



E P R E S S

Viet Nam: a transition tiger Geography, resources and population

Abstract for chapter 2

Viet Nam is the twelfth most populous country in the world, but only 58th in terms of land area – a little smaller than Germany. This chapter outlines the geography of the region, looks at the population and demographic transition, gives an overview of the regions, and outlines the regional distribution of economic activity.

The discussion on geography and the natural resource base focuses on agriculture, forestry and fishing resources and the environment, as well as the issues of energy, minerals and water. The population and demographic transition points to the fact that life expectancy has continued to increase during *Doi Moi* while the declining population growth is reducing the burden on the state. In terms of regional productivity, with 42 per cent of the population concentrated in the two deltas, foreign investment is based in the Southeast region and the Red River Delta.

Keywords:

Agriculture, Central Coast region, Central Highlands, Climate, Da Nang, demographic transition, Dong Nai, Fishing, Hai Phong, Hanoi, Ho Chi Minh City, Mekong River Delta, natural resources, North Central region, Northeast region, Northwest region, Red River Delta, shipping routes, smuggling, Southeast region, tourism

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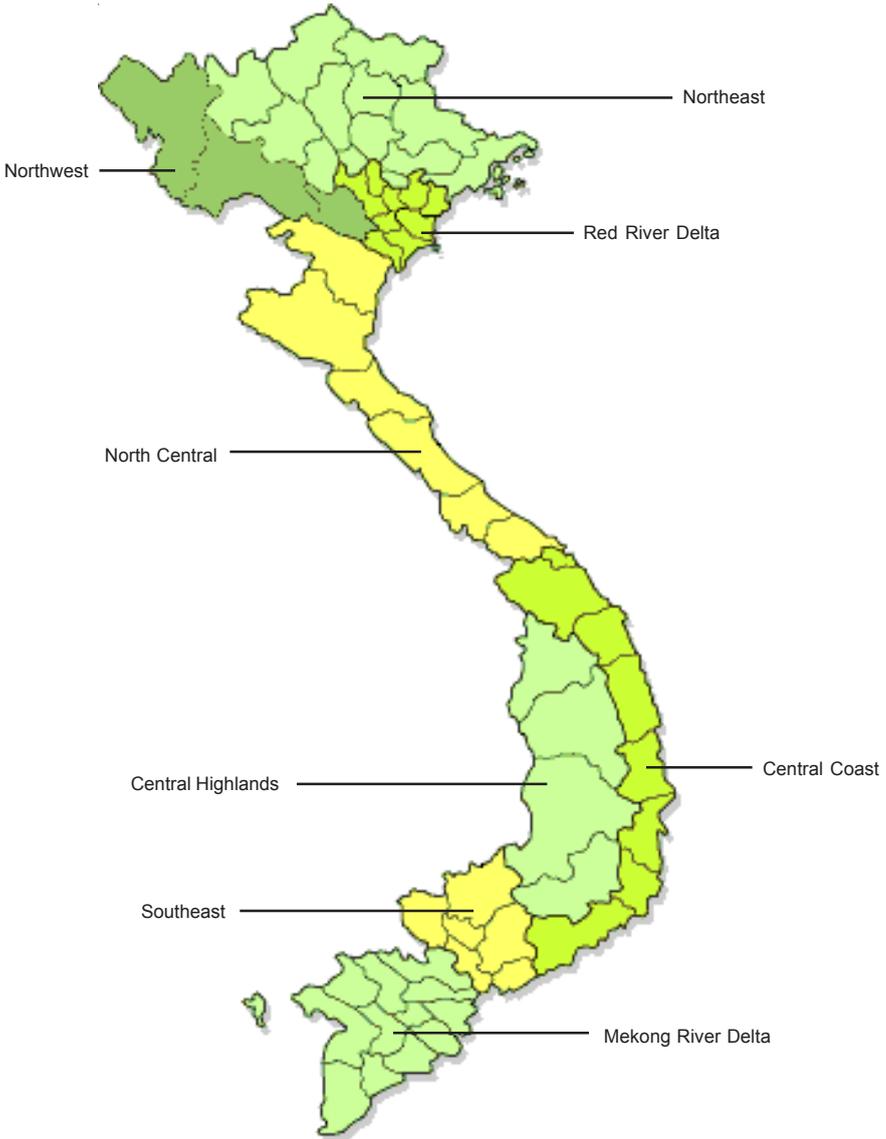
GEOGRAPHY, RESOURCES AND POPULATION

Viet Nam is the twelfth most populous country in the world, but only fifty-eighth largest in terms of land area (Communist Party of Vietnam 2001b). In terms of land area and population it is a little smaller than Germany. The population density is high and cultivatable land per person is very low. The population is heavily concentrated in the Red River and Mekong River Deltas. There is a long, narrow coastal strip linking the deltas. The two substantial highland areas (the Northern and Central Highlands) are more sparsely populated than the deltas. Viet Nam's population is better educated and has a higher life expectancy than that of most countries with similar average per capita incomes.

GEOGRAPHY AND THE NATURAL RESOURCE BASE

Viet Nam extends 1,650 kilometres from north to south. At its widest point the country stretches 600 kilometres from west to east, and at its narrowest point, only 50 kilometres. Viet Nam is located close to major shipping routes, and relatively prosperous and rapidly expanding East Asian economies. It has a very long coast line (about 3,000 kilometres) providing opportunities for fishing and tourism (and smuggling), and also ensuring that most areas of the country are not far from access to transport to foreign markets. While natural resources have played an important role in recent economic development, the country is not particularly well endowed with agricultural, forest, energy, or mineral resources.

Map 2.1 Main regions of Viet Nam



Source: Adapted from World Bank, n.d. Map of Vietnam, World Bank, Hanoi. Available online at <http://www.worldbank.org.vn/wbivn/map/map001.htm>.

The country's location and length results in great variations in climate, ranging from tropical to temperate, and allows for a diversity of flora and fauna. The southern and central areas are tropical and humid. The northern areas are also humid, but temperatures are much more variable with average temperatures ranging from around 30 degrees in July to 16–18 degrees in January. Average temperatures in the south range from 26 to 28 degrees throughout the year. Typhoons are experienced in most parts of the country, but are most severe in the central provinces. Rainfall variability is very high in the North and Central provinces, contributing to variability in agricultural output and incomes. Rainfall is more reliable in the southern areas, but all parts of the country suffer from frequent natural calamities.

Viet Nam has rich biological diversity in its forests, rivers and oceans. A great variety of crops, cultivars and domesticated animals are used in its agricultural systems. Some 275 different animal, 826 bird, and 180 reptile species are found in Viet Nam. Wild animals include elephants, dapple deer, leopards, tigers, bears, wild buffalo, samba deer, mountain goats, monkeys, goats, bobcats, foxes and squirrels. Three out of the seven new species of wild animals identified during the twentieth century were found in Viet Nam's forests. More than 1,000 medicinal plant species have already been identified. An indication of the richness of Viet Nam's biodiversity is shown in Table 2.1.

On the other hand, habitat loss and hunting have resulted in 16 different primate species, 4 large mammals, and 25 bird species being threatened (World Bank 2000:105). Five large water bird species have become extinct in the

Table 2.1 **Biodiversity in Viet Nam**

	Number of species in Viet Nam (SV)	Number of species in the world (SW)	SV/SW (per cent)
Mammals	275	4,000	6.8
Birds	800	9,040	8.8
Reptiles	180	6,300	2.9
Amphibians	80	4,148	2.0
Fish	2,470	19,000	13.0
Plants	7,000 ^a	220,000	3.2

Note: ^a It has been estimated that another 5,000 species have still not been formally identified.

Source: Biodiversity Information Management System On-Line, <http://www.geoanalytics.com/bims/vm.htm>.

Mekong Delta in the last 30 years. Wetlands in the two main deltas are under threat because of high population pressures, and increased economic incentives to exploit these areas.

Agriculture, forestry and fishery resources and the environment

The long north–south axis, and mix of coastal and upland areas, provides scope for Viet Nam to grow a wide variety of tropical and temperate crops and forests. The relatively small ratio of cultivatable land per person greatly influences agricultural technology and the rural economy. The high variability in rainfall and frequent typhoons are important influences on rural social and economic systems. Poorly developed physical infrastructure constrains market access in many locations, especially in the mountainous areas.

The most productive agricultural land is found in the Mekong and Red River deltas, the two most densely populated rural areas. Cropped land per capita is low by international and regional standards—0.09 hectares per person, compared with 0.16 in India and 0.30 in Thailand—but is comparable with Sri Lanka (0.10 hectares) and Bangladesh (0.07 hectares).

The Mekong River Delta accounted for 38 per cent of total value added in the agricultural sector in 1999 (with 12 per cent of the land area), while the Red River Delta accounted for 19 per cent (with only 4.5 per cent of the total land area) (General Statistics Office 2000b). Most of the population (especially the Kinh majority) is concentrated in the two main deltas and a narrow section of the east and southeast coast. Only a small portion of the highland areas bordering Laos and China are suitable for cropping, and population densities

Table 2.2 Key rural indicators in selected Asian economies

Country	Rural population (% of total in 2000)	Agricultural output (% of GDP in 2000)	Arable land (ha/capita in 1999)
Viet Nam	80.3	24.6	.09
Bangladesh	78.8	24.3	.07
China	65.7	15.9	.11
India	71.6	25.3	.16
Indonesia	58.8	16.9	.15
Malaysia	42.7	8.6	.35
Philippines	41.4	15.9	.13
Sri Lanka	76.4	19.4	.10
Thailand	78.4	9.1	.30

Source: Asian Development Bank, 2001. *Key Indicators 2001*, Asian Development Bank, Manila.

in these areas are low, with higher proportions of ethnic minority groups. Despite the low ratio of cultivable agriculture land, Viet Nam has emerged as a leading agricultural exporter, and has also substantially diversified agriculture exports in recent years.

Viet Nam's forests are concentrated in the upland regions, with about 40 per cent found in the central highlands. Forests are an important economic resource, providing firewood, protein, income and materials for shelter. Until recently, most of the population in mountainous areas lived near forests and earned part of their livelihood through the harvest and sale of bamboo, firewood, medicine, fruit, fodder and game from forests. Some 2,300 forest plant species are harvested for food, medicine, construction, textiles and water proofing (World Bank 2000).

Forest resources are, however, being depleted. Population growth and economic development are increasing pressures to clear forests and to expand agriculture into highland areas and other environmentally fragile areas. Between 1943 and 1997, five million hectares of Vietnamese forests were converted to other uses. Forest cover fell from 43 per cent of the country's total land area in 1945, to just 28 per cent by 1997. Large areas were destroyed during the war with the United States as a result of bombing and deliberate attempts to reduce forest cover by spraying chemical poisons.

Underlying causes of continuing deforestation include poorly controlled logging, rural poverty resulting in burning of forests for farming and foraging for food for fuel, and inappropriate land tenure arrangements. While the government has adopted programs to reduce poverty, better manage forests, and reforest barren hill lands in an attempt to reverse the decline in forest cover, the pursuit of other objectives (for example, promoting accelerated growth of industrial crops for export) has placed increasing pressures on the natural environment.

Inland fishing and marine products are important sources of protein and income for many communities. Almost three million people are directly employed in the sector; nearly 10 per cent of the population derives their main income from fisheries, and fish consumption provides about half of national protein consumption. Exports of aquatic products have been important contributors to rapid export growth. The total area of natural inland water bodies (lakes and rivers) is estimated to be about 4,200 km², and there are additional ponds and seasonal flooded areas of 6,000 km². In addition, a number of reservoirs are used for fishing. Concerns are growing, however, about over-

fishing, unsustainable fishing practices, the impacts of industrial pollution, and the sustainability of shrimp farming in former mangrove swamps. With rising demand for water, deforestation and weaknesses in watershed management, and poor irrigation and drainage infrastructure, there are concerns that water quality is deteriorating in many areas.

Energy, minerals and water

Another important contributor to rapid export growth during the late 1980s and 1990s was the development of the country's oil resources. New oil and gas resources continue to be found and developed (mostly offshore from Vung Tau in the south), and will be significant contributors to economic growth and budget revenue for at least the medium term. While many areas are still to be explored, most experts estimate that reserves are substantially less than oil rich Southeast Asian nations such as Brunei, Indonesia and Malaysia on a per capita basis. Coal and hydropower development (especially in the north) has also contributed significantly to economic growth.

While the country is known to possess a wide range of other minerals, commercial exploration is hampered by uncertainty about property rights. Lead, zinc, antimony, pyrite, manganese, limestone, marble, salt and precious stones are also currently being exploited. Studies suggest commercial potential to develop bauxite, phosphates (mostly from apatite), lead, gold, tin, graphite, iron ore, manganese, chrome and asbestos.

Viet Nam is endowed with river systems that have potential for hydro-power development, estimated at about 18,000 megawatts. Some 3,700 megawatts' capacity has already been developed.

POPULATION AND DEMOGRAPHIC TRANSITION

The population of Viet Nam was estimated at 78.7 million in 2001 (General Statistics Office 2000a). The crude birth rate fell from 45 per thousand (1955–59), to 38 (1970–74), to 31 (1985–89), and then to 19.9 per thousand in the 1999 Census (General Statistics Office 2000a). Declining fertility reflects widespread adoption of family planning practices. The government has maintained a population policy that discouraging families of more than two children, but without draconian controls. The decline in the birth rate must also have been associated with success of health policies that increased life expectancy at birth, and with the achievement of high educational enrolments.

While distinct regional differences in fertility persist, with much higher rates in the highland areas than in the delta and urban areas, a substantial decline in fertility is recorded for all regions.¹ The estimated rate of population growth fell from 2.1 per cent per annum during 1979–89 to about 1.7 per cent per annum from 1989 to 1999. The population growth rate has continued to fall, and the General Statistics Office (2000a) now estimates the rate at 1.35 per cent in 2001, with a fertility rate of 2.3 children per woman. Life expectancy has continued to increase during *Doi Moi* from an already relatively high 67 years in 1992 to an estimated 68.6 years in 1999.

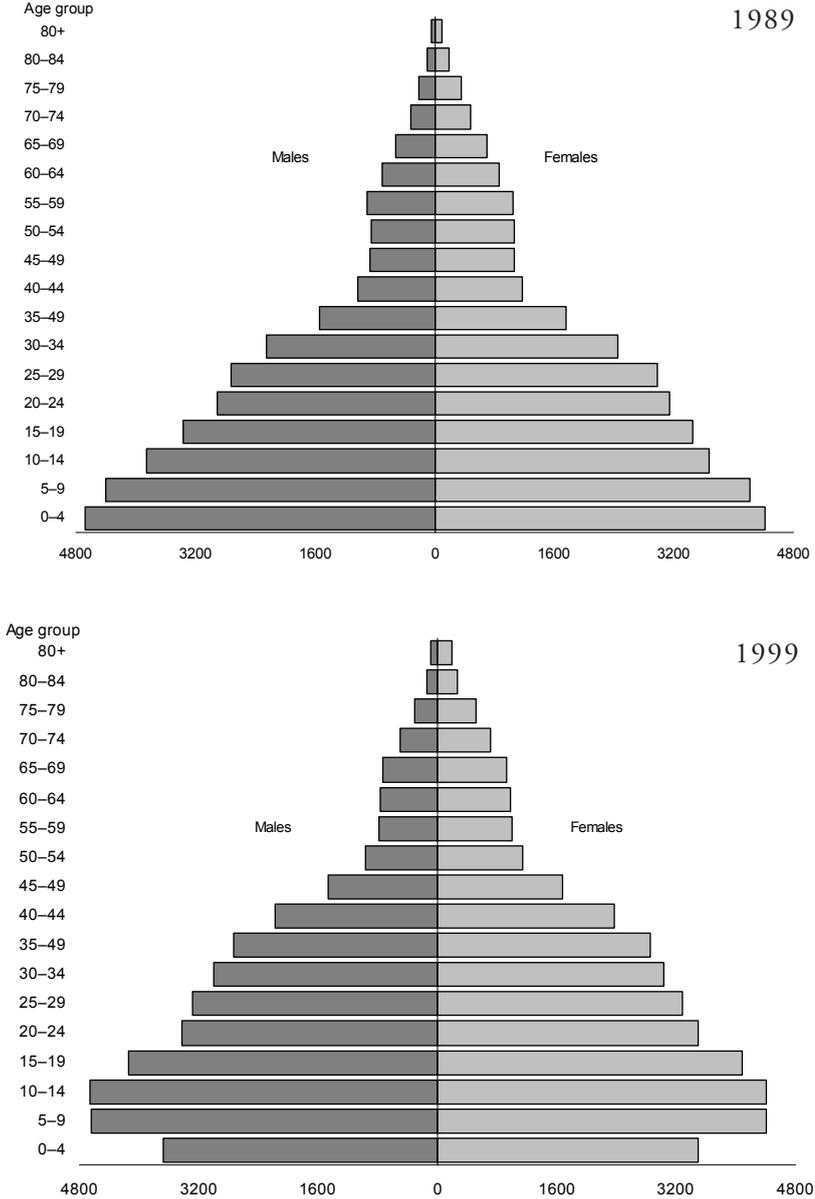
Thus, Viet Nam has experienced a rapid demographic transition (McNicholl 2002). Relatively low mortality rates and declining fertility rates have resulted in a clear transition in the population's age profile. At the time of the 1989 Census the profile was a pyramid, with each five year cohort larger than the next older group.² By 1999, this profile had changed in a crucial fashion, with a 5–9 year old cohort smaller than the 10–14 group, and the 0–4 cohort showing an even sharper drop in size. Viet Nam is now experiencing a 'demographic bonus',³ in which a declining population growth rate is reducing the burdens on the education system, increasing the proportion of income earners and making it easier to achieve increases in per capita income, which in turn is associated with a further decline in birth rates.

The country is predominantly rural. Only 19.5 per cent of the population resided in urban areas in 1990.⁴ At that time, Viet Nam's economic structure was characteristic of a low-income developing economy. In terms of the sources of livelihood for the population, the country was (and is) still predominantly agricultural. Of the total estimated active labour force in 1992 of 31.8 million, 23.0 million (72 per cent) were engaged in agriculture and little more than one-tenth in industry. In 1990, agriculture and fisheries still accounted for two-fifths (39 per cent) of GDP. Some 80 per cent of the population still live in rural areas.⁵

OVERVIEW OF THE REGIONS

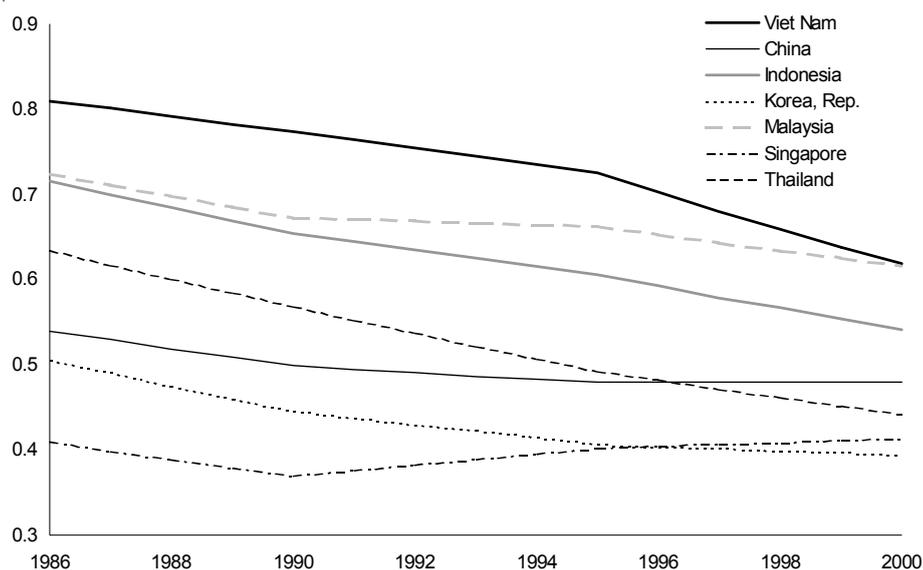
The Red River Delta, with a population of 17.2 million in 2001, is the most densely populated region. It includes the national capital Hanoi and the port city of Hai Phong (the second and third largest cities in Viet Nam). The combined population of Hanoi and Hai Phong is less than half that of Ho Chi Minh City.⁶ More than one in five Vietnamese live in the Red River Delta.

Figure 2.1 Viet Nam population pyramid, 1989 and 1999



Source: General Statistics Office, 2000. *Statistical Yearbook 2001*, General Statistics Office, Hanoi.

Figure 2.2 Age dependency ratio in selected Asian countries, 1986–2000



Note: The age dependency ratio is the ratio of dependants (people younger than 15 and older than 65) to the working-age population (those aged 15–64).

Source: World Bank, 2002. *World Development Indicators*, World Bank, Washington, DC.

Table 2.3 Population distribution by region, 1995–2001
(per cent of total)

	1995	1997	1998	1999	2000	2001
Red River Delta	22.4	22.2	22.1	22.0	21.9	21.9
Northeast	11.7	11.6	11.6	11.6	11.5	11.5
Northwest	2.9	2.9	2.9	2.9	2.9	2.9
North Central Coast	13.3	13.2	13.2	13.1	13.0	12.9
South Central Coast	8.6	8.6	8.6	8.5	8.5	8.5
Central Highlands	4.7	5.0	5.2	5.3	5.5	5.5
Southeast	14.9	15.1	15.2	15.4	15.5	15.7
Mekong River Delta	21.6	21.3	21.2	21.1	21.1	21.0

Source: General Statistics Office, 2001. *Statistical Year Book 2001*, General Statistics Office, Hanoi.

With particularly high population densities and productive land, yields per hectare are higher here than anywhere else in the country. This region is one of the three focal economic zones identified as areas for concentrated development. Hanoi, by virtue of its status as capital, attracts public and service sector investment, but is also becoming an important industrial centre. The Hanoi/Hai Phong industrial region is second most important location for foreign invested projects after the Ho Chi Minh City/Dong Nai area.

The Northeast and Northwest regions (the Northern Uplands) have a population of 11.3 million. It is one of the regions of concentrated poverty, where weak infrastructure and limited agricultural land limit development prospects. It has experienced a low rate of agricultural growth and lower than average overall growth. Areas near Hanoi could, however, benefit from Hanoi's growth, particularly if investments are made to ensure good access. The area could also benefit from increased tourism and economic links with Yunnan province in China.

Another problematic region is North Central Coast. This region includes some of the more inhospitable areas of Viet Nam, with frequent typhoons and infertile land. As a result, the incidence of poverty is high. The region is politically important as the link between the two more developed parts of Viet Nam and has had an historical importance as the home area of key figures in Viet Nam's independence movement. The region has a population of about 10.2 million people. Like the Northern Uplands, it is a region of concentrated poverty and has experienced the lowest growth rate of all the regions in the *Doi Moi* period.

Further down the coast, the South Central Coast region (6.7 million people) has higher income levels than its northern neighbour and a growth rate of GDP and proportion of GDP generated from industry close to the national average. This region includes Da Nang, the fourth largest city and third port of Viet Nam, and a centre of one of the three focal economic zones. This area has so far been the weakest of the three focal economic zones as a magnet for foreign investment.

Inland from the South Central Coast region, where the land mass of Viet Nam widens, are the Central Highlands. This is the least densely populated of Viet Nam's regions; with the second largest land mass of all the regions (5,612 thousand hectares), it has only 4.3 million people (2001). While it contains large mountain and forest areas which are either of low potential for

agricultural development or deserve protection on environmental grounds, and remote areas whose location and poor access has been a barrier to development, there are also considerable areas of high-potential underdeveloped land adaptable, for example, to high value tree crop development. As a result, it has attracted a high rate of migration and has been the centre of the dynamic growth of coffee production. This region has experienced the highest rate of rural growth and is an important host to rural–rural migrants. In 1989–99 the population of the Central Highlands grew at 4.87 per cent per annum, compared with the national average of 1.70 per cent. The share of the Central Highlands in agricultural value-added has increased sharply and, despite the net migration to this area, agricultural value-added per person in this region has also increased much faster than in the rest of the country.

The southern part of the country includes the Mekong River Delta region and the Southeast region. The Mekong River Delta is the second most populous of the regions, with over 16 million people, although it is less densely populated than the Red River Delta. It has an unrealised potential for agricultural growth both at the intensive margin (increasing productivity per hectare) and at the extensive margin (bringing more land into irrigated cultivation). It is in the Mekong that further expansion in staple food production can be most readily achieved,⁷ and this could be associated with movement of labour into the region. Social and economic infrastructure is not as developed as in the Red River Delta, suggesting the need for substantial investment in rural infrastructure to take advantage of the region's potential. There is also a need to invest in road improvements to link rural areas with regional growth centres (notably the town of Can Tho) and with Ho Chi Minh City.

With a population almost as large as the Red River Delta, but a larger land area, the Mekong Delta is the main producer of a marketable food surplus for domestic consumption and export. The Red River Delta also produces a modest surplus. The rest of the country produces close to or below food self-sufficiency. Maize and cassava are the two main food staples after rice and are also mainly grown in the deltas.

The Southeast region includes Ho Chi Minh City and Dong Nai, the most dynamic centres of commercial and industrial development in Viet Nam, and the most attractive to foreign investors. Ho Chi Minh City, with about 5.4 million people (in 2001), is almost twice as populous as Hanoi. In designating the area as a focal economic zone, government is doing no more than recognising

Table 2.4 **Gross regional product per capita by major region, 1995–2000 (ratio of national average)**

	1995	1996	1997	1998	1999	2000
Red River Delta	97	97	98	98	98	99
Northeast	55	54	55	55	55	57
Northwest	40	39	39	42	41	40
North Central Coast	58	56	57	56	55	55
South Central Coast	73	73	73	73	73	73
Central Highlands	61	59	57	58	58	57
Southeast	233	236	234	234	232	228
Mekong River Delta	84	83	83	82	83	83

Source: General Statistics Office, 2002. *Viet Nam Economy in the Years of Reform*, Statistical Publishing House, Hanoi.

Table 2.5 **Share of GDP by region, 1995–2000 (per cent of total)**

	1995	1996	1997	1998	1999	2000
Red River Delta	19.53	19.14	18.86	19.30	18.86	18.59
Northeast	8.09	7.95	7.88	7.91	7.75	7.78
Northwest	1.30	1.26	1.27	1.24	1.15	1.15
North Central Coast	8.02	7.69	7.53	7.38	7.16	7.04
South Central Coast	6.27	6.24	6.31	6.43	6.25	6.25
Central Highlands	2.26	2.30	2.18	2.44	2.43	1.98
Southeast	36.44	37.11	37.76	36.96	38.67	39.99
Mekong River Delta	18.08	18.30	18.21	18.33	17.73	17.22

Source: General Statistics Office, 2002. *Viet Nam's Economy in the Years of Reform*, Statistical Publishing House, Hanoi.

the reality of the strong growth of Ho Chi Minh City, which is spilling over into neighbouring areas. Although already a large city, Ho Chi Minh City still falls short of being an East Asian mega-city,⁸ but it is likely to become so within the next twenty years, with all the attendant problems and investment requirements that implies.

REGIONAL DISTRIBUTION OF ECONOMIC ACTIVITY

Some 42 per cent of the population are concentrated in the two deltas. The two main deltas account for more than 55 per cent of agricultural output. The Southeast (including Ho Chi Minh City and Dong Nai) and the Red River Delta dominate industrial output (60 per cent of total industrial output). By

Table 2.6 **Agriculture value-added by region, 1995–2000**

	1995	1997	1998	1999	2000
Percentage of total					
Red River Delta	20.1	19.6	19.6	19.0	18.6
Northeast	8.0	7.9	7.8	7.7	7.7
Northwest	1.9	1.9	1.8	1.9	1.9
North Central Coast	9.0	9.1	8.6	8.6	8.7
South Central Coast	6.1	5.9	5.9	5.7	5.5
Central Highlands	5.9	7.4	7.3	8.6	10.2
Southeast	11.1	11.3	10.8	11.1	11.2
Mekong River Delta	38.0	37.0	38.3	37.4	36.2
'000 dong/person (constant 1994 prices)					
Red River Delta	1,027	1,096	1,162	1,200	1,226
Northeast	780	847	884	920	961
Northwest	759	801	796	881	914
North Central Coast	772	855	857	916	967
South Central Coast	806	854	908	934	929
Central Highlands	1,425	1,818	1,840	2,240	2,702
Southeast	855	935	930	999	1,039
Mekong River Delta	2,012	2,161	2,369	2,457	2,485
Whole country	1,143	1,245	1,313	1,389	1,444

Source: General Statistics Office, 2000. *Statistical Year Book 2000*, General Statistics Office, Hanoi; General Statistics Office, 2001. *Statistical Year Book 2001*, General Statistics Office, Hanoi.

far the highest per capita incomes are in the Southeast, more than twice the national average. Per capita incomes in the Red River Delta are the same as the national average, but incomes in the Mekong Delta are about 83 per cent of the national average. The poorest area is the Northwest (about 40 per cent of the national average).

While the two deltas dominate agricultural output, the share of the deltas in total agricultural output has recently declined. This reflects the more rapid industrialisation and urbanisation of these areas, and the rapid development of industrial crops in upland areas, especially in the Central Highlands. The Central Highlands share of agricultural value-added increased from 5.9 to 10.2 per cent between 1995 and 2000 due to a rapid expansion in the output of coffee and other industrial crops. The Central Highlands region has the highest per capita value-added in agricultural output in Viet Nam followed by the Mekong River Delta.

Table 2.7 Industrial value-added by domestic enterprises by region, 1995–2001 (per cent of total)

	1995	1997	1998	1999	2000	2001
Red River Delta	19.8	19.6	19.7	20.0	20.0	20.3
Northeast	7.4	7.6	7.3	7.0	7.0	7.1
Northwest	0.4	0.4	0.5	0.4	0.4	0.4
North Central Coast	4.6	4.3	4.3	4.3	4.5	4.2
South Central Coast	5.9	6.2	6.3	6.5	6.7	6.7
Central Highlands	1.5	1.4	1.4	1.4	1.4	1.3
Southeast	38.9	38.9	38.7	39.0	39.3	39.5
Mekong River Delta	14.6	14.0	13.8	13.5	13.0	12.9
Not allocated to a province	6.9	7.6	8.0	7.9	7.8	7.7

Sources: General Statistics Office, 2000. *Statistical Year Book 2000*, General Statistics Office, Hanoi; General Statistics Office, 2001. *Statistical Year Book 2001*, General Statistics Office, Hanoi.

Table 2.8 Total industrial value-added by region, 1995–2000

	1995	1997	1998	1999	2000	2001
Percentage of total						
Red River Delta	17.7	18.4	19.1	19.6	20.4	20.2
Northeast	6.0	5.8	5.6	5.4	5.4	5.4
Northwest	0.3	0.3	0.3	0.3	0.3	0.3
North Central Coast	3.6	3.3	3.2	3.1	3.6	3.8
South Central Coast	4.8	4.8	4.8	4.8	4.9	5.0
Central Highlands	1.2	1.1	1.0	1.0	1.0	0.9
Southeast	49.4	50.3	50.5	50.9	50.2	50.0
Mekong River Delta	11.8	10.6	10.2	9.7	9.3	9.5
Not allocated to a province	5.2	5.4	5.4	5.2	5.0	5.0
'000/person (constant 1994 prices)						
Red River Delta	1,134	1,495	1,725	1,960	2,369	2,650
Northeast	736	906	963	1,027	1,192	1,357
Northwest	155	184	224	223	237	249
North Central Coast	387	449	489	526	709	837
South Central Coast	801	1,018	1,114	1,237	1,476	1,688
Central Highlands	362	390	390	409	452	458
Southeast	4,777	6,031	6,650	7,292	8,252	9,163
Mekong River Delta	788	901	962	1,016	1,131	1,305
Whole country	1,435	1,809	2,004	2,203	2,555	2,877

Sources: General Statistics Office, 2000. *Statistical Year Book 2000*, General Statistics Office, Hanoi; General Statistics Office, 2001. *Statistical Year Book 2001*, General Statistics Office, Hanoi.

Some commentators, focusing on Ho Chi Minh City with its higher income and more developed services, conclude that all the south of Viet Nam is more developed economically than the north. The southeast (which includes the major industrial centres of Ho Chi Minh City, Dong Nai and Vung Tau) does have a considerably higher GDP per capita and accounts for nearly half the country's industrial output. On the other hand, per capita incomes in the Mekong Delta in the south are lower than in the northern Red River Delta. It is the gap between the larger urban centres (including Ho Chi Minh City, Dong Nai, Hanoi and Hai Phong) and rural areas that is more pronounced.

Nearly 40 per cent of industrial output from domestic enterprises comes from the southeast and 20 per cent from the Red River Delta. The Mekong River Delta accounts for a further 13 per cent (Table 2.6).

Most foreign investment in industry has been concentrated in the southeast and the Red River Delta. When industrial output from enterprises with foreign investment is included, almost 50 per cent of total industrial output is from the southeast and 20 per cent from the Red River Delta. The share of total industrial output in the southeast has remained largely unchanged over the last seven years. Output in the Red River Delta has increased marginally, while that in the Mekong River Delta has fallen.

NOTES

- ¹ Even a stable proportion of urban population in the total population would imply some rural–urban migration, as fertility rates have fallen faster in urban areas than in the countryside (in 1989 the crude birth rate in urban areas was 24.1 compared to 33.6 in rural areas). The corresponding crude death rates were 5.1 and 7.9, suggesting a significant difference in the urban and rural natural rates of population increase (General Statistics Office 1994). A 1994 survey indicates that the differences in fertility persist (General Statistics Office 1995).
- ² Except for the male cohort of 45–54 at that time, which had been severely depleted by war deaths.
- ³ A term used to denote 'the radical declines in death and birth rates associated with societal modernization' (Boom and Williamson 1998:419–56). They argue that a demographic bonus has contributed to the stellar economic performance in East Asia in recent decades.
- ⁴ Alternative definitions might result in a significantly higher figure. The Viet Nam Urban Sector Strategy Study (*Final Report November 1995*) noted that the Vietnamese definition of urban residence did not conform to international practice, as rural areas within cities and

municipalities were excluded from the urban totals; the study team estimated that, using the more inclusive definition about 8 per cent more of the population resided in urban areas (resulting in a total of 28.1 per cent).

- ⁵ The estimate in the Table is from an ADB source that allows regional comparisons. The GSO estimates that about 76 per cent of the population were living in rural areas in 2000.
- ⁶ Based on the 1999 Census, the urban populations of the three provinces were Hanoi 1.552 million, Hai Phong 0.572 million and Ho Chi Minh City 4.245 million. However, as the urban–rural distinction is necessarily somewhat arbitrary and the peri-urban rural areas are very much part of the urban economies, the total provincial populations may be more revealing of relative size. The total provincial population in 1999 was estimated to be Hanoi 2.685 million, Hai Phong 1.691 million and Ho Chi Minh City 5.222 million.
- ⁷ At least in terms of the eventual production possibilities. There are still difficult water management and infrastructure constraints to be resolved.
- ⁸ In 2001, Tokyo had a population of about 26.4 million, Shanghai, 12.9 million; Jakarta, 11.0 million; Osaka, 11.0 million; Manila, 10.9 million; Beijing, 10.8 million; and Seoul, 9.9 million in 2000 (see McNicholl 2002:20).