VIETNAM



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1. NATIONAL PROFILE

1.1 General¹

Vietnam, after two decades of rapid economic growth, is today considered a development success story. Political and economic reforms (Doi Moi) launched in 1986 have transformed Vietnam from one of the poorest nations in the world to a middle-income country within a quarter of a century. This dramatic growth, with per capita income rising from below US\$100 to an estimated at US\$1,596 in 2012, has coincided with a dramatic reduction in poverty from 58 to 14 per cent between 1993 and 2008 and an estimated 11.8 per cent in 2011. While most development indicators have improved with a number of Millennium Development Goals attained ahead of the 2015 deadline, new challenges are emerging as Viet Nam enters a new phase of development.

1.2 Physiography²

The country is divided into the highlands and the Red River Delta in the north; and the Dãy Trường Sơn (Central Mountains, or the Chaîne Annamitique, sometimes referred to simply as "the Chaine."), the coastal lowlands, and the Mekong Delta in the south.

Vietnam is located on the eastern margin of the Indochinese peninsula and occupies about 331,211.6 square kilometers, of which about 25% was under cultivation in 1987. It borders the Gulf of Thailand, Gulf of Tonkin, and South China Sea, alongside China, Laos, and Cambodia. The S-shaped country has a north-to-south distance of 1,650 kilometers and is about 50 kilometers wide at the narrowest point. With a coastline of 3,260 kilometers, excluding islands, Vietnam claims 12 nautical miles (22.2 km; 13.8 mi) as the limit of its territorial waters, an additional 12 nautical miles (22.2 km; 13.8 mi) as a contiguous customs and security zone, and 200 nautical miles (370.4 km; 230.2 mi) as an exclusive economic zone.

1.3 Climate³

The northern part of Vietnam is on the edge of the tropical climatic zone. During January, the coldest month of the year, Hanoi has a mean temperature of 63 °F (17 °C), while the annual average temperature is 74 °F (23 °C). Farther south, the average annual temperature in Hue is 77 °F (25 °C) and in Ho Chi Minh City is 81 °F (27 °C); in the highland city of Da Lat, it drops to 70 °F (21 °C). The winter season in northern Vietnam lasts from November to April; from early February to the end of March there is a persistent drizzle, and March and April are sometimes considered to be a transitional period. The summer in northern Vietnam lasts from April or May to October and is characterized by heat, heavy rainfall, and occasional typhoons. In central and southern Vietnam the southwest monsoon winds between June and November bring rains and typhoons to the eastern slopes of the mountains and the lowland plains. The period between December and April is drier and is characterized by the winds of the northeast monsoon and, in the south, by high temperatures.

Socio-economic Indicators				
GDP: Gross domestic product (million current US\$)	2011	846834		
GDP per capita (current US\$)	2011	3495.0		
GNI: Gross national income per capita (current US\$)	2011	3395.0		
Population (millions)	2014	91.68		
Urban (% of population)	2014	32.31		
Sex ratio (males per 100 females)	2012	99.4		
Life expectancy at birth (females/males, years)	2010-2015	71.8/68.3		
Adult literacy rate (% ages 15 and older)	2014	93.4		
Expenditure on education (% of GDP)	2014	6.56		

1.4 Socio-economic Profile^{4, 5}

1.5 Administrative Setup⁶

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, Hai Phong, Ho Chi Minh City (Saigon)

2. DISASTER RISK PROFILE⁷

Located in the tropical monsoon area in south East Asia, Vietnam is one of the most hazard-prone areas in the Asia Pacific Region. Because of its topography, Vietnam is susceptible to typhoons, floods, droughts, sea water intrusion, landslides, forest fires and occasional earthquakes of which typhoons and floods are the most frequent and most devastating hazards. The storm season lasts from May to December with storms hitting the northern part of the country in May through June and moving gradually south from July to December.

Given the massive concentration of its population along the coastline and in the low lying deltas, disasters take a heavy toll in lost lives and damaged livelihoods. The encroachment of economic activity and development into marginally suitable areas such as floodplains, costal swamps, drainage channels or other natural buffers only adds to the vulnerability of the population.

Household survey data from 2006 confirms the continued reduction of poverty in Vietnam, with the fraction of households living below the poverty line attaining 16 percent (Vietnam Development report 2008). Most of the poor live in rural areas and while rural poverty rates are declining, urban poverty rates appear to have stagnated. Natural disasters continually threaten the progress that has been made.



Every year, natural disasters cause an average of 750 deaths, and result in annual economic losses equivalent to 1.5 percent of GDP. However, damage and loss data is chronically underreported, so real totals may be much higher. As most of the population is living in low-lying river basins and coastal areas, more than 70 percent of the population is estimated to be exposed to risks from multiple natural hazards.

A 2007 assessment of the World Bank listed Vietnam as one of the five worst affected countries by climate change, as a large proportion of the population, infrastructure and economic production including irrigated agriculture, is located in costal lowlands and deltas.

High	Medium Low	
Flood	Hail rain/tornado	Earthquake
Typhoon	Drought	Accident (technology)
Inundation	Landslide	Frost
	Flash flood	Damaging cold
	Fire	Deforestation

Relative Disaster Frequency

It appears that a one-meter rise in the sea level would affect 39 of the 64 provinces in six of the eight economic regions of Vietnam. About 20 percent of the communes could be wholly or partially inundated, with the Mekong River Delta being the most seriously affected area. By one estimate, a one meter rise in sea level would affect approximately 5 percent of Vietnam's land area, 11 percent of the population, and 7 percent of the agriculture input.

2.1 Exposure and Vulnerability

An estimated 80–90 percent of the population is affected by typhoons according to the Ministry of Agriculture's Central Committee for Flood and Storm Control. This includes both communities living along the long coastline and those living in the upland areas who are vulnerable to subsequent flashfloods resulting from the typhoons' heavy rains.

River plain flooding is extensive and prolonged throughout the wet season in the large deltas. Most of Vietnam's 2,360 rivers are short and steep, so that heavy rainfall in their basins produces intense, short duration floods. Sizeable portions of the country and especially the Central Highlands and Central Coast are subject to heavy rainfall. Three consecutive years of flooding in the Mekong Delta claimed the lives of over 1,000 people, mainly children.

An average of six to eight typhoons or tropical storms of varying intensity strike Vietnam each year with more frequent occurrences in the northern and central coastal region earlier in the season. In 1997, Typhoon Linda killed over 3,000 people along the southern coast.

Тор	Natural	Disasters	in	Vietnam	for	the	period	1900	to	2014
sorte	d by numb	oers of kille	d ⁸							

Disaster	Date	No Killed
Storm	Sep-64	7000
Storm	2/Nov/1997	3682
Storm	26/Sep/1953	1000
Storm	23/Oct/1985	798

Storm	25/May/1989	751
Flood	25/Oct/1999	622
Epidemic	1/Jan/1964	598
Storm	24/Jul/1996	585
Storm	Sep-83	578
Flood	Jul-00	460

Top Natural Disasters in Vietnam for the period 1900 to 2014 sorted by numbers of total affected people⁸

Disaster	Date	No Total Affected			
Storm	15/Sep/1980	9027174			
Storm	23/Jul/1980	6624710			
Flood	Jul-00	5000004			
Storm	Oct-89	4635762			
Flood	Aug-78	4079000			
Flood	25/Oct/1999	3504412			
Drought	Dec-97	3000000			
Flood	7/Sep/1985	2800000			
Storm	6/Sep/1986	2502502			
Storm	28/Sep/2009	2477315			

Top 10 Natural Disasters in Vietnam for the period 1900 to 2014 sorted by economic damage costs⁸

Disaster	Date	Damage (000 US\$)
Storm	28/Sep/2009	785000
Storm	11/Nov/2013	734000
Storm	30/Sep/2013	663230
Storm	27/Sep/2006	624000
Flood	27/Oct/2008	479000
Storm	2/Nov/1997	470000
Storm	30/Nov/2006	456000
Drought	Dec-97	407000
Storm	24/Jul/1996	362000
Flood	10/Nov/2007	350000

3. INSTITUTIONAL SETUP^{7,9}

Vietnam's primary DRM framework, the national strategy for natural Disaster Prevention, Response and Mitigation to 2020, was approved by the government in November 2007. The strategy lays out Vietnam's primary disaster risk management objectives, focusing largely on water related disasters. The Ministry of Agriculture and rural Development estimated they will require a budget of US \$18 billion; around US \$13 billion for structural measures i.e. building reservoirs, dams and dykes and US \$5 billion for non-structural measures. This figure does not include funds needed by other ministries and provinces to implement disaster risk reduction action plans.

The main objectives of the national strategy are:

The integration of disaster risk management into socio-economic development plans at the national and levels with a focus on disaster response; ensuring sustainable disaster recovery which integrates disaster risk management; planning five different regional disaster risk management strategies for the five geographical regions of the country; combining structural and non-structural measures in disaster risk management and dividing implementation responsibilities and timing for risk reduction among a range of ministries.

Traditionally, Vietnam has focused on preparedness and response with a strong emphasis on structural measures such as dykes and seawalls. Mitigation activities are slowly entering the development agenda but the revised strategy still puts disaster preparedness and forecasting as its foremost objectives.

3.1 Legal System

Decree No. 168-HDBT (May 19, 1990) of the Council of ministers established and outlined the tasks of the Central Committee of Storm and Flood Control (CCSFC), and committees and sectors at all levels (provincial, district and village).

DECREE NO. 168 - HDBT OF MAY 19, 1990

3.2 Organization

At the Central level, the National Committee, an inter-ministerial institution serves as a coordinating body for disaster reduction efforts in Viet Nam. Its secretariat is provided by the Department of Dike Management and Flood Control (DDMFC) of the Ministry of Agriculture and Rural Development (MARD). The CCSFC (Central Committee for Flood and Storm Control, Ministry of Agriculture & Rural Development) formulates all regulations and mitigation measures related to typhoons and floods. Emphasis is on dike protection, surveillance and maintenance. Local emergency work is coordinated by the provincial CSFC.



4. INITIATIVES

4.1 Plan⁹

First National Strategy and Action Plan for Mitigating Water Disaster was prepared in 1994 through a national consultation process. It identified the need for

a multi-sectoral and multi-disciplinary approach to reduce the vulnerability of the country and improve its capacity to cope with the adverse impacts of natural threats. It serves as a basis for annual state plans. The plan has strengthened institutions for disaster mitigation and management. Second Strategic Action Plan (2001-2020) set up several strategies in disaster mitigation and management that aim to reduce disasters and their impacts on people, property, agriculture, economic well-being, environment, and sustainable development. It lays down responsibilities of various implementing bodies. The National Strategy for natural disaster prevention, response and mitigation to 2020) was approved by the Prime Minister on 16 November 2007.

Viet Nam: Plan of operations of Vietnam National Committee on International Decade for Natural Disaster Reduction (IDNDR)¹⁰

This document sets out the objectives and activities for Vietnam's involvement in the International Decade for Natural Disaster Reduction (IDNDR), including setting up scientific research programme and national strategy for disaster preparedness and mitigation. It includes the 1991 plan of operations of Vietnam IDNDR Committee, and provides full text of the decree by Chairman of Council of Ministers on the establishment of Vietnam National IDNDR Committee.

View full document [PDF 214.91 KB]

Vietnam: end of IDNDR assessment report (1998)¹¹

This report provides an assessment of the achievements and progress made in disaster risk reduction (DRR) by Vietnam during the International Decade for Natural Disaster Reduction (IDNDR). It describes country's recent experience with natural hazards and disasters, such as flood, storm, drought, landslide and tornado, also presents national institutional and legal framework for DRR and provides strategic guidelines and recommendations for future activities.

View full document [PDF 357.04 KB]

References

¹ http://www.vn.undp.org/content/vietnam/en/home/countryinfo/

² http://en.wikipedia.org/wiki/Geography_of_Vietnam

³ http://www.britannica.com/EBchecked/topic/628349/Vietnam/52693/Climate

⁴ http://hdr.undp.org/en/countries/profiles/VNM

⁵ http://data.un.org/CountryProfile.aspx?crName=Viet%20Nam

⁶ http://www.indexmundi.com/vietnam/administrative_divisions.html

⁷ http://www.unisdr.org/files/14757_6thCGDRMProgramsforPriorityCountrie.pdf ⁸ http://www.emdat.be/result-country-profile

⁹http://www.adrc.asia/nationinformation.php?NationCode=704&Lang=en&Nation Num=15

¹⁰ http://www.preventionweb.net/english/professional/policies/v.php?id=30540

¹¹ http://www.preventionweb.net/english/professional/policies/v.php?id=32532