAVN is armed largely with weapons and equipment from Russia and the former Soviet Union; in recent years, Vietnam has moved to diversify arms its arms suppliers and has acquired items from countries such as India, South Korea, and the US; Vietnam has a small defense industry involved in the manufacture of small arms, ground combat vehicles, and naval systems (2024)
note: the US lifted an embargo on arms sales to Vietnam in 2016

Military service age and obligation
18-27 years of age for compulsory and voluntary military service for men and women (in practice only men are drafted); service obligation is between 24 (Army, Air Defense) and 36 (Navy and Air Force) months (2023)

Military deployments
190 Abyei/South Sudan/Sudan (UNISFA) (2024)

Military - note
since withdrawing its military occupation forces from Cambodia in the late 1980s and the end of Soviet aid in 1991, Vietnam has practiced a non-aligned foreign policy that emphasizes friendly ties with all members of the international community; Hanoi adheres to a security doctrine called the "Four Nos" (no alliances, no siding with one country against another, no foreign bases, and no using force in international relations); despite longstanding tensions with Beijing over maritime boundaries in the South China Sea, Vietnam puts a priority on stable relations with China, given its proximity, size, and status as Vietnam's largest trading partner

the PAVN is one of the region's largest militaries and has participated in numerous conflicts since its founding in the mid-1940s, including the First (1946-54) and Second (1955-1975) Indochina Wars, the Cambodian-Vietnamese War (1978-1989), and the Sino-Vietnamese War (1979); the PAVN's current missions include protecting the country's independence, sovereignty, territorial integrity, and national interests; in recent years, it has placed additional emphasis on protecting the country's maritime economy and sovereignty in the South China Sea, including strengthening air and naval capabilities; the PAVN also assists with natural disasters and is involved in economic projects, such as electrical infrastructure, oil and gas services, hydroelectric projects, aviation and seaport services, telecommunications, and the shipbuilding industry, while military-owned factories and enterprises produce weapons and equipment

the PAVN is the military arm of the ruling Communist Party of Vietnam (CPV) and responsible to the Central Military Commission (CMC), the highest party organ on military policy; the CMC is led by the CPV General Secretary (2024)

Space

Space agency/agencies
Vietnam National Space Center (VNSC; established 2011; formerly known as the Vietnam National Satellite Center); Space Technology Institute (STI; established 2006); both the VNSC and the STI operate under the Vietnamese Academy of Science and Technology (VAST); Ministry of Science and Technology (2024)

Space program overview
has a growing space program focused on acquiring, operating, and exploiting satellites, as well as expanding domestic capabilities in satellites and associated sub-system production, space sciences, and technology applications; builds and operates communications and remote sensing satellites; conducting research and development on space science and applied space technologies, such as advanced optics and space data exploitation; has worked closely with Japan on its space program since inception; cooperation has included funding, loans, training, technical expertise, and data sharing; has also established relationships with the space agencies or commercial space sectors of some European countries (such as France), India, and the US (2024)

note: further details about the key activities, programs, and milestones of the country's space program, as well as government spending estimates on the space sector, appear in the Space Programs reference guide

Transnational Issues

Refugees and internally displaced persons
stateless persons: 35,475 (2022); note - Vietnam's stateless ethnic Chinese Cambodian population dates to the 1970s when thousands of Cambodians fled to Vietnam to escape the Khmer Rouge and were no longer recognized as Cambodian citizens; Vietnamese women who gave up their citizenship to marry foreign men have found themselves stateless after divorcing and returning home to Vietnam; the government addressed this problem in 2009, and Vietnamese women are beginning to reclaim their citizenship

Illicit drugs
a transshipment and destination country for all types of illegal drugs; most transshipments destined for other Asian countries and not the United States; heroin transits from Thailand, Laos, and Burma for domestic use and shipping to other countries in Southeast Asia, Oceania, China and Taiwan; methamphetamine and amphetamine type stimulants from Burma locally consumed and shipped; South American cocaine locally consumed and distributed to Southeast Asia and Oceania

Acronyms and Abbreviations

°	degree(s) – of temperature (Celsius [C] or Fahrenheit [F]) or of latitude and longitude (North [N], South [S], East [E], or West [W])
$	dollar(s) – of the U.S.
ADB	Asian Development Bank
ADINET	ASEAN Disaster Information Network
AADMER	ASEAN Agreement on Disaster Management and Emergency Response
AAR	After Action Review
AHA Centre	ASEAN Coordinating Centre for Humanitarian Assistance on Disaster Management
APAN	All Partners Access Network
ASEAN	Association of Southeast Asian Nations
AFTA	ASEAN Free Trade Area
BHA	Bureau for Humanitarian Assistance (USAID)
CBDRM	Community-Based Disaster Risk Management
CCA	Climate Change Adaptation
CCNDPC	Central Committee for Natural Disaster Prevention and Control
CCNDPC/SR	Commanding Committee for Natural Disaster Prevention and Control, Search and Rescue
CDC	U.S. Centers for Disease Control and Prevention
CFE-DM	Center for Excellence in Disaster Management and Humanitarian Assistance
COVID-19	Coronavirus Disease 2019
CPV	Communist Party of Vietnam
CRI	Climate Risk Index
CRS	Catholic Relief Services
DKI-APCSS	Daniel K. Inouye Asia-Pacific Center for Security Studies
DRR	Disaster Risk Reduction
DRRP	Disaster Risk Reduction Partnership
DM	Disaster Management
DMG	Disaster Management Group
DMPTC	Disaster Management Policy and Technology Center
DMWG	Disaster Management Working Group
DoD	Department of Defense (U.S.)
DRM	Disaster Risk Management
DRR	Disaster Risk Reduction
EU	European Union
EWS	Early Warning Systems
FAO	Food and Agriculture Organization of the United Nations
FCG	Foreign Clearance Guide
FTA	Free Trade Agreements
FTS	Financial Tracking System

FTX	Field Training Exercise
GBV	Gender-Based Violence
GDACS	Global Disaster Alert and Coordination System
GDP	Gross Domestic Product
GHG	Greenhouse Gas Emission
GoV	Government of Vietnam
ha	Hectares
HADR	Humanitarian Assistance and Disaster Response
HCT	Humanitarian Country Teams
HDI	Human Development Index
HDX	Humanitarian Data Exchange
HF	High Frequency
HFA	Hyogo Framework of Action 2005-2015: Building the Resilience of Nations and Communities to Disasters
IbFW	Impact-based Forecasting and Warning
ICJ	International Court of Justice
ICC	International Criminal Court
ICRC	International Committee of the Red Cross
IFRC	International Federation of Red Cross and Red Crescent Societies
INGO	International non-government organization
IOM	International Organization for Migration
km	Kilometer
LNDPC	Law on Natural Disaster Prevention and Control
MAE	Ministry of Agriculture and Environment
MARD	Ministry of Agriculture and Rural Development (now part of MAE)
MNCC	Multinational coordination center
MCIP	Multinational Communications Interoperability Program
mi	Miles
mm	Millimeters
MMR	Measles-Mumps-Rubella
MND	Ministry of National Defense
MoNRE	Ministry of Natural Resources and Environment (now part of MAE)
mph	Miles per hour
MPS	Ministry of Public Security
NCD	Non-communicable diseases
NCHMF	National Center for Hydro-Meteorological Forecasting
NGO	Non-government organizations
NSCNDPC	National Steering Committee for National Disaster Prevention and Control
ODA	Official Development Assistance
OCHA	United Nations Office for the Coordination of Humanitarian Affairs

OSOCC	On-Site Operations Coordination Centre
PACAF	Pacific Air Forces (U.S.)
PAC ANGEL	U.S. Pacific Angel
PACFLEET	U.S. Pacific Fleet
PDC	Pacific Disaster Center
PTWS	Pacific Tsunami Warning and Mitigation System
RHCC	Changi Regional HADR Coordination Centre
RIMPAC	Rim of the Pacific
ROAP	Regional Office for Asia and the Pacific (UN OCHA)
SAR	Search and Rescue
SCDPC	Steering Committee for Disaster Prevention and Control
SDG	Sustainable Development Goals
SeAFFGS	Southeast Asia Flash Flood Guidance System
SGO	Surgeon General Office
SitRep	Situation Report
sq km	square kilometers
SOPs	Standard Operating Procedures
SME	Subject matter experts
SMS	Short Message Service
SWFP	Severe Weather Forecasting Programme
TB	Tuberculosis
TEU	Twenty-foot equivalent units
TTX	Table Top Exercise
UNDRR	UN Office for Disaster Risk Reduction
UNFPA	United Nations Populations Fund
UNFCCC	United Nations Framework Convention on Climate Change
UNICEF	United Nations Children's Fund
USNS	U.S. Naval Ship
USAID	United States Agency for International Development
USARPAC	U.S. Army Pacific
USG	United States Government
VDDMA	Viet Nam Disaster and Dyke Management Authority (alternately VNDMA)
VFF	Vietnam Fatherland Front
VHF	Very High Frequency
VHMS	Vietnam Hydro-Meteorological Service
VINASARCOM	National Committee for Incident, Disaster Response, and Search and Rescue (Vietnam)
VNCIVDEF	Vietnam Steering Committee for Civil Defense
VNDMA	Viet Nam Disaster Management Authority (an alternate reference to the VDDMA)
VND	Vietnamese Dong
VNMHA	Viet Nam Meteorological and Hydrological Administration

VNRC	Vietnam Red Cross Society
VPA	Vietnam People's Army
WASH	Water, Sanitation and Hygiene
WHO	World Health Organization

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