



TECHNICAL AND
VOCATIONAL EDUCATION
AND TRAINING IN THE
SOCIALIST REPUBLIC OF VIET NAM
AN ASSESSMENT

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Acknowledgments

This publication is an assessment of the major trends, strengths, and issues in the technical and vocational education and training (TVET) subsector in the Socialist Republic of Viet Nam. It focuses on formal skills development programs operated by the General Department of Vocational Training (GDVT) in the Ministry of Labour–Invalids and Social Affairs (MOLISA) of the Socialist Republic of Viet Nam. The assessment covers analyses of the country’s technical and vocational training system as well as subsector policies and strategies. Data on other related issues (such as growth in employment, education indicators, and enrollment rates) were collected, consolidated and displayed in tables to provide the reader with a comprehensive view of the development of the subsector.

This publication benefited from, and is based upon, an earlier study entitled *Technical-Vocational Education and Training in Viet Nam*, which was undertaken for the Asian Development Bank (ADB) in 2009 by Richard Johanson. The publication was updated and edited by Eiko Izawa, senior education specialist; Yasushi Hirosato, former principal education specialist; and Wendy Duncan, former ADB principal education specialist. Leah C. Gutierrez, director of the Human and Social Development Division, provided a review as well as technical and editorial inputs. Maricel Bolado and Nguyen Ngoc Thuy, operations assistants, provided administrative support and coordination.

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Currency Equivalents

(as of 13 March 2014)

Currency Unit – dong (D)

D1.00 = \$0.000047

\$1.00 = D21,085.00

Notes:

- (i) The fiscal year (FY) of Viet Nam and its agencies ends on 31 May. “FY” before a calendar year denotes the year in which the fiscal year ends, e.g., FY2012 ends on 31 May 2012.
- (ii) The school year (SY) in Viet Nam officially starts in September and ends on 31 May. “SY” before a calendar year denotes the year in which the school year ends, e.g., SY2012 ends on 31 May 2012.
- (iii) In this report, “\$” refers to US dollars.

Abbreviations

ADB	-	Asian Development Bank
AFD	-	Agence Française de Développement (French Development Agency)
ASEAN	-	Association of Southeast Asian Nations
DGE	-	Department of Gender Equality
FDI	-	foreign direct investment
FTE	-	full-time equivalent
GDP	-	gross domestic product
GDVT	-	General Directorate of Vocational Training (in MOLISA)
GSO	-	General Statistics Office (of the Ministry of Planning and Investment)
GTZ	-	Gesellschaft für Technische Zusammenarbeit (German Technical Assistance Agency)
ICT	-	information and communication technology
ILO	-	International Labour Organization
JETRO	-	Japanese External Trade Organization
JICA	-	Japanese International Cooperation Agency
MOET	-	Ministry of Education and Training
MOLISA	-	Ministry of Labour-Invalids and Social Affairs
NCWA	-	National Commission for Women's Advancement
NSSDC	-	National Skills Standard Development Committee
SEDP	-	Socio-Economic Development Plan
SWAP	-	sector-wide approach
TVET	-	technical and vocational education and training

Introduction

1. This assessment analyzes the major trends, strengths, and issues of the technical and vocational education and training (TVET) subsector in Viet Nam. The strategic investment priorities of the Government of Viet Nam, and of the Asian Development Bank (ADB), in the education and training sector are documented, and potential future directions for external assistance are identified. The assessment focuses on formal skills development programs under the Ministry of Labour–Invalids and Social Affairs (MOLISA), specifically in the General Directorate of Vocational Training (GDVT). The document does not investigate MOLISA’s large program of nonformal skills development, or formal TVET at the upper secondary level under the Ministry of Education and Training (MOET).

2. Viet Nam’s poverty reduction and economic growth achievements in the past 20 years are a success story in economic development. Prior to the global economic crisis, Viet Nam was one of the fastest growing economies in Southeast Asia, and has remained so in the postcrisis period. In 2009, it joined the ranks of lower middle-income countries. Exports have been the main drivers for growth, and foreign investments have been buoyant. This economic growth has changed the economic structure of Viet Nam. The share of industry and services in the country’s gross domestic product (GDP) has steadily increased, while the share of agriculture, including fisheries and forestry, has declined. The government plans to reduce the contribution of agriculture, forestry, and fisheries, and to increase even further the contribution of industry and services.

3. Job growth in Viet Nam has been strong over the decade, with changing employment patterns that reflect the changes in the economic structure. Agriculture’s share of employment has declined, while industry and service sector employment has increased. Employment growth has been highest in industry and services, but has also been strong in tourism. Information technology, science, and technology-based industries have remained small but are growing. If Viet Nam is to expand as an industrialized country, it must develop highly skilled industrial workers who can increase enterprise productivity, product quality, and service standards. Viet Nam’s long-term prosperity and economic development depends on increasing its competitiveness in regional and global markets. In recent years, a shortage of labor has become an obstacle to expanding business.¹

4. The growth in industry and services is expected to further intensify over the coming decade. Projections indicate that the demand for skilled labor in particular will continue to grow strongly. At present, however, only 13% of the employable workforce has vocational qualifications. According to MOLISA, the shortage of highly skilled workers has reached worrying levels, particularly in foreign-invested enterprises.

¹ United Nations Industrial Development Organization. 2009. *Skill Development for Viet Nam’s Industrialization*. Ha Noi.

5. Viet Nam has become an attractive host country for foreign direct investment (FDI), as the third-largest recipient of FDI inflows in the Association of Southeast Asian Nations (ASEAN), behind Singapore and Malaysia. Initially, FDI enterprises were attracted to Viet Nam by the abundance of efficient production-line workers on low wages. However, once salaries start to increase, assemblers may move to other countries with lower labor costs. In the long run, if Viet Nam is to expand as an industrialized nation, it must develop highly skilled industrial workers who can increase productivity in the manufacture of high-tech, value-added products and services. For the first time, a shortage of labor has become an obstacle to expanding business. The shortage of qualified human resources is also inhibiting Viet Nam's absorption of FDI. A major challenge for the vocational education and training (VET) sector, therefore, is to produce more and better qualified skilled workers who can enhance the pace of economic growth.



A. Socioeconomic Context

6. **Population and per capita income.** The population of Viet Nam is increasing at a rate of about 1.1% per annum. Total population grew from 70 million in 2000 to an estimated 91 million in 2010. These population figures are projected to increase to 97 million by 2015, and to 101 million by 2020.

7. Economic growth increased from 6.8% per annum in 2000 to about 10.0% annually between 2003 and 2005. It reached 11.4% in 2007, before dropping back to 5.0% in 2009 following the start of the global economic crisis. In 2013, Viet Nam retained its economic growth of around 5.4% in the context of the continuing economic crisis. Consistently strong economic growth, together with limited population growth, more than doubled annual per capita incomes from \$390 in 2000 to \$890 in 2008.² The proportion of the population living below the poverty line was halved, from about 20% in 2000 to less than 10% by the end of the decade.

8. **Gross domestic product by sector.** According to the Statistical Yearbook of Viet Nam 2013, preliminary data collected in 2012 showed that agriculture accounted for about 19.7% of GDP, industry and construction for 38.6% and services 41.7%. The shares of agriculture in GDP decreased between 2009 and 2012, while industry increased by 2.7% points. The proportion in services remained relatively constant (Figure 1).

9. **Labor force.** The size of the labor force grew from about 38 million in 2000 to 48 million in 2010. The female participation rate is high at about 48% of the total. Viet Nam ranked 11th out of 134 countries on female labor force participation in the 2009–2010 Global Competitiveness Report.

10. The rate of unemployment fell, averaging from about 2.40% in 2008³ to 1.96% in 2012.⁴ Unemployment rates varied between urban and rural areas. In 2012, the rate was 3.21% in urban areas and 1.39% in rural areas. In the last 5 years, the urban unemployment rate has declined from 4.90% to 3.21%. Employment data suggests that the unemployment rate of the labor force at working age in urban areas dropped from 4.60% in 2009 to around 3.21% in 2012.⁵

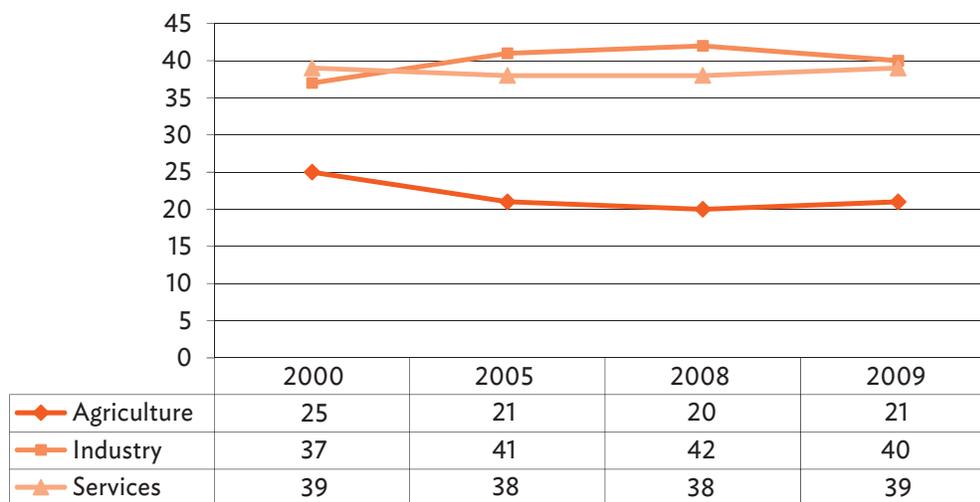
² ADB. 2010. *Key Economic Indicators*. Manila.

³ ILO. 2010. *Key Indicators of the Labour Market*. Bangkok.

⁴ General Statistics Office. 2013. *Statistical Yearbook of Vietnam*. Ha Noi.

⁵ General Statistics Office. 2013. *Statistical Yearbook of Vietnam*. Ha Noi.

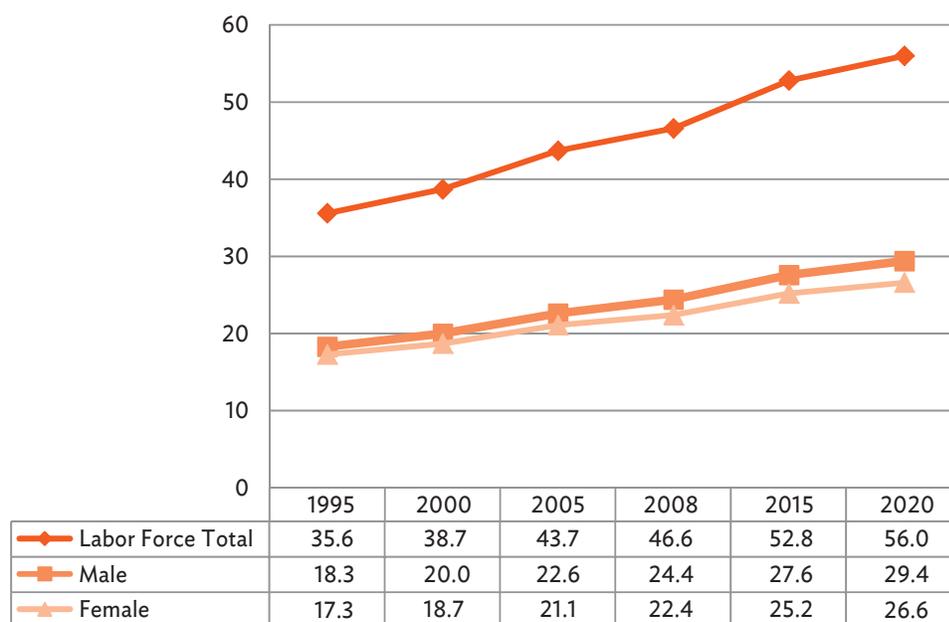
Figure 1. Value Added by Sector, 2000–2009 (% of GDP)



GDP = gross domestic product.

Source: World Bank. World Development Indicators. <http://data.worldbank.org> (accessed July 2011).

Figure 2. Viet Nam Labor Force by Gender, 1995–2008 and Projections to 2020 (millions)



Source: ILO. Labor Force Statistics. <http://laborsta.ilo.org>

11. Major shifts are occurring in the composition of the labor force by economic sector. The percentage of the labor force employed in the agriculture sector decreased from 69% in 1997 to 54% in 2009 to around 48% in 2011. By 2015, the percentage is expected to be approximately 40% (Figure 3).

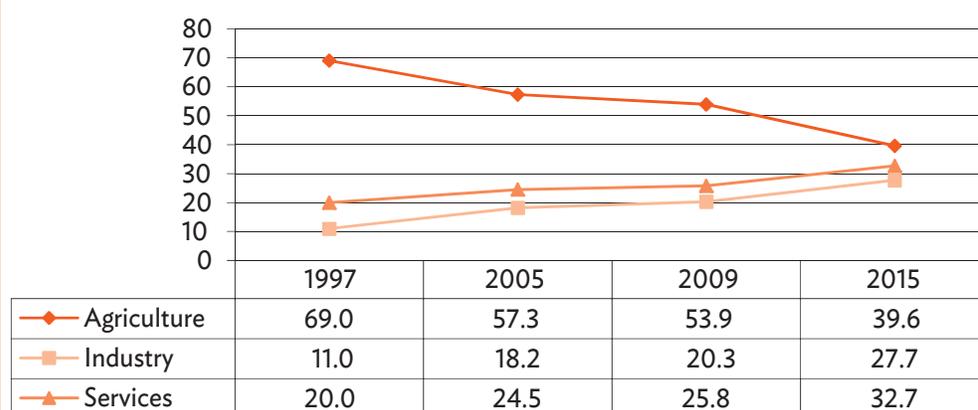
12. At current rates, over 1 million workers are shifting from agriculture to industry and services each year. Commensurate increases in industry were from 11% of the total in 1997 to about 21% in 2011, with a forecast estimated of 28% by 2015. In the services category, the figures increased from 20% in 1997 to 30% in 2011,⁶ with an estimate of 33% by 2015.

13. The movement of workers across industry sectors is consistent with trends in other Asian countries. Figure 4 shows the relative shares of the labor force by economic sector in 2000 and 2006 for selected ASEAN countries. The rapid movement out of agriculture into services and industry in Viet Nam is exceeded only by Cambodia.

14. Table 1 shows total changes in employment and annual growth rates by sector from 2000–2006 for ASEAN countries.

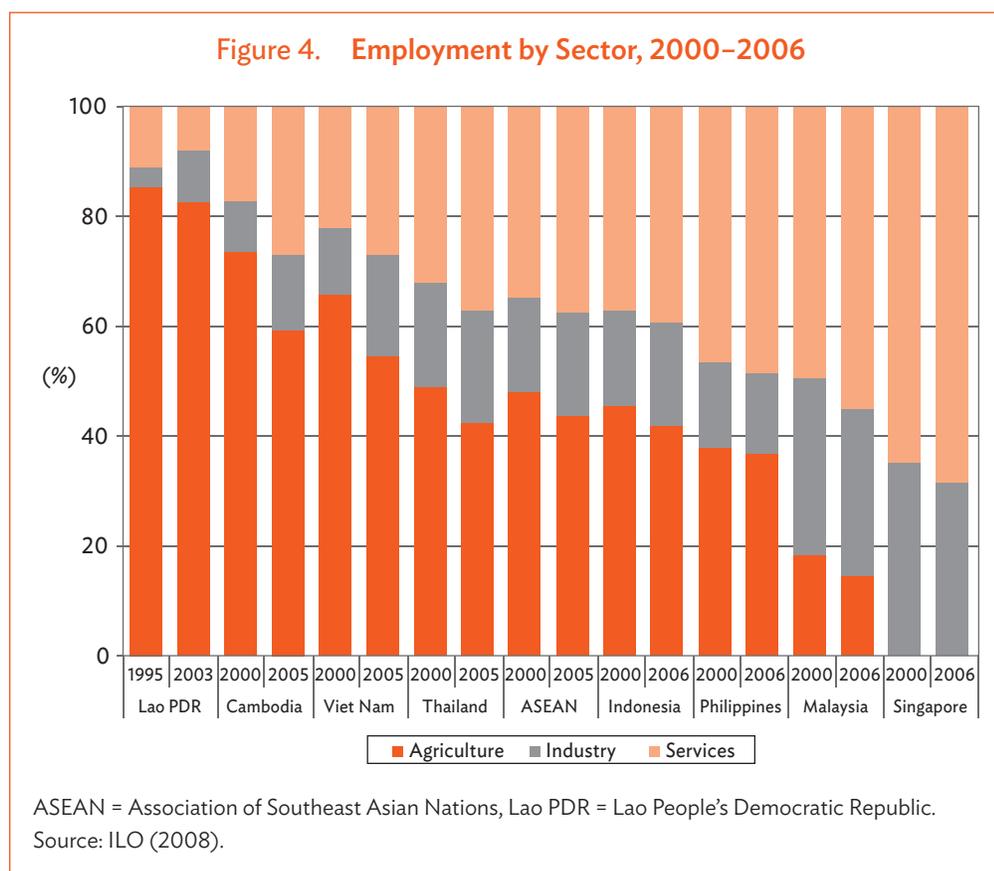
15. **Labor productivity.** The structural shift out of agriculture into industry contributed to substantial increases in overall productivity. In nearly every country, agriculture has the lowest level of labor productivity, and industry is the most productive. The ratio of average productivity in industry to agriculture is 6.4:1 in Viet Nam. In other words, it would take an average industrial worker less than 2 months to produce what an average agricultural worker would produce in 1 full year. Such a high ratio indicates high potential returns to employment shifts out of agriculture.

Figure 3. Labor Force by Sector, 1997–2015 (millions)



Source: 2009 Population Census, Draft Socio-Economic Development Plan 2011–2015.

⁶ General Statistics Office. 2012. *Report on the 2011 Vietnam Labor Force Survey*. Ha Noi.

**Table 1. Growth in Employment by Sector, 2000–2006**

	Total Change in Employment ('000s)			Annual Growth Rate (%)		
	Agriculture	Industry	Services	Agriculture	Industry	Services
ASEAN	324	8,445	13,314	0.1	3.6	2.8
Cambodia	310	540	1,110	1.4	15.3	15.5
Indonesia	544	2,078	4,086	(0.2)	2.1	1.9
Lao PDR	236	159	(22)	1.5	15.1	(1.2)
Malaysia	(208)	109	1,051	(2.1)	0.6	3.5
Philippines	1,765	454	3,198	2.6	1.6	3.8
Singapore	0	18	307	1.1	(1.5)	2.9
Thailand	(780)	1,223	2,847	(0.8)	3.0	4.0
Viet Nam	(670)	3,388	3,463	(0.5)	9.4	5.8

() = negative, ASEAN = Association of Southeast Asian Nations, Lao PDR = Lao People's Democratic Republic.

Source: ILO (2008).

Table 2. Labor Productivity by Sector and Contribution from Sector Employment Shift, 2000–2006 (constant \$2,000 and average annual growth)

	Labor Productivity, Most Recent Year			Annual Labor Productivity Growth (%)				Contribution from Employment Shift	
	Agriculture	Industry	Services	Agriculture	Industry	Services	Total	Total	%
ASEAN	806	7,429	4,209	3.2	1.3	2.1	3.1	0.6	18.3
Cambodia	361	1,445	1,149	3.6	(1.2)	(4.7)	3.2	1.5	46.9
Indonesia	773	5,408	2,456	3.4	1.9	4.4	3.8	0.3	7.6
Lao PDR	477	2,318	2,329	2.9	6.6	4.9	4.2	1.0	23.8
Malaysia	6,442	18,838	8,816	5.6	3.6	1.8	2.9	(0.2)	(5.4)
Philippines	1,226	6,015	3,493	1.1	1.5	2.3	1.8	0.1	3.7
Singapore	16,202	50,309	43,744	(2.2)	3.6	1.7	2.3	0.0	(2.0)
Thailand	838	9,873	5,788	3.4	3.1	0.4	3.4	1.0	30.6
Viet Nam	392	2,523	1,523	4.2	0.8	1.3	5.0	1.8	36.7

() = negative, ASEAN = Association of Southeast Asian Nations, Lao PDR = Lao People's Democratic Republic.
Source: ILO (2008).

16. In Viet Nam, the shift in employment accounted for nearly 37% of the country's average productivity growth of 5%. Productivity in agriculture increased at an annual pace of just over 4%. However, productivity growth in industry was less than 1% and ranked the lowest among ASEAN countries. Low industrial productivity, among other things, reflects low skill levels in the labor force.

17. Small and medium-sized enterprises are highly important to employment in Viet Nam, accounting for over 75% of employment, 25% of value added, and 20% of exports (Table 3).

18. Although declining from 60% to 40% between 1998 and 2006, farming is still the single largest occupation in Viet Nam. The proportion of workers employed by private enterprises almost doubled between 1998 and 2006 to over 20% of the total.

19. The number of wage workers in Viet Nam more than doubled during the period 1997 to 2007, and they now represent 30% of the total labor force, an increase of around 11% over the period. The proportion of "own account" workers (those who get their pay directly from their customers) increased from 42% to 54% during the same period. These increases of wage and "own account" workers significantly reduced the proportion of unpaid family workers from 39% in 1997 to 13% in 2007, meaning these workers are bringing more cash income to their respective families. The entrepreneurial group, the employers (those who employ at least one paid worker in their business or trade) also increased rapidly. Although they comprise a relatively small group, their numbers have grown from just over 50,000 in 1997 to almost 1.5 million in 2007.⁷

⁷ MOLISA. 2007. *Labor Force and Employment Survey*. Ha Noi.

Table 3. Share of Small and Medium-Sized Enterprises in Value Added, Employment, and Exports, Most Recent Year (%)

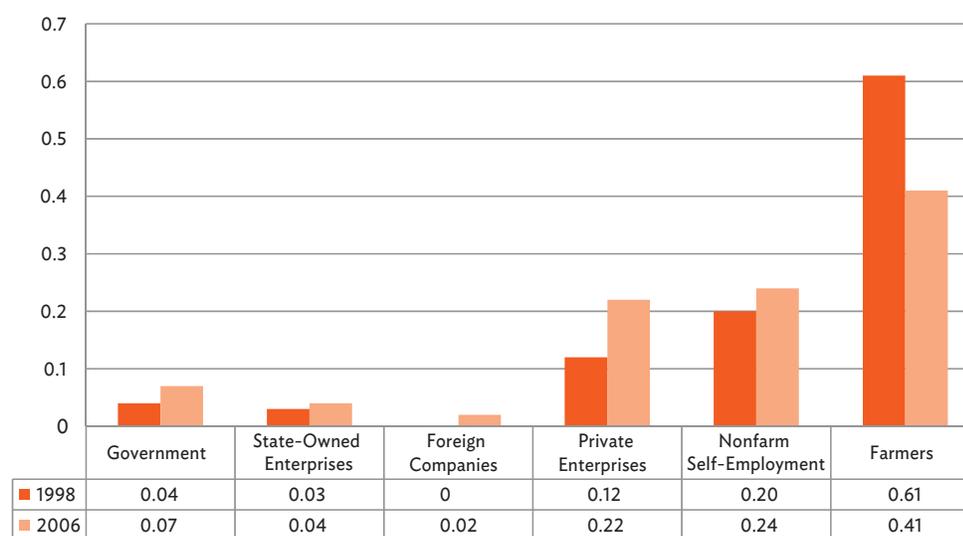
Country	Year	Value Added	Employment	Exports
Indonesia	2003	57.6	99.4	10.6
Malaysia	2005	47.3	65.1	15.0
Philippines	2001	32.0	70.0	...
Singapore	2005	34.7	51.8	16.0
Thailand	2006	...	68.1	10.0
Viet Nam	2004	26.0	77.5	20.0
China, People's Republic of	2004	68.7	85.2	40.0~60.0
India	2003	40.0	85.8	...
Japan	2004	53.8	71.0	13.5
Korea, Republic of	2004	59.4	86.5	40.0

... = data not available.

Note: Data for exports refer to the most recent year available.

Source: ILO (2010).

**Figure 5. Structure of the Labor Force, 1998 and 2006
(% employed by location)**



Source: World Bank (2008a).

20. **Gender and the private sector.** A number of government incentives, aimed at increasing the number of female workers in the labor force, are available to the private sector. Decree 23/CP (18 April 1996) Providing Details, and Guidance for the Implementation of a Number of Articles of the Labor Code on Women Laborers outlines a number of preferential treatments for female workers and specifies two key incentives for enterprises that employ a large number of women:⁸ (i) access to low interest loans from the National Fund for Employment (Article 6); and (ii) reduced tax considerations (Article 7). In 2009, the Viet Nam Trade Union conducted a review of the Labor Code (1994). It revealed that working conditions for female laborers were not improving, as 76% of women employed had to work overtime. It also found that enterprises employing large numbers of women did not have access to low interest loans or tax reductions.

21. **Women in the workforce.** Viet Nam has one of the highest female labor force participation rates in the region. According to the 2011 labor force survey,⁹ women represent 48.2% of those employed. However, women and men do not participate equally in the labor market. Out of 50.35 million people employed in nine professional groups, there are four vocational skill levels that employ many female workers rather than “personal services, protection, and sales,” “secondary-level professional,” “unskilled occupations,” and “unskilled occupations” (Table 5).

Table 4. Female Labor Participation Rate, 2005–2009
(% of female population aged 15+)

Country	2005	2006	2007	2008	2009
Cambodia	74.7	74.1	73.6	73.3	73.6
Philippines	49.4	48.5	48.3	48.7	49.2
Sri Lanka	34.8	36.9	35.3	34.6	34.2
Viet Nam	68.5	68.3	68.2	68.2	68.0
India	32.4	32.6	32.8	33.1	32.8
Indonesia	50.6	51.1	51.5	52.0	52.0
Thailand	66.2	65.2	65.8	65.9	65.5
China, People’s Republic of	68.5	68.1	67.8	67.5	67.4
Malaysia	44.2	44.1	44.1	44.1	44.4
Korea, Republic of	54.4	54.5	54.6	54.7	55.1
Singapore	53.5	53.7	53.4	54.2	53.7

Source: World Bank. 2010. Washington, DC.

⁸ An enterprise that meets one of the following two conditions is regarded as having a high proportion of women in its workforce: (i) regularly employs 10–100 women laborers and has women laborers accounting for 50% or more of its total regular workforce, and (ii) regularly employs over 100 women laborers and has women laborers accounting for 30% or more of its regular workforce.

⁹ General Statistics Office. 2012. *Report on the Labor Force Survey in 2011*. Ha Noi.

Table 5. Number and Composition of Employed Population by Occupation, 2011

Occupation	Number of Employed Workers (Thousand persons)	Proportion (%)			
		Total	Male	Female	% Female
Total	50,352.0	100.0	100.0	100.0	48.2
1. Leaders in all fields and levels	538.3	1.1	1.6	0.5	23.3
2. High-level professional	2,680.7	5.3	5.1	5.5	50.2
3. Secondary-level professional	1,777.4	3.5	3.0	4.0	55.3
4. Clerks	765.0	1.5	1.6	1.4	44.8
5. Personal services, protection, and sales	7,559.7	15.0	10.6	19.7	63.1
6. Agricultural, forestry, fishery occupation	7,086.9	14.1	15.5	12.6	43.0
7. Skilled manual workers and other related workers	6,074.9	12.1	16.9	6.9	27.7
8. Assemblers and machine operators	3,516.2	7.0	8.5	5.3	36.9
9. Unskilled occupations	20,352.9	40.4	37.1	43.9	52.4

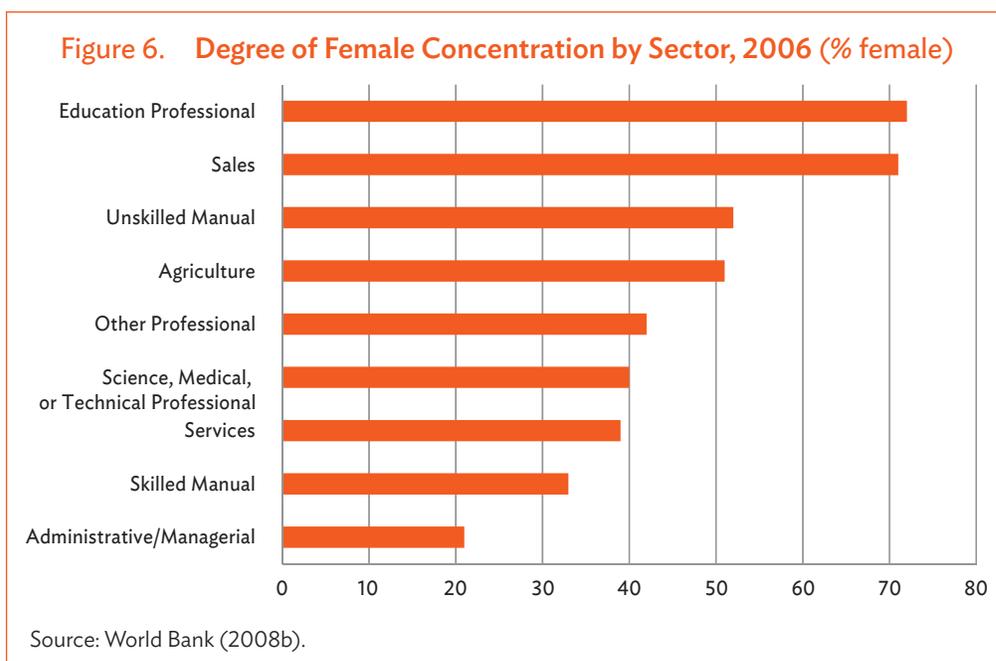
Source: General Statistics Office. 2012. *Report on the Labor Force Survey in 2011*. Ha Noi.

22. Women are poorly represented in some sectors of the Viet Nam labor market. A good example is the information and communication technology (ICT) sector. A majority of the few women working in ICT are employed as programmers, and a few are hardware specialists. Men tend to work as designers. Reasons for low female participation rates in ICT are multifaceted. Women face discrimination about their technical competency and ability to work long hours. However, they also tend to believe that there is a negative impact of computers on their reproductive health. A detailed list of male- and female-dominated occupations can be found in Appendix 2.

23. Discrepancies are also evident between women's and men's salaries, even when education levels and qualifications are taken into account. On average, men in Viet Nam earn about 34% more than women, according to the General Statistics Office (GSO) in 2008. This gap varies with the level of education completed. Men earn up to 44% more than women with short-term vocational training. The income gap is less with those who have attended secondary vocational school. Income disparities are partly due to differences in skill levels attained between men and women, and are most pronounced in the private sector compared to state-owned enterprises.

24. Generally, the Vietnamese labor force has low skills. Results of the 2011 Labor Force Survey¹⁰ indicated that the proportion of the labor force that had received technical and vocational training remains low. In a total of over 50.35 million people aged 15+ employed in Viet Nam, only around 7.8 million workers have been trained. This accounts for just 15.4% of the labor force. Conversely, 84.6% of employed workers have not been trained to achieve

¹⁰ General Statistics Office. 2012. *Report on the Labor Force Survey in 2011*. Ha Noi.

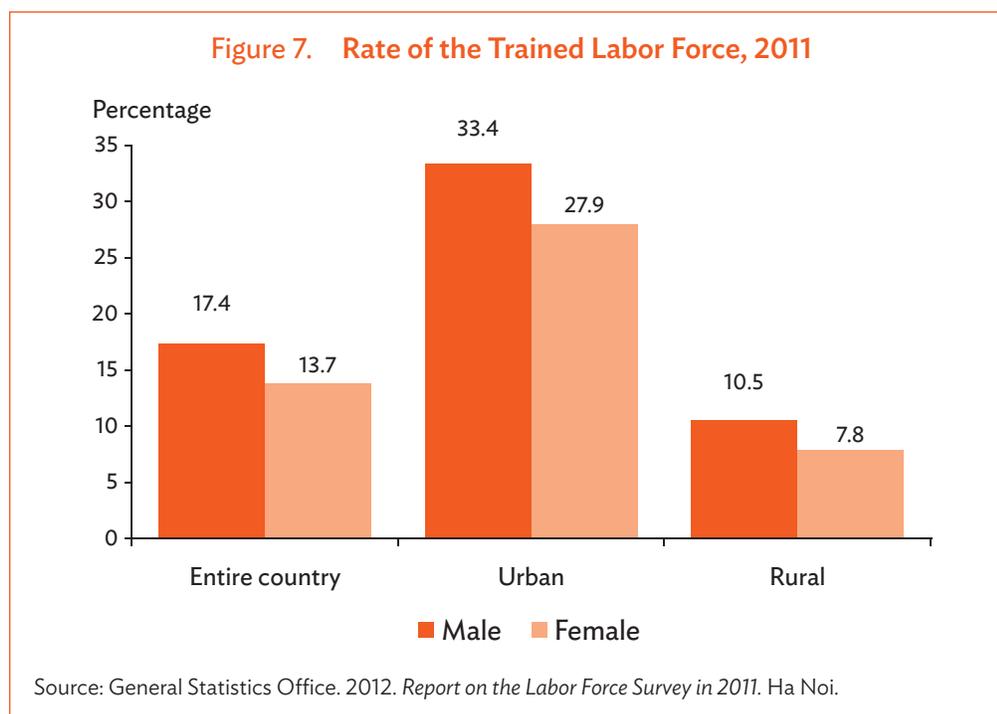


any level of technical qualification. Moreover, the difference in training rates of employees in urban areas (30.9%) and rural areas (9.0%) is significant. Men tend to receive more education and training opportunities than do women. Figure 7 shows the differences in training between men and women in urban and rural areas.

25. Differences exist in the level of certificate attainment by women and men in the labor force in Viet Nam. According to the 2006 Viet Nam Household Living Standard Survey, about 5% of men have a technical worker certificate, compared to 2% of women. In addition, about 5% of men have vocational training compared to 3%–4% of women (GSO 2006). Although the proportion of women and men who have attained a technical or vocational training certificate has increased since the 2002 survey this increase was greater for men in both qualifications. For technical certification, the increase was about 612% for men, compared with an increase of about 6% for women. For vocational certification, the increase was around 85% for men, compared with a 69% increase for women. Employment data suggest that university graduates experience greater levels of unemployment (21%) than those with a college certificate or short-term vocational training (14%). The highest level of unemployment (about 32%) is experienced by those with vocational secondary training, with female graduates experiencing the greatest unemployment.

B. Productivity and Competitiveness

26. Viet Nam actually decreased in competitiveness from 2006/2007 to 2009/2010, deteriorating from 64th place out of 134 countries to 75th place. However, it improved in 2010/2011 to reach 59th place. Sri Lanka, Indonesia, the People's Republic of China, and Singapore consistently improved their rankings.



27. **Education and training.** Table 7 reveals some association between competitiveness, higher levels of secondary enrollments, and enrollments in TVET, with the more competitive countries showing higher scores on all three measures. Nevertheless, few students who enroll in secondary education pursue vocational training, ranging from 0.6% in the Lao People's Democratic Republic to 16.4% in Thailand. Viet Nam's gross secondary enrollment is in the middle range in comparison with other ASEAN countries, as is its secondary-level TVET enrollment. The share of TVET enrollments in Indonesia and Thailand is considerably higher but ranks below Thailand and Indonesia in the technical and vocational enrollment in formal secondary schooling, 6.4% for Viet Nam compared with 16.4% for Thailand and 12.8% for Indonesia.

28. **Returns to schooling.** The evidence of skill-based technical change occurring in Viet Nam is demonstrated by changes in the number of students returning to school. Additional schooling clearly contributes to additional income, and returns increased steadily from 2002 to 2006. Tables 8 and 9 indicate the likelihood of wage employment according to educational level, and the returns in earnings.

29. An analysis of the private returns to general education and vocational training based on data from the 2008 Viet Nam Household Living Standards Survey shows that workers with vocational training (including short-term training) are more likely to be employed than workers with a general education (ranging from no formal education to upper secondary). It is only at the tertiary level that general education has better employment and wage outcomes than vocational college. Furthermore, workers with technical or vocational training at either the secondary or tertiary level earn 32% more than the average wage earner. Average

Table 6. Global Competitive Index Rankings, 2006–2007 to 2010–2011

Economy	2006/07	2007/08	2008/09	2009/10	2010/11
Cambodia	106	110	109	110	105
Philippines	75	71	71	87	83
Sri Lanka	81	70	77	79	62
Viet Nam	64	68	70	75	59
India	42	48	50	49	51
Indonesia	54	54	55	54	44
Thailand	28	28	34	36	38
China, People's Republic of	35	34	30	29	27
Malaysia	19	21	21	24	26
Korea, Republic of	23	11	13	19	22
Taipei, China	13	14	17	12	13
Singapore	8	7	5	3	3

Note: Out of 134 economies, with 1 being the highest rank.

Source: World Economic Forum. 2010. *The Global Competitiveness Report 2010–2011*. Geneva.

Table 7. Key Education Indicators, Selected Members of the Association of Southeast Asian Nations, SY2009

	GCI	Gross Secondary Enrollment Ratio	TVET Enrollment (% of total secondary enrollment)
Lao PDR	...	35	0.6
Cambodia	106	44	2.2
Viet Nam	64	67	6.4
Indonesia	54	76	12.8
Philippines	75	81	...
Thailand	28	71	16.4
Malaysia	19	69	5.9

... = data not available, GCI = Global Competitiveness Index, Lao PDR = Lao People's Democratic Republic, SY = school year, TVET = technical and vocational education and training.

Sources: World Economic Forum. 2010. *Global Competitiveness Report 2010–2011*. Geneva; World Bank. 2009. *Education at a Glance: Viet Nam*. <http://siteresources.worldbank.org/EXTEDSTATS/Resources/3232763-1171296190619/3445877-1172014191219/VNM.pdf>; ILO (2010).

earnings for a worker with general education are only 5% higher than average wage earnings. The exception is at the tertiary level, where salaries for tertiary graduates are 173% higher than for vocational college.¹¹

¹¹ Hyun H. Son. Vocational Education, Human Capital and Employment by Income Class: A Case Study of Viet Nam. Unpublished.

Table 8. Probability of Getting Employment for People with Vocational Training

Number of Years of Schooling	Technical Qualification	Level of Training	Probability of Getting a Job	Probability of Becoming a Wage Earner
5	Without technical knowledge	Primary	0.996	0.235
9		Secondary	0.995	0.334
12		High school	0.995	0.421
13	With technical knowledge	Vocational training	0.995	0.482
14		Professional school	0.995	0.513
16		College, higher education	0.996	0.604

Source: Bui Ton Hien, unpublished thesis, based on GSO. 2006. *Estimates of Probability of Employment under the Logistic Model Based on the Household Living Standards Survey 2006*. Ha Noi.

Table 9. Skill-Based Returns by Level of Education and Training, 2002, 2004, 2006

Number of Years of Schooling	Technical Qualification	Level of Training	Rate of Return (2002)	Rate of Return (2004)	Rate of Return (2006)
5	Without technical knowledge	Primary graduate	1.4	2.3	1.5
9		Secondary school	3.8	5.4	5.5
12		High school	5.6	7.6	8.5
13	With technical knowledge	Vocational training	6.2	8.4	9.5
14		Professional high school	8.8	9.2	10.5
16		College, higher education	7.4	10.7	12.5

Source: Bui Ton Hien, unpublished thesis, based on (i) Doan Hong Quang, Nguyen Lan Huong, and Gian Thanh Cong. 2006. *Impact of Free Trade on Wages and Employment: Viet Nam Case*. Ha Noi; (ii) World Bank. 2007. *Higher and Skill Education for Development in Viet Nam*. Washington, DC.

30. **Shortage of skilled workers.** Viet Nam currently experiences shortages of skilled workers. Several surveys have suggested a large number of job vacancies where skilled workers are required. A 2006 survey of Japanese manufacturing companies in Viet Nam revealed difficulties in recruiting middle-management staff and engineers. Between 2003 and 2006, the percentage of firms that reported difficulty in recruiting workers increased from 37% to 63% for engineers and technicians, and from 54% to 70% for middle managers. In contrast, the percentage of manufacturers reporting difficulties in recruiting general workers (e.g., production-line workers) was low at 14%–20%.¹² Shortages of engineers, technicians, and middle managers are greater in Viet Nam than in other Asian countries, as shown in Figure 8.

¹² Japan External Trade Organization (JETRO) survey 2006 as reported in Mori et al. (2009), pp. 3–4.

Table 10. Employment by Sector and Education Level for Population Aged 15+ Years

Education Level	Number of People	Employed in Wage and Salary	Self-employed in Primary Industry	Self-employed in Nonprimary Industry
No degree	14.0	3.4	7.1	2.0
Primary	15.1	5.0	8.7	3.2
Lower secondary	18.6	5.1	9.8	3.6
Upper secondary	9.3	2.4	2.5	1.6
Short-term technical	2.2	1.1	0.8	0.7
Long-term technical	1.3	0.7	0.3	0.2
Professional secondary	2.3	1.3	0.7	0.4
Vocational college	0.2	0.2	0.0	0.0
Tertiary general	3.5	2.7	0.4	0.3
General education	46.5	15.1	21.3	8.7
Vocational education	6.0	3.3	1,791.3	...
Total	66.5	21.8	30.2	12.0

... = data not available.

Source: ???.

31. A labor force survey carried out by MOLISA in 2007 indicated that domestic companies face similar staff shortages, especially for craftspeople. An assessment of job vacancies by occupation and economic sector, based on a sample of formal business establishments, found that nearly two-thirds of the job openings for the economy as a whole were for craftspeople, including 81% in exploitation industries, 85% in processing industries, 58% in construction, 37% in utilities, and 25% in services.¹³

32. Lack of skilled labor was mentioned as a “severe bottleneck” by one-fifth of respondents to the 2005 Investment Climate Survey by the World Bank, and as a “moderate bottleneck” by an additional one-fifth of respondents. Skill shortages were a serious obstacle in electronics, chemicals, machinery, furniture, and even in textiles.¹⁴ Figure 9 shows that “Labor skills and education” ranked third at 22.3% out of 18 possible constraints to business operations in Viet Nam.

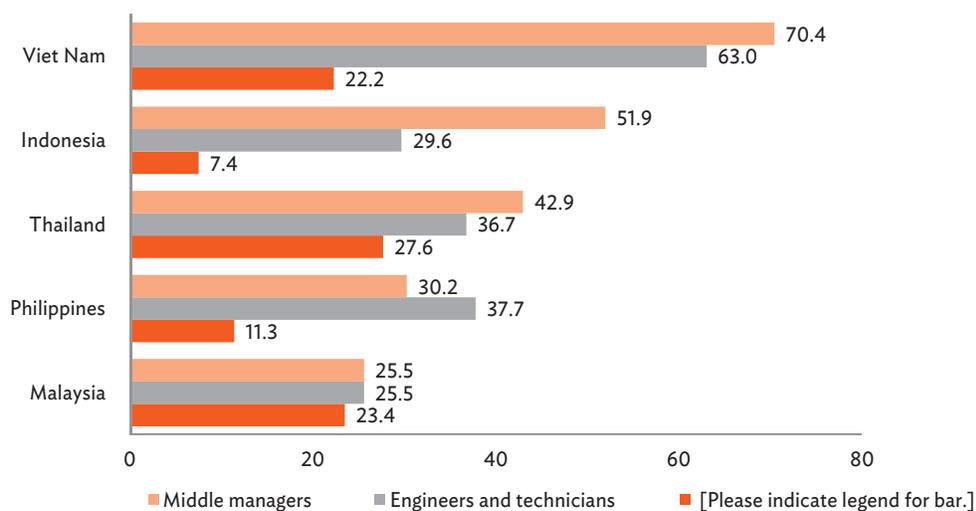
33. **Labor force projections.** Figure 10 shows that the projected growth in the labor force from 2010–2020 is likely to be about 13%. That would add about 1.05 million people annually to the labor force.

34. Viet Nam is expected to reap a “demographic dividend” in the future because of a projected increase in the proportion of the prime-age population (aged 25–54 and economically active) to total population, and a decline in the proportion of economic

¹³ ADB. 2008. *Labor Market Survey 2005*, as cited in World Bank June 2008. Ha Noi. MOLISA.

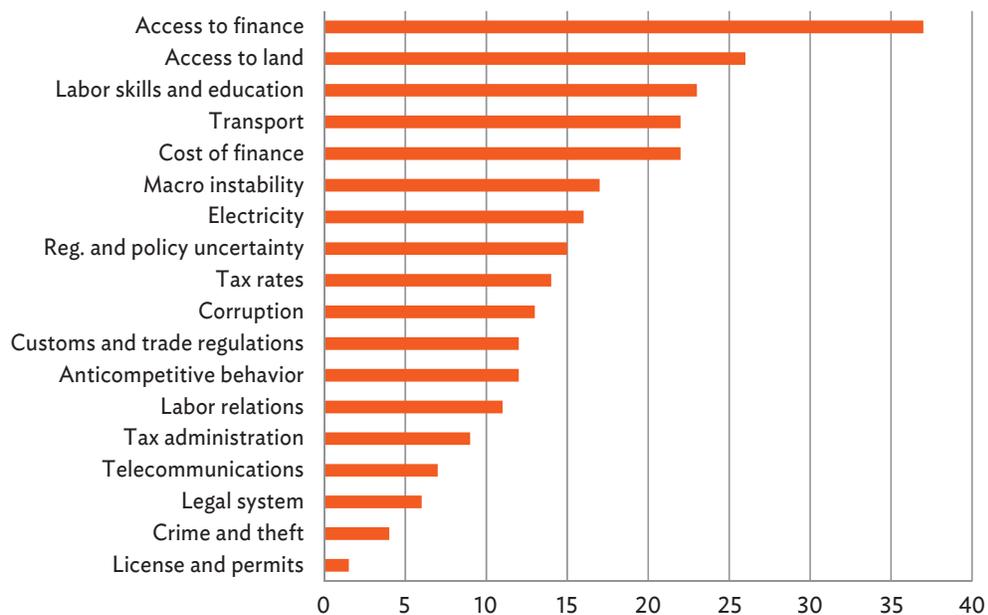
¹⁴ World Bank. 2008. *Viet Nam Economic Report*. Washington, DC.

Figure 8. Firms Reporting Difficulty in Recruiting Workers, 2007
(% of total)



Source: Japan External Trade Organization survey 2006 as presented in Mori et al. (2009).

Figure 9. Constraints to Doing Business in Viet Nam, 2006
(% of respondents)



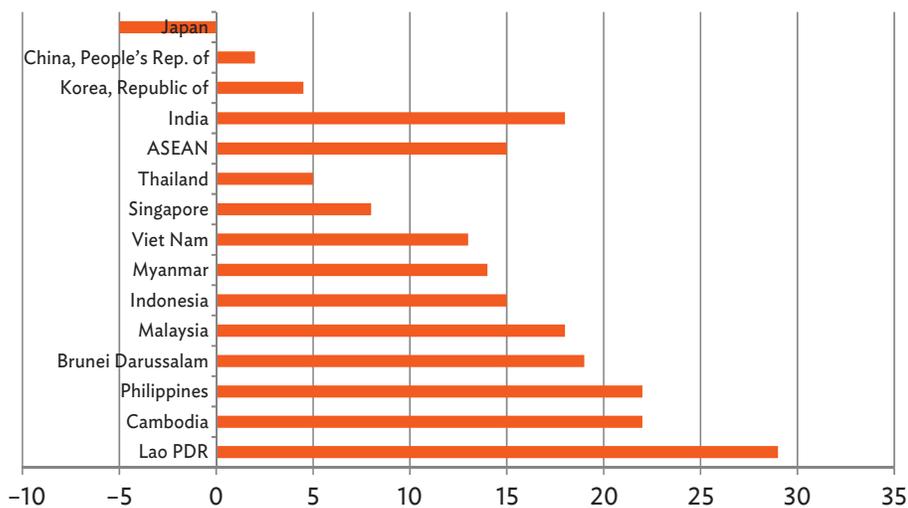
Source: World Bank. 2006. *Investment Climate Assessment*. Washington, DC.

dependents. The proportion of the population aged 25–54 is expected to increase from 40.5% to 44.0% by 2015.¹⁵

35. In addition, successful shifts in employment from agrarian-center production to higher value-added activities can contribute to healthy growth in agricultural productivity. Such growth can support structural change by freeing up rural laborers so they can take up higher productivity employment in industry. Fewer workers are needed in agriculture as a result of productivity gains, and this “pushes” labor into other potentially more productive activities. However, this must be accompanied by skills development in the new occupations. Table 11 shows that labor productivity must grow by 5.8% per annum to sustain historical growth rates.

36. Policies to support productivity growth are needed in Viet Nam. This includes policies to raise the skills of those entering, and already engaged in, employment. It should remain a priority for Viet Nam to increase the skills and educational relevance of its workforce to be competitive in the region. Projections indicate that even conservative assumptions about growth rates and employment shift away from agriculture will be associated with a substantial increase in the demand for skilled labor. In 2008, the World Bank projected the growth of unskilled labor to be only 2% per annum (2005–2010). In contrast, the demand

Figure 10. Projected Labor Force Growth in ASEAN+3 and India, 2010–2020 (%)



ASEAN+3 = Association of Southeast Asian Nations plus the People's Republic of China, Japan, and the Republic of Korea; Lao PDR = Lao People's Democratic Republic.

Source: ILO (2010).

¹⁵ ILO (2008).

Table 11. Historical and Projected Gross Domestic Product Growth and Labor Productivity

	Real GDP Growth (%)		Labor Productivity Growth (%)	
	2000–2007	2007–2015	2000–2007	2007–2015
		(With No Increase in Productivity Growth)		
ASEAN	5.6	5.2	3.3	4.1
Cambodia	9.5	5.8	3.1	6.8
Indonesia	5.1	5.1	3.5	3.4
Malaysia	5.1	5.5	3.2	2.8
Myanmar	11.7	9.3	7.7	10.1
Philippines	5.0	4.4	2.0	2.6
Singapore	5.1	2.9	1.2	3.3
Thailand	5.0	3.8	3.3	4.4
Viet Nam	7.7	7.2	5.3	5.8

ASEAN = Association of Southeast Asian Nations, GDP = gross domestic product.
Source: ILO (2008).

Table 12. Gross Domestic Product and Employment, Average Annual Growth, Selected Members Association of Southeast Asian Nations, 2001–2008 (%)

Country	GDP Growth	Employment Growth
Indonesia	5.4	1.7
Malaysia	5.7	1.8
Philippines	5.3	2.8
Thailand	5.2	1.7
Viet Nam	7.6	2.0

GDP = gross domestic product.

Source: International Monetary Fund. 2009. World Economic Outlook Database. <http://www.imf.org/external/pubs/ft/weo/2009/02/weodata/index.aspx> (accessed 2009).

for technical workers was expected to increase at about 7% per annum. Viet Nam will need to focus on making its labor force more competitive, with particular emphasis on investment in skilled labor.¹⁶

¹⁶ World Bank (2008a).

Skills Supply: The Technical and Vocational Education and Training System



This section describes the main characteristics and dimensions of TVET in Viet Nam.

A. Organization and Management

37. Multiple agencies administer TVET institutions. A wide range of organizations owns public training institutions:

- (i) MOLISA;
- (ii) MOET;
- (iii) Various line ministries, including Industry and Trade; Agriculture and Rural Development; Transport; Construction; Defense; Health; Culture, Sports and Tourism;
- (iv) Viet Nam Labor Federation;
- (v) Viet Nam Women's Union;
- (vi) Cooperatives Alliance;
- (vii) State-owned enterprises; and
- (viii) Provincial, city, and district governments.

38. Appendix 3 shows the distribution of ownership by central ministries, state-owned enterprises, and Provincial People's Committees.

39. At the college level, the central ministries and organizations manage almost half (48%) of the institutions. At the intermediate level, the central government directly manages more than a quarter (26%) of the institutions. At the elementary level, the central government directly manages only 5% of the institutions, while local governments handle 95%. State management of vocational training has moved from agency to agency over the years. Appendix 4 shows the various agencies that have been in charge of vocational training and the total number of vocational training institutions.

40. MOLISA is at present charged with coordinating the training provision of all entities. Given the diversity of these entities, it seeks standardized procedures and criteria through the issuance of regulations and decrees. Even small institutions have a thick book of all the regulations and orders that they are supposed to follow. However, surprisingly, MOLISA collects and summarizes little information on TVET institutions. Appendix 5 shows the organizational structure of GDVT. At the provincial level, there is little or no coordination of total training provision, as each sector ministry handles its own institutions.

41. **Dual structure.** Viet Nam has two distinct tracks for TVET: one composed of institutions under MOLISA, and another of institutions under MOET.

- (i) MOLISA institutions include elementary vocational training (delivered partly through vocational training centers), intermediate vocational training (through vocational secondary schools) and higher vocational training (through vocational colleges).
- (ii) MOET institutions include short-term vocational training, technical secondary schools,¹⁷ and technical (professional) colleges.

42. The TVET system is structured into four different levels under MOET and MOLISA (Table 13). Further delineation of the TVET system into formal and nonformal training (i.e., short-term and long-term) under MOLISA and MOET is illustrated in Figure 11.

43. The main difference between the technical secondary and vocational secondary streams used to lie in the proportions of theory and practice in the curriculum of each stream. Technical secondary schools had a curriculum that was about 40% practice and 60% theory. Meanwhile, the curriculum of vocational secondary schools was about 70% practice and 30% theory. While graduates of technical secondary schools were eligible to enter colleges and universities,¹⁸ a graduate of a vocational secondary school could not gain entry to a technical college, and a graduate of vocational colleges could not enter a university. Happily, this situation has recently been redressed. The proportion of theory and practice has been more standardized across two types of institutions, and a graduate of a vocational college may now enter university. This is an important step forward in articulating the MOLISA and MOET education and training systems.

44. **Multilevel, multitrack training.** Higher-level institutions can, and typically do, offer lower-level training. That is, universities offer college-level, secondary-level, and even elementary-level training. Colleges tend to offer intermediate-level vocational

Table 13. Levels of Education and Training

Level	MOET	MOLISA/GDVT
Bachelor's degree	Universities, polytechnics	
College level	Professional colleges	Vocational colleges
Secondary level	Technical (professional) secondary schools	Vocational secondary schools
Elementary level		Vocational training centers ^a

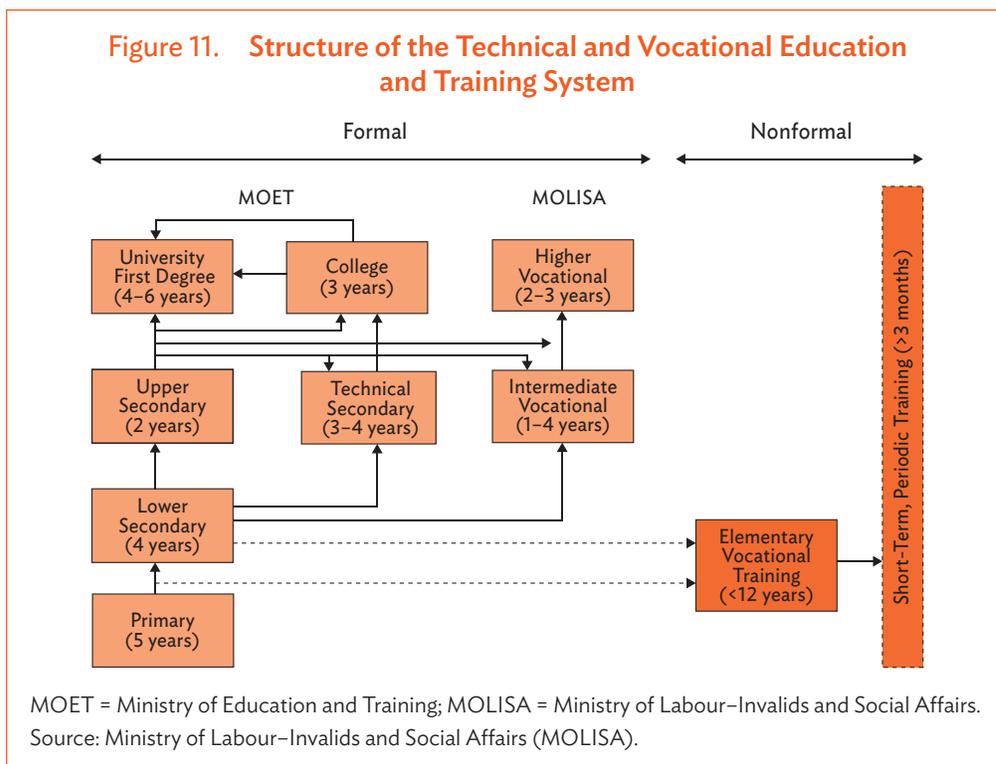
GDVT = General Directorate of Vocational Training; MOET = Ministry of Education and Training; MOLISA = Ministry of Labour-Invalids and Social Affairs.

^a Proposed by the Ministry of Labour-Invalids and Social Affairs.

Source: Asian Development Bank.

¹⁷ Called professional secondary.

¹⁸ Hanh also reports that the key differences between technical secondary and vocational secondary is that technical secondary schools under MOET provides training on various subjects classified by sectors such as health, culture, mining, and services while vocational secondary school trains for skills and competencies for specific occupations like welders, carpenters, electricians, and mechanics.



training and often elementary training as well. Vocational secondary schools can also offer elementary-level courses. Teaching staff sometimes teach at more than one level. Hence, it is difficult to obtain statistics on teachers by level.

45. Training institutions can offer programs from both the education and labor tracks. For example, the Ha Noi Industrial Vocational College has both the secondary vocational school program of MOLISA and the professional secondary school program of MOET. The Hanoi University of Industry has both a college under MOET and a vocational college under MOLISA, as well as both a professional secondary school and vocational secondary school. This causes complications in terms of accreditation for the institution, as both ministries need to certify the programs.

46. **Specialization.** Virtually all vocational secondary schools and most postsecondary institutions are specialized by sectors or subsectors, e.g., agriculture (forestry, fisheries, horticulture), transport, construction, industry, etc. No aggregate data are available on the numbers of institutions or enrollments by sector specialization. However, GDVT has approved 380 training programs at the college level and 440 programs at the vocational secondary level.

47. **School-based training.** Vocational training is delivered, by and large, in schools and training institutions, as opposed to the workplace. The length of training varies from 3 to 12 months in elementary training centers, and from 2 to 4 years in secondary schools and colleges.

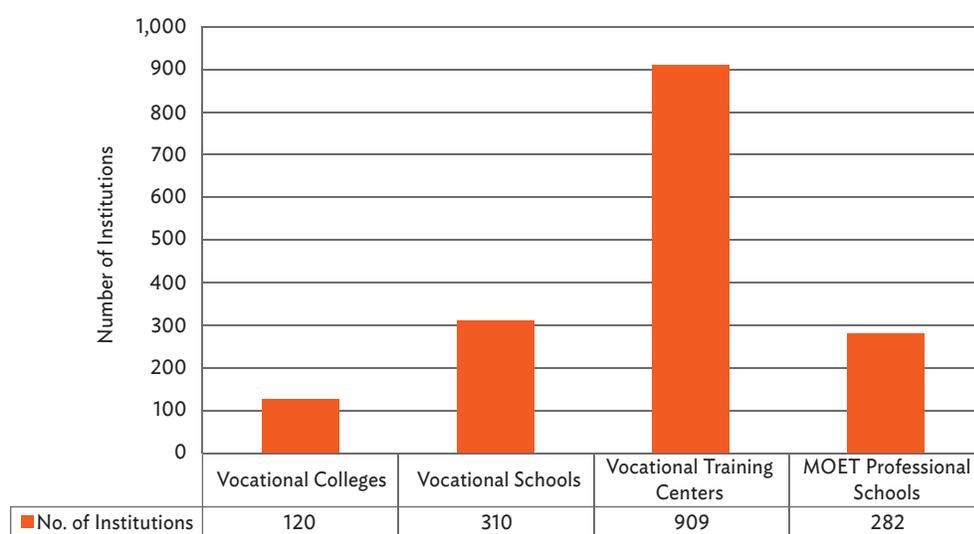
B. System Coverage

48. **Institutions.**¹⁹ In SY2010, there were 720 training institutions offering long-term, formal training, and 909 institutions offering short-term, nonformal training (Figure 10).

49. During the decade of the 2000s, there was rapid growth in the number of institutions (Figure 12). The total number of institutions under MOLISA quadrupled from 312 in SY2001 to 1,347 in SY2010. Vocational training centers accounted for most of the increase. The number of technical secondary schools under MOET increased from 220 to 282 over the same period, a much lower rate of increase.²⁰

50. **Student enrollments.** Student enrollment showed similar large increases, as indicated in Figure 14. Figure 15 shows current enrollments (SY2011), disaggregated by short-term and long-term training, and public and private sector. The number of private short-term training centers has increased to 44% of all vocational training centers, and has begun to increase in the provision of long-term training as well.

Figure 12. Number of Vocational Training Institutions by Type and Supervising Ministry, SY2010



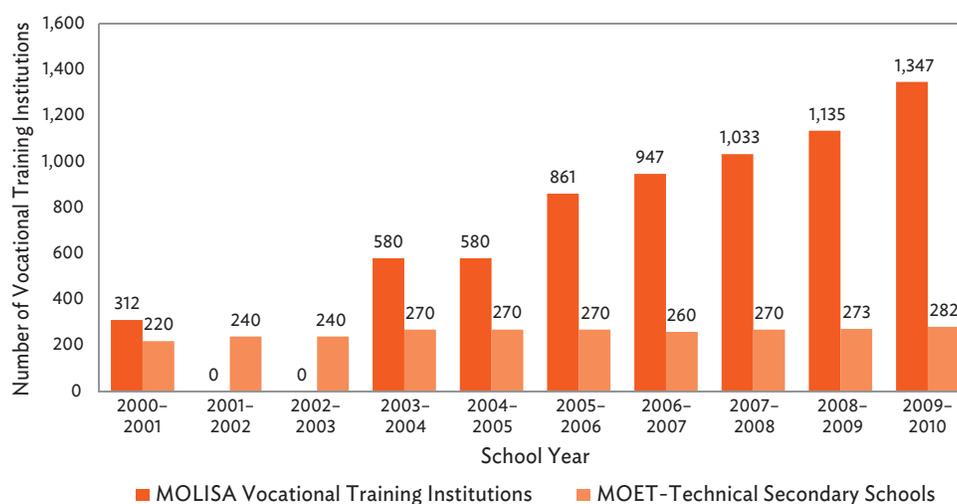
MOET = Ministry of Education and Training, SY = school year.

Sources: Department of Planning and Finance, MOET; General Directorate of Vocational Training, MOLISA.

¹⁹ The presentation of TVET statistics is complicated by the structural change in 2006–2007—when long-term and short-term training was divided into three levels—college, intermediate, and elementary.

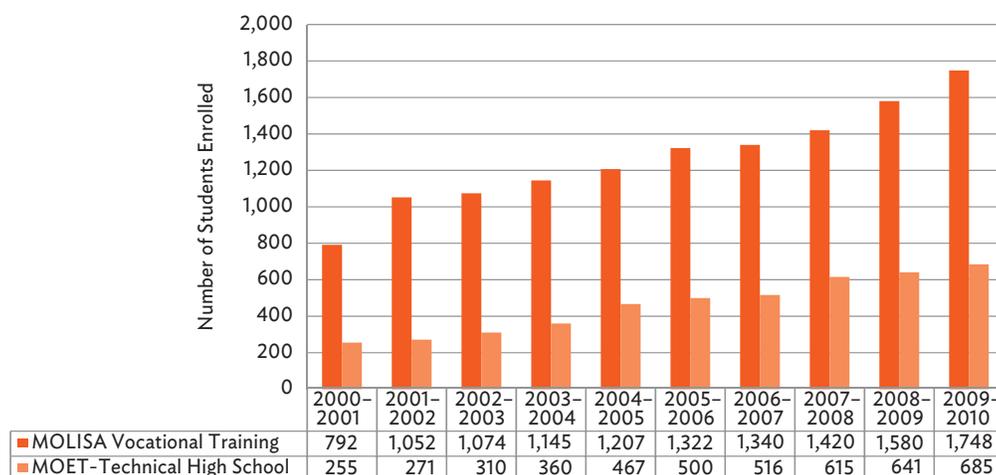
²⁰ The decade after *Doi Moi* saw the number of vocational training schools fall from 279 in SY1987 to 129 in SY1998. Demand for vocational graduates decreased because many state-owned enterprises closed or laid off workers. When the first wave of FDI hit Viet Nam, most TVET institutions could not respond to the demand for skilled workers (Mori et al. [2009], p. 6).

Figure 13. Number of Vocational Training Institutions under the Ministry of Labour-Invalids and Social Affairs and the Ministry of Education and Training, SY2001–SY2010



MOET = Ministry of Education and Training; MOLISA = Ministry of Labour-Invalids and Social Affairs; SY = school year.
 Note: Includes both short- and long-term training institutions. Excludes schools in security and national defense.
 Sources: Department of Planning and Finance, MOET; General Directorate of Vocational Training, MOLISA.

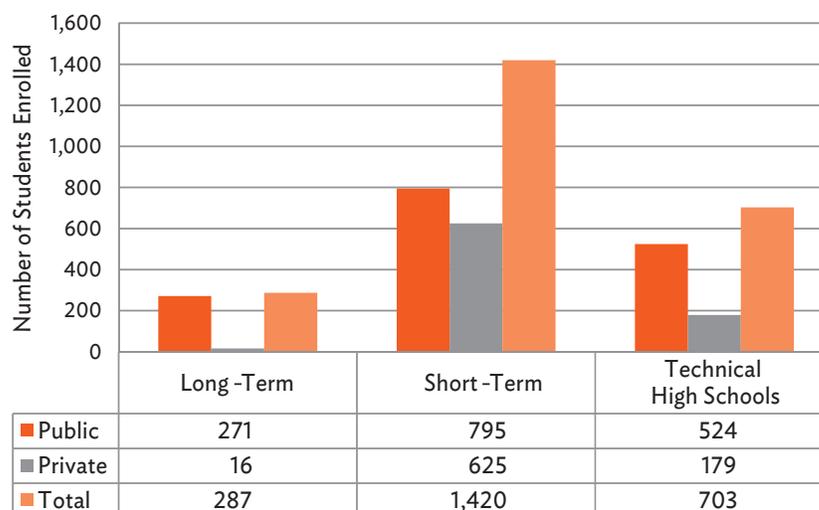
Figure 14. Students Enrolled in Vocational Training Institutions by Supervising Ministry, SY2001–SY2010 ('000s)



GDVT = General Directorate of Vocational Training; MOET = Ministry of Education and Training; MOLISA = Ministry of Labor, Invalids and Social Affairs; SY = school year.

Note: MOLISA includes both short-term and long-term training.

Sources: Department of Planning and Finance, MOET; General Directorate of Vocational Training, MOLISA.

Figure 15. Students Enrolled by Type of Training, SY2011 ('000s)

SY = school year.

Source: General Directorate of Vocational Training, Ministry of Labour–Invalids and Social Affairs. 2011.

Table 14. Ministry of Labour–Invalids and Social Affairs Institutions and Enrollment, SY2011 and Projections to 2020

	Number of Institutions			Enrollment
	SY2011		2020 Plan	SY2011
	Total	Private	Total	('000s)
Vocational colleges	128	32	250	97
Vocational secondary schools	310	102	400	180
Vocational training centers	909	352	900	1,468
Total	1,347	486	1,550	1,745

Source: General Directorate of Vocational Training, Ministry of Labour–Invalids and Social Affairs. 2011.

51. Table 14 presents the number of MOLISA institutions and enrollments for SY2011 and projections to 2020. As can be seen, further significant growth is planned.

52. Table 15 shows the development of the vocational training system from SY2006 to SY2011, demonstrating significant growth in enrollments and institutions, especially over the past few years (note there are small discrepancies in the data from difference sources).

53. According to GDVT statistics, Viet Nam has nearly 200 vocational training institutions, including 37 vocational colleges and vocational secondary schools run by corporations such as the Viet Nam Shipbuilding Industry Corporation (Vinashin), Viet Nam Machinery Erection Corporation (LILAMA), and Petro Viet Nam. These institutions must follow the same regulations as do state vocational training institutions.

Table 15. Ministry of Labour–Invalids and Social Affairs Training Institutions and Students Enrolled, SY2006–SY2011

		SY2006	SY2007	SY2008	SY2009	SY2010	SY2011
Institutions							
Vocational school	College			62	92	103	128
	Secondary	236	262	104	250	278	310
	Others			138	40	0	0
Vocational training center		404	607	632	691	754	909
Total		640	869	936	1,073	1,135	1,347
Students ('000s)							
Long term	College				60		
	Secondary	230	260	305	198	287	277
Short term		977	1,080	1,131	1,280	1,420	1,468
Total		1,207	1,340	1,436	1,538	1,707	1,745

MOLISA = Ministry of Labour–Invalids and Social Affairs; SY = school year.

Note: In addition to these institutions, there are about 1,000 other institutes or training centers that also deliver vocational training programs such as universities, Ministry of Education and Training professional high schools and colleges, agricultural extension centers, job placement and career guidance centers, enterprise-based centers, etc.

Source: General Directorate of Vocational Training, MOLISA. 2011.

54. Training institutions are distributed relatively evenly throughout Viet Nam, although most institutions are located in urban areas. Some districts, however, have no vocational training centers. With such a narrow institutional base in some rural areas, it is difficult to provide skills training to raise productivity and incomes in these areas.

55. **Emergence of private training provision.** Private training providers, permitted in Viet Nam since 1998, now make up a significant proportion of the country's vocational training institutions. These proportions include 27% of vocational colleges and technical high schools, 34% of vocational secondary schools, and 39% of vocational training centers. Private training also covers 27% of enrollments in formal training. Private trainers tend to concentrate on low-cost fields, such as ICT, business subjects, and languages. The regulatory environment for private training providers is relatively favorable. Private training providers can set their own fee levels, provided they inform the responsible state authority, and go through the same registration screening as public institutions. They must also have a board of directors, which selects the manager of the institution. This nomination is sent to the respective government authority (provincial for secondary schools and below, and national ministry for colleges and above) for "recognition." Private training providers must follow the same curriculum framework as public institutions. There is no requirement for a set number or percentage of scholarships for needy students. The government is counting on private training providers to provide the bulk of increased enrollment. According to the draft TVET Strategy 2020, private training provision is expected to increase from 20% of enrollees in technical secondary schools to 40% by 2020.

Table 16. Public and Private Provision of Vocational Training, SY2010–SY2011

	Public	Private	Total	Private (%)
Institutions				
Vocational secondary school MOLISA	206	104	310	34
Vocational college MOLISA	90	33	123	27
Technical high school MOET (SY2010)	207	75	282	27
Total	503	212	715	30
Students ('000s)				
Vocational secondary school MOLISA	1,730	670	2,400	28
Vocational college MOLISA				
Technical high school MOET (SY2010)	524	179	703	25
Total	2,254	849	3,103	27

MOLISA = Ministry of Labour–Invalids and Social Affairs; MOET = Ministry of Education and Training; SY = school year.

Note: Figures for private institutions and enrollments under MOLISA include vocational training institutions run by corporations.

Source: General Directorate of Vocational Training, MOLISA. 2011.

C. Access to Technical and Vocational Education and Training

56. About 19% of Vietnamese youth have had, or are participating in, some form of job training. Poverty is still a factor in determining their ability to participate in vocational training. Although Viet Nam has made impressive achievements in poverty reduction, and continues to pursue specific poverty-alleviation programs, around 10% of households were still impoverished in 2010. Poverty is more pronounced in rural areas than it is in urban areas and outside of the major industrial regions of the Red River Delta, Mekong River Delta, and southeast. Outside of these areas, the proportion of households living in poverty ranges from 17.2% in the south central coast to 39.4% in the northwest. The Northern Mountain and Central Highland regions, which are home to most ethnic minorities, have the highest poverty compared to the rest of the country (GSO 2006). Ethnic minorities make up a large proportion of Viet Nam's impoverished group.

57. To enter into a vocational training college, one must have completed upper secondary school. In Viet Nam, lower income groups are less likely to have this prerequisite. Of the lowest income quintile, 6.5% of households completed upper secondary school compared to 19.0% for the upper quintile.

58. There is a direct correlation between income and participation in vocational training, where access to vocational training among the richest quintile is almost seven times higher than that for the poorest.²¹ In rural areas, only 0.8% of the lowest income quintile attended

²¹ Son (2007).

Figure 16: Access to Vocational Training by Location and Gender, SY2007

SY = school year.

Source: ADB (2010a).

vocational training, compared to 1.5% for their urban counterparts. This gap decreases with higher income groups. The rate for the top quintile is 10 times greater than for the bottom quintile in rural areas, compared to 3.33 times greater for urban areas.

59. Literacy is also a factor in vocational training participation. The national literacy rate is high (slightly lower for women than men). Literacy rates are lower in rural areas than urban areas (92% versus 96%) especially for women in rural areas compared to their urban counterparts (89% versus 95%). Literacy levels among ethnic minorities are lower than the Kinh majority (72% versus 93%). Literacy is also lower among ethnic minority women. In addition to being literate, knowledge of Vietnamese is also related to the poverty that is experienced by ethnic minorities, most of whom do not speak Vietnamese well.

60. The youth in ethnic minorities had far less access to training than their Kinh counterparts (5% versus 21%). Lack of training opportunities and cost of training were the main barriers to access. There is a positive correlation between vocational training participation and household income, especially for women.

61. **Legal framework for gender equality.** The legal framework for promoting gender equality in TVET includes a series of laws and regulations. The Social and Economic Development Plan (2005–2010) includes a policy measure to develop vocational and job centers for women. The plan also seeks to offer training to 75 million people, of which 20%–30% will have received long-term training. The National Target Program on Poverty Reduction (Phase 2: 2006–2010) includes 12 further programs and policies, including a vocational training component that aims to provide training, for free or reduced fees, for 150,000 poor people. By 2009, out of the 75% of households that identified needs in training, only 2% had benefited from vocational training. Decision No. 2590/1997/QĐ-BGD and Circular No. 16/1997/TT-BGD both aim to prepare ethnic minority students

for university and vocational training, and to develop cadres of ethnic minority teachers. Decision No. 267/2005/QĐ-TTg gives priority to ethnic minority vocational training students in boarding schools.

62. The National Strategy for the Advancement of Women in Viet Nam to 2010 (2001) aimed to increase the proportion of trained women workers to 40%, of which 26% would have access to vocational training by 2010. The Law on Gender Equality (2006) provides for women's and men's equality in education and training. It stipulates provisions for (i) gender equality in accessing and benefiting from the policies on education, training, and fostering professional skills; (ii) the establishment of proportions for men and women in training; (iii) assisting female laborers in rural areas in vocational training; and (iv) supporting female public servants with children under 3 years old to participate in training, and priority to be given to women in the case of equal qualifications between women and men. The legislation also states it is a violation of the law to conduct career-oriented education and to compile and disseminate textbooks that contain gender bias. A number of implementation decrees and regulations were passed in 2008 and 2009.²² For instance, Resolution 57 (2009) includes a time-bound action plan with assigned responsibilities for the development of the National Strategy for Gender Equality (2011–2020) and the National Target Program on Gender Equality (2011–2015) by 2010.

63. **Institutional responsibility.** The Department of Gender Equality (DGE) was established in MOLISA in December 2007, and is responsible for implementing and monitoring progress of the Law for Gender Equality. In 2008, the National Commission for Women's Advancement (NCWA) also moved to MOLISA, where both entities coordinate with one another in the following ways: (i) the director for DGE and director for the committee for the advancement of women in MOLISA is the same, (ii) the minister for MOLISA is the chair for NCWA, (iii) the president for the Viet Nam Women's Union is the chair for NCWA, and (iv) members of the NCWA are the deputy ministers from all the line ministries and equivalent central sector agencies. The DGE reports directly to the Prime Minister and coordinates with the Viet Nam Women's Union at the central and provincial levels.

64. The highest proportion (27%) of female students is found in vocational secondary programs, while the lowest (11%) is in technical worker programs. Female students comprised about 26% of all vocational college graduates. Of 204 female graduates, about 54% enrolled in technical worker programs, 39% in vocational secondary, and 7% in college-level programs. Women are concentrated in technical worker programs, which reflect a general tendency for women to be enrolled in short-term courses. For young women, shorter-term or less time-intensive vocational training programs allow them to balance educational interests with responsibilities at home.

²² Decrees and regulations include (i) Decree No. 70/2008/ND-CP (4 June 2008) Providing Details for the Enforcement of Relevant Stipulations of the Gender Equality Law; (ii) Decree No. 48/2009/ND-CP (19 May 2009) Stipulating for Measures to Ensure Gender Equality; (iii) Decree No. 55/2009/ND-CP (10 June 2009) Stipulating for Penalizing Administrative Violations on Gender Equality; and (iv) Resolution No. 57/NG-CP (1 December 2009) Issuing the Governmental Programme of Action for the Period to 2020 on Implementation of the Resolution No. 11/NQ/TW (27 April 2007) of the Political Bureau on the Work for Women in the Period of Accelerating Industrialization and Modernization of the Country.

65. According to GDVT, about 24% of the 20,195 vocational teachers are female, and 1.1% are from ethnic minority groups. Across vocational institutions, the proportion of women in vocational training centers (about 28%) is greater than in vocational colleges (about 23%) and vocational secondary schools (about 22%). Most female teachers are found in tourism and culture, information programs, and some in industrial programs such as design and garments. Vocational teachers from ethnic minority groups work mostly in vocational training centers, with a few who also teach in ethnic minority languages.

D. Vocational Teachers and Teacher Development

66. According to GDVT, 21% of TVET teachers oversee theoretical subjects, 33% teach practical subjects, and 46% cover both theory and practice. In terms of qualifications, 60% of teachers have a bachelor's degree or above, 13% have college-level qualifications, and 26% have secondary and other levels of qualification. About one-third (27%) of the 20,200 vocational teachers are female, and 1.1% are ethnic minorities.

67. **Teacher training.** Technical teacher-training colleges and universities are the preferred source for teachers and instructors in vocational training institutions. However, few such institutions exist: there are only four technical training universities in Viet Nam. Most teachers are recruited via 6-month teaching certification courses for those with bachelor's degrees. The Vocational Training Law specifies that a teacher of theory at the college or intermediate level must have a bachelor's degree, and an instructor for practical subjects must have at least a college diploma, or be an artisan. However, given that teachers are now being asked to teach both theory and practical classes, the qualification becomes, by default, a university degree. This is not the most appropriate level of teacher training for practical courses. At the university level, the vocational teaching certificate course is 6 months in duration. Students enrolled in teacher-training courses do not have to pay tuition, but neither do they have to enter teaching on completion of studies. One of the teacher-training universities reported that few of its graduates with technical teaching certificates actually entered teaching. It is widely recognized that the quality of teaching throughout the TVET system needs to be improved. GDVT is acutely aware of the following key issues.

68. **Lack of technical teaching skills and industrial experience.** The majority of TVET teachers have little or no industrial or technical experience in the areas in which they teach. Table 16 provides an overview of teacher qualifications, which illustrates that technical specialization occurs as part of formal teacher training. Teacher-training institutions deliver programs that are not linked to industry practice or vocational standards. Assessment of teachers lacks validity in that technical skills and application are overlooked or not valued in their development process. Many of the teacher-training institutions do not have adequate technical workshops in which teachers can develop technical skills. There is also no requirement for TVET teachers to have any workplace or industry experience. This has resulted in the teaching of only basic technical concepts, and has not equipped learners with the high-level skills sought by government or industry.

69. With very few exceptions, the participation of industry in TVET activities is minimal. There are few opportunities, mechanisms, or policies that encourage the participation of

Table 17. Professional Qualifications of Vocational Teachers, 2007

Vocational Teachers	Total	Post-graduate Degree	Under-graduate Degree	College Diploma	Craftsmen	Others
Vocational training institutions (formal)	14,261	829	7,604	2,453	1,825	1,550
Vocational training centers (nonformal)	5,934	181	2,103	1,210	1,514	926
Other Institutions	15,767	2,772	6,767	2,264	2,005	1,959
Total	35,962	3,782	16,474	5,927	5,344	4,435

Source: General Directorate of Vocational Training, MOLISA. 2011.

industry, particularly those from the private sector. This results in fewer opportunities for teachers to gain industrial or workplace exposure or experience. As a result, teachers have very few opportunities to access or learn the technologies utilized, or the work practices applied, in industry. This lack of engagement between industry and TVET activities further reduces the ways through which teachers can validate their training program content. School visits undertaken during the preparation of the Skills Enhancement Project indicate that some industry partnerships do exist at the school level, and that there is some opportunity to work with enterprises on curriculum design, assessment, job placement, and teacher training. A key initiative of the project is to establish a systematic and college-level approach to engagement and partnership with industry.

70. In 2007, there were 20,195 instructors in the vocational colleges, intermediate schools, and vocational training centers. Of these, 4,678 were in vocational training colleges, 9,583 were at the vocational intermediate level, and 5,934 were in other vocational training schools. Overall, 10,886 teachers (or 76% of all teachers in vocational colleges, vocational secondary schools, and vocational training centers) have a university degree. Only 1,825 (or 13% of teachers in these institutions) have industry experience, and possess the practical knowledge or technical skills that are needed.

71. **Recruitment of teachers.** The majority of teachers are recruited through the schooling or university systems, and not from industry. This further compounds the approach that educational theory is emphasized at the expense of technical skill acquisition and application. The result is educational practices that are neither grounded in, nor applied to, technical pursuits, and which embody a subject-driven, classroom-centered approach to learning and skills acquisition. The private colleges adopt more flexible employment arrangements, and utilize part-time staff, which allows the hiring of industry personnel and retired professionals as teachers. This practice has also been adopted in the public sector, but has yet to be widely used.

72. The present salary level of vocational teachers is comparatively low, and does not encourage or reward improvement of professional and technical skills. These low salary levels also make it difficult to recruit skilled technicians or production managers from industry to become TVET teachers. There is no incentive program to attract people with

extensive industry experience into the teaching profession. Viet Nam does place a high value on teaching and the role of teachers in society, but this has to be better translated into policy to improve the status of technical teaching.

73. It is estimated that there will be a shortage of teachers with the increased emphasis on TVET. Government has actively promoted TVET, which has resulted in increased enrollments throughout the TVET system. The current student-teacher ratio exceeds the standard ratios promoted by government policy. The ratio is about 30 students per teacher (against the standard of 20). This places further pressure on teachers, contributing to their feelings of being overloaded and of not having time to improve their training skills—even if those opportunities were available. The situation also requires the government to think more broadly about teacher recruitment, to address expected enrollment increases, policy pressures to improve industry responsiveness, and overall quality of the TVET system.

74. **Upgrading technical teacher skills.** The shift to workplace modes of learning requires teachers to engage with delivery and assessment techniques that are different from those normally used in a classroom. The integration and application of knowledge and skill through project-driven, problem-based activities—aligned to broad-based national skills standards—is new to vocational education in Viet Nam. Pre-service and in-service training programs are relatively ineffective. They do not introduce teachers to workplace learning theory or to various models available for the delivery of competency-based training and structured on-the-job training programs. These approaches are more familiar to those involved in adult education or community-based education than to those involved in formal schooling programs. Vocational teachers are therefore doubly disadvantaged because they are not trained in how to apply work-based learning methodologies, and do not have technical skills in the programs in which they are required to teach.

75. Recent policies adopted by MOLISA require teachers to know how to prepare training curricula from skills standards set by industry and government. Teachers must also know how to assess the competence of students in applying knowledge and technical skill to achieve a specified outcome. Colleges have sought to address this through the use of workshop instructors, who provide training in practical work within school facilities. Workshop instructors are often graduates from the college, or others who have some workplace experience. These instructors do have some technical and instructional skills, but do not have pedagogical training in integrating theory with practice. The result is poor integration between the knowledge developed through theory classes and the skills developed in college workshops.

76. **Adequacy of facilities.** Many classrooms and technical workshops have limited materials and equipment. This places further pressure on the skills of teachers and workshop instructors to simulate the workplace environment. It hampers their ability to teach students to apply in any meaningful way the theoretical foundations they have learned. The Skills Enhancement Project will address college workshop requirements, and improved teacher development to better prepare students for the world of work. A balance is required in improving facilities and workshop equipment. Facilities can be upgraded, but this has to occur alongside a reorganization of technical teacher development to maximize the opportunities that become available through new machinery and equipment. It is also important to

look at ways that delivery can occur within industry. Colleges should be encouraged to use the facilities available in enterprises to support technical skills development in learners.

77. Utilization of industry facilities should be a priority for management and program planners in colleges. This can avoid costly maintenance and ensure that college workshops provide foundation skills, while industry provides the more specialized skills within the overall training program. Technology and work organization change rapidly, and, because the replacement and ongoing maintenance of equipment can be very expensive, it is important that colleges not try to emulate enterprise working environments. This is a further reason to develop structured on-the-job training opportunities for learners as part of their training experience. It is equally important for teachers also to have the opportunity to work in an enterprise, so that they are better able to gauge the foundation skills that learners will need to gain employment.

78. **Standards for quality vocational training.** The introduction of national skills standards transforms the ways in which learners are taught, and the way in which skills are assessed. Pedagogical methods become more facilitative and experiential—that is, learning by doing. Emphasis is placed upon learners demonstrating a mastery of skills to identify and solve specific problems, underpinned with applied theoretical awareness of key occupational concepts. Generic skills in mathematics, science, ethics, language, communication, and personal management, etc. are embedded or integrated into technical activities, and assessed through their application, rather than as separate bodies of knowledge. Vocational training becomes post-formal schooling, and more holistic within given occupational or technical pursuits.

79. To improve the quality of teaching and training in TVET institutions, it is important to raise the standard of professionalism for vocational teachers and instructors by identifying a set of national standards that can be applied across the system. To improve the status of teachers, a licensing/professional certification and qualification system should be introduced and managed through GDVT. These standards would also form the basis for teacher development programs. The absence of such a system is hindering teachers in the upgrading their qualifications, and in the ability to link their skills and performance to increased salaries.

80. **Current training and development for vocational teachers.** Teachers are primarily recruited from universities that provide degree programs in education or other relevant disciplines. GDVT is aware of the shortcomings of the current arrangements to develop technical teachers, and has instituted the vocational teacher competency certificate. This course is designed for people with noneducation degrees who wish to become teachers, and provides the following core modules—vocational educational psychology, pedagogical skills, management of teaching programs, teaching skills, and subject-specific teaching methods. A student then selects two modules from the following bank of elective subjects to complete the requirements of the qualification—including science methods in vocational education, curriculum development techniques, technology teaching methods, and use of information technology in teaching. The course normally takes 6 months to complete and is delivered through universities and a teacher-training institution.

81. GDVT supports this program, but is concerned that there are no consistent standards for teachers, which can be used to assess or measure competence. GDVT is also concerned that the program does not provide a sufficient component of practical skills and demonstration, meaning practical skills both in terms of application of theory and developing technical skills. Other recommendations include:

- (i) The introduction of competency-based training through a pilot program for teachers that uses the Australian Certificate IV in workplace training through the International Labour Organization (ILO) for teachers at vocational training centers. This is a 1-month program. GDVT has supported 30 teachers to undertake this training.
- (ii) The introduction of higher-level training for teachers in technical schools and vocational colleges through the City and Guilds Certificate 2 program in vocational training, based in the United Kingdom. This is conducted over 3 months, through the use of a service provider that is licensed to use this training package. To date, 22 teachers have completed this program, with a further 130 expected to complete in December 2009.
- (iii) GDVT to provide support to teachers to develop improved English language proficiency. To this end, GDVT has adopted the TOEIC system used by the City and Guilds authority in the United Kingdom.

E. Quality Assurance and System Accreditation

82. Quality assurance is taking root in Viet Nam. Accreditation of TVET institutions was piloted under the Vocational and Technical Education Project. The policy on accreditation was developed and adopted (i.e., the Viet Nam National Accreditation System) and pilot tested in the 15 key schools under the project. The accreditation process starts with self-assessment by the institution on the basis of a standard set of criteria, followed by external review. At present, 180 external reviewers have been trained, and 35 institutions (out of 63 candidates) have been accredited. Accreditation is voluntary, and there is no financial incentive at present for becoming accredited, although the state has paid the costs of accreditation. MOET has its own, different standards for accreditation of technical secondary schools.

83. **Training provider accreditation.** Institutional or provider accreditation is a requirement of the National Law on Vocational Training (No. 97 of November 2006). In particular, Articles 44, 73, 74, 75, 76, 77, and 78 describe the requirements that a training provider has to meet to be recognized by GDVT. These articles underpin government efforts to improve system quality and are summarized below.

- (i) Article 44 identifies the minimum statutes and charters for vocational training centers, vocational secondary schools, and vocational colleges. These describe the articles of incorporation, scope of services, duties and responsibility of staff, management structures, and delegated authorities, including the duties of trainers and trainees.

- (ii) Article 73 provides for the quality control of vocational training, to ensure that the vocational training institution has fulfilled its objectives and training requirements as specified in approved syllabi and other regulations of government.
- (iii) Article 74 establishes the methodology for the quality control of vocational training, and details an extensive list of criteria to be addressed through government auditing of providers.
- (iv) Article 75 delegates the management and organization of quality control for vocational training, and authorizes GDVT to determine the standards and procedures for quality assurance.
- (v) Article 76 describes the responsibilities and authority of vocational training institutions in the quality assurance process, and requires providers to develop and implement operational plans to improve the quality of provider operations and services.
- (vi) Article 77 details how quality in vocational training can be certified. Once certified, a provider is presented with a certificate of “good quality,” which is valid for 5 years.
- (vii) Article 78 describes the benefits, responsibilities, and authorities granted to vocational training institutions that are issued with “good quality” certificates by GDVT. Providers are also required to report annually to GDVT on results and achievements. Importantly, these providers enjoy government investment to further improve performance, and are eligible to bid for vocational training contracts issued by the state.

84. GDVT has commenced accrediting or formally recognizing training providers within the framework described above to improve the quality of vocational training throughout Viet Nam. GDVT has developed, and is currently implementing, a system through which providers have to meet set requirements to gain authority to be a recognized training provider in Viet Nam. GDVT has developed standards that providers must meet, or comply with, in order to be recognized as an accredited provider and receive a “good quality” certification. GDVT has also developed the criteria through which providers will be evaluated against these standards. Finally, GDVT has further documented the accreditation procedure, the “step-by-step” process to support training providers to meet or comply with the set standards.

85. The process for gaining provider accreditation supports providers to self-assess in the first instance, and to then be subjected to an external assessment by a quality assessor/ auditor who is contracted by GDVT. Currently, GDVT trains external quality assessors, whom it recruits from industry or from within the TVET system. These people have industrial and vocational training experience, and are recognized as experts by GDVT. GDVT provides training for these experts in the provider accreditation system, and manages the process from the Department of Vocational Accreditation within GDVT.

86. GDVT accredited 46 vocational colleges, 18 vocational secondary schools, and 12 vocational training centers in 2010. GDVT has already trained approximately 160 people in provider accreditation requirements. These people support providers to prepare for accreditation requirements, and conduct provider assessments for GDVT. A key issue for

GDVT is to expand the number of accredited providers, and to strengthen the system to be more easily recognized externally by industry, by society, and by training authorities in other countries.

F. National Skills Standards and Certification

87. **Development of a national skills standards system.** The Government of Viet Nam has endorsed the introduction of a standards-based approach to TVET to improve the quality and relevance of its vocational training provision. The development of national skills standards was foreshadowed in Chapter IX of the National Law on Vocation Education No. 97/2006. In this law, which took effect in 2008, the government proposes to develop standards for each identified vocation. Clause 2 of Article 79 says:

The national standards for work skills are the base on which workers can improve their skills, meeting the increasing demand of production and trading, employers can assign different jobs for and correspondingly remunerate workers; the standards also help increase the competitiveness of the business in international integration; based on those standards, vocational training programs can be established in accordance with production and trading requirements.

88. Article 80 of the law assigns the responsibility for the development of procedures for setting standards to MOLISA, which has the responsibility for the development and management of establishing and issuing national skills standards. Article 81 assigns the “implementation of assessment and certification of national skills standards” to MOLISA, which is also required to work with other relevant ministries and government agencies to ensure a cooperative approach to implementation.

89. Other relevant features from the law, which inform national skills development and certification, are that the rights of employees or existing workers be protected, and that a skills recognition system be developed to enable employees to be assessed against national skills standards. Provision is further made to ensure that grievances and appeals can be managed, and principles of good conduct are specified to inform assessment practices. The Law also stipulates that, on completion of an assessment, a person deemed qualified will be granted a national work skill certificate at the assigned vocational skills level.

90. In Chapter X of the law, the management of vocational training should be aligned with national skills standards described in detail. Given the importance of these provisions, these are reproduced below from Article 83, which describes the management functions of GDVT:

- (i) to set up and implement strategies, planning, plans, and policies on vocational training development;
- (ii) to issue and implement legal documents on vocational training;
- (iii) to set objectives, contents, methods, and curriculum for vocational training; standards for vocational trainers; the list of trained vocations at different levels; standards for physical conditions and equipment; statutes for selection and certification;

- (iv) to manage the implementation of quality control in vocational training;
- (v) to maintain statistics and information on the organization and operation of vocational training;
- (vi) to implement the vocational training management structure;
- (vii) to organize and manage the training of teaching and management staff of vocational training;
- (viii) to mobilize, manage, and utilize sources for the development of vocational training;
- (ix) to organize and manage research and technological and scientific application in vocational training;
- (x) to organize and manage international cooperation in vocational training; and
- (xi) to inspect and check the legal observation in vocational training; and to settle claims, appeals, and breach of law on vocational training.

91. Given the complex web of agencies involved in the provision of TVET and the resulting fragmentation of effort this generates throughout Viet Nam, the government has sought to ensure the creation of a nationally consistent and coordinated approach to the management and implementation of its skills development system. Article 84 reinforces the provision reproduced above, and goes further to specify that through the GDVT:

- (i) The state shall unanimously control vocational training.
- (ii) The central state vocational management office shall report to the government on state management issues on vocational training.
- (iii) Ministries and quasi-ministerial offices, in coordination with the central state vocational management office, shall carry out state management on vocational training in accordance with their authorities.
- (iv) People's committees at all levels shall carry out state management on vocational training in accordance with their authorities as assigned by the government, and be responsible for investment in vocational training development to meet the local requirements for the workforce [Article 84].

92. The adoption of the national law is a significant shift from the previous arrangements governing vocational education and training in Viet Nam. MOLISA, in accordance with its specified obligations under this law, has developed the operational machinery to enable implementation of national skills standards as well as an associated certification system through which skills can be formally recognized.

93. **National skills standards.** MOLISA has issued a set of regulations concerning the principles and criteria for guiding the development and awarding of the national skills standards in Decision No. 09/2008/QĐ-BLDTBXH. These regulations are central to the establishment and implementation of a national standards-based vocational training system, and are consistent with the provisions of the national law described above. In these regulations, GDVT is assigned overall responsibility for the management and administration of the system. A national skills standard comprises regulations on the level of performance and requirements on knowledge, skills, and attitudes needed for an occupation. The format and content of a national skills standard is detailed in the regulations, to ensure consistency

of approach, and to ensure standards have national application. The purpose of issuing national skills standards is to

- (i) facilitate worker participation in upgrading of skills, and provide a direction for improvement through the attainment of higher-level qualifications needed to attain opportunities for promotion or self-advancement;
- (ii) guide employers with recruitment, work organization and allocation, and with the setting of wages;
- (iii) facilitate vocational training institutions to develop training programs designed to achieve national skills standards and align with the vocational qualifications framework; and
- (iv) facilitate approved agencies to conduct assessments and issue national skills certificates [summarized from Article 3].

94. The regulations prescribe that skills standards be developed for defined occupations within skill qualification levels. Skill qualification levels promote career progression through development of logical pathways, within an occupationally relevant set of skills. Unlike the more system-wide approaches that have been adopted in some other economies, Viet Nam is aiming to create logical pathways relevant at an occupational level, as opposed to generic skill or cross-occupational approaches. Standards need to be developed in a consistent format, and be capable of alignment with regional and international occupational standards. The regulations prescribe five levels of qualification, with minimum requirements prescribed at each level. Levels are determined based upon the following key criteria:

- (i) scope, difficulty, and complexity of task;
- (ii) flexibility and creativeness in performing the task; and
- (iii) coordination and responsibility in performing the task [Article 5].

95. Progression between levels is based on achievement and demonstration of skills, which need to be externally assessed. In essence, these regulations prescribe the development of a vocational training pathway, and it is not intended to be linked with the formal schooling system. This removes many of the contestations experienced in many economies when seeking to develop equivalency between a secondary school certificate and a vocational qualification. This enables Viet Nam to move quickly ahead with the development of occupational standards, and to improve training provision to meet these requirements. It also allows the system to be responsive to the needs of employers, and to more quickly address their priorities through the revised system. The disadvantage is the lack of articulation with the formal school system.

96. Central to the success of this system will be the roles and responsibilities ascribed to industry. A key feature of the approach is that the standards have to meet the specified needs of employers, enterprises, and industry. To facilitate this, Viet Nam has adopted a unique model that brings industry and relevant government agencies together, through the formation of national skills standard development committees (NSSDCs). The regulations prescribe the establishment, role, and operation of these committees in Articles 8, 9, 10, 11, and 12. Essentially, committees are formed to undertake task and skills analysis, through which skills standards can be identified and adopted. These are then packaged into qualifications,

and proposed for alignment into a qualification level. There are currently about 20 NSSDCs, involving the ministries of industry and trade, transport, construction, agriculture and rural development, and labor.

97. A key feature is the requirement that those government agencies, departments, and ministries that have a direct interest in the development of identified occupations will participate in the process of developing standards. Lead government agencies will facilitate the process, and provide secretariat support. Membership rules prescribe that employers, employer associations, labor organizations, and recognized technical experts are to be members of the committee.

98. MOLISA provides funds for the operations of recognized NSSDCs, which can be supplemented from lead government agencies and industry, to facilitate the identification and establishment of standards. Each committee has to go through a process of surveying the number of enterprises involved, and conducting job analysis. Committees can enter into contracts for services, and utilize vocational colleges and industry experts to support the prescribed work of the NSSDC. International expertise is being sought to support this process, particularly in areas where there is an absence of local skill to build upon. The GDVT department responsible for this system is the National Vocational Skills Testing and Certification Department.

99. To support improved quality in the TVET system, the government has established a National Skill Standards Appraisal Council to verify the skills standards that are developed through the NSSDC process. An appraisal council is made up of recognized experts involved with the specific occupations, who then evaluate standards for endorsement. This validation process is managed within the overall framework of the NSSDC, and is essentially an independent subcommittee of the NSSDC. The procedures for appraisal are described in Articles 13, 14, and 15, and detailed requirements to be applied in the appraisal process are stipulated. The appraisal committee forwards its recommendations to the lead government agency. The government agency then facilitates and seeks agreement with MOLISA, which is charged with responsibility for the endorsement and assigning of a national standard.

100. To date, only 123 national skills standards have been issued, and 50 are under development. The reason for these numbers is the necessary but time-consuming process of consultation with enterprises. Some ministries estimate the development of one national standard will take 2 years, twice the current estimate. GDVT also plans to develop regional-level and international-level skills standards. For the regional skills standards, GDVT will adopt and adapt the skills standards used by regional neighbors, such as Malaysia. For the international standards, GDVT will look to those used by countries such as Australia, the United Kingdom, and Germany.

101. For all remaining occupations, curriculum frameworks will be used. As with skills standards, the process for developing a curriculum framework involves extensive analysis of occupational requirements. One-third of curriculum committee members are supposed to come from enterprises, while the remaining two-thirds are to be trainers. The curriculum frameworks specify 70% of the content and time requirements, and allow training institutions to design 30% of the content. So far, 205 curriculum frameworks have been developed. These are reportedly for the most common occupations and cover about 60% of students enrolled.

G. Assessment and Certification

102. At present, teachers and instructors test their own students, and institutions certify their own graduates. There is no national examination for vocational training. However, GDVT plans to introduce national occupational testing, and is exploring different approaches to the assessment of skills. A number of different systems from Australia, the Republic of Korea, the United Kingdom, and Germany are being tried to help the government better appreciate and address the policy implications of adopting an assessment model. Assessment policies and procedures need to be strengthened to ensure that learners are assessed on the basis of national skills standards at the levels required through the vocational qualifications framework. A recently promulgated regulation [Decision No. 09/2008/QD-BLDTBXH] provides for assessment of workers who are not in training programs, and requires assessment to be conducted externally by qualified assessors who have recognized occupational skills in the areas in which they conduct assessments.

103. The regulations provide for the establishment of skills centers to conduct assessments against national skills standards. Successful assessments would trigger the issuance of a national certificate. A skills center can be an enterprise, a training provider/institution, a stand-alone assessment service center, or other organizations approved by GDVT. To ensure consistency and reliability in assessment of skills, GDVT requires an assessment procedure that it can monitor and quality assure. Assessment results can then be tracked and recorded through the vocational training institutions to be developed through the Skills Enhancement Project. A national record of skills will be available to enable the government to track its progress in meeting the skills needs and requirements of industry as set through the NSSDC process.

104. **Certification of skills can only occur through the Ministry of Labour–Invalids and Social Affairs.** The procedures for certification are described in Article 16 of the regulations. The National Law on Vocational Training states that accredited training providers can issue qualifications. The provisions enshrined in these rules allow for the issuing of a qualification or a statement of attainment to be delegated to a broad range of stakeholders, including other government ministries. However, the certification of skills standards requires approval from MOLISA.

105. Test banks were prepared, and pilot testing started in two occupations under the Vocational and Technical Education Project. The Government of the Republic of Korea has agreed to provide further support to MOLISA in establishing a skills testing and certification system. This project will establish an assessment and certification system, so that skills can be recognized. The project will review the laws and regulations regarding the skills testing and certification, and the establishment of the National Skills Testing Management Agency and skills testing centers. The project will also establish a master plan for the establishment of the National Skills Testing and Certification System in Viet Nam. The project is under implementation for 3 years from June 2011, for a project cost of \$1.5 million.

H. Financing of Technical and Vocational Education and Training

106. Education funding has increased significantly over recent years. In 2009, total spending on education and training reached 20.0% of government expenditure (achieving the government target), and 6.0% of GDP (comparable to many other middle-income countries). The state budget for TVET, including provincial and district sources, has risen from 9.3% of the state education and training budget in 2006, to 13.5% in 2011. Most of these funds (63.0%) come from the state budget, with the remainder from tuition and fees (21.0%) and private enterprise (16.0%).

107. Formal TVET institutions are dependent on central and local government funding for capital expenditure and recurrent funding. This funding is provided through a quota system that sets a ceiling for enrollments at each institution, and funds students on a per capita basis. There is little flexibility in the financing system. Fees and per capita cost subsidies are set at the same low level for all training programs, and institutions cannot raise the fees. Schools run by state-owned enterprises also receive government funding, while private schools rely on fees and income from entrepreneurial activities. MOLISA is moving to decrease funding of school expenditures to around 60% of total recurrent expenses, in part to create a more level playing field for private TVET institutions. Tuition fees, as well as industrial production, business, and service activities at institutions, are expected to cover the remaining 40% of expenses. Local governments have tried to augment school resources by providing land and funds for additional classrooms and workshops. Equipment must be funded by GDVT or other sources.

108. The government has increased the amount and share of expenditures devoted to TVET. The share for MOLISA vocational training institutes and MOET technical secondary schools (the middle two columns in Figure 17) increased from 9.3% of total public spending on education and training in 2006 to 13.6% in 2011. Nevertheless, public expenditure for TVET remains inadequate, and the government is aware that other sources of financing must be mobilized to achieve the required level of expansion.

109. Allocations are based on a funding norm applied to student quota for individual TVET institutions, aggregated into national and provincial training fund plans. The norms were adopted in 1998, supposedly as an average across 12 vocational groups, but on closer examination, it appears only three were used. As the norms have not been updated since 1998, a study will be carried out under the Skills Enhancement Project to establish up-to-date cost norms. In any event, the actual allocation of funds to training institutions is done by the parent organization, and actual allocations deviate significantly from original plans. Reallocations often take place over which GDVT has little knowledge or control. As a result, the final allocations may bear little resemblance to original plans, and are not related to the actual number of trainees.²³

²³ Franz (2007), pp. 4–5.

Figure 17. State Expenditures on Education and Training by Level and Type, 2006–2011 (% of total expenditure)



MOET = Ministry of Education and Training; MOLISA = Ministry of Labour–Invalids and Social Affairs; VTI = vocational training institution.

Source: Ministry of Finance, 2011.

110. One recent innovation has been the introduction of public tendering of training quotas, introduced as a pilot for five occupational groups. In 2006, 2,850 training places were allocated through a tender system to 17 public training institutions. The trainees were selected from the disadvantaged (landless, women, ethnic minorities, the poor, etc.). The 3-year program was completed in 2008, and 2,700 trainees finished the course successfully. In 2009, another bidding took place for 2,300 trainees in two occupations. Twenty schools, mainly operated by state-owned enterprises, were selected. Each enterprise has committed to employ the trainees on completion of training.

111. Much of the capital financing for TVET comes through the Strengthening Vocational Training Capacity (Component 7) of the National Target Program for Education. This program allocated D780 billion to TVET under GDVT between 2002 and 2005. About D2,916 billion was allocated from 2009 to 2011.

112. Public TVET institutions enjoy a relatively high degree of financial autonomy. They have the right to collect and receive different types of income, and to make decisions on the use of the income within the context of public sector rules. These institutions are expected

and encouraged to generate and manage income from production and sale of goods and services. Institutions also have the right to raise pay levels above the minimum wage and public salary scales.

113. **Emergence of cost sharing.** Decree No. 10 of 2002 introduced tuition fees into Vietnamese educational institutions. The level of fees charged is set separately by MOET and MOLISA for their respective institutions.²⁴ The share of tuition in total budgets has been increasing. Tuition reportedly reaches 50% or more of expenditures in some public schools. In some state-owned enterprises, it represents virtually 100% of revenue. The fee levels are capped by the Ministry of Finance for intermediate levels and above. Fee levels are not controlled for short courses.

114. Private training providers do not receive any regular state funding. Fees are not capped for private training providers. Private providers have to recover virtually all costs through tuition fees, but this is constrained in view of competition with public providers. However, a current and key government priority for action in the TVET system is to ensure stronger private sector involvement in the provision of training, with appropriate incentives to encourage participation. Government policy supports a significant expansion of the TVET system, accompanied by a gradual shifting of state funding from the public to the private sector.

115. A large number of private training institutions have already been established, funded by investors with capital, land, and equity. Other investors, however, have informed the GDVT in MOLISA that they are having trouble obtaining bank loans for this purpose. These investors have requested MOLISA's assistance in obtaining credit, to expand their training programs, purchase new technologies, modernize vocational teaching equipment, and train vocational teachers in pedagogical and practical skills. To address this issue, MOLISA has requested from ADB a loan in the amount of \$20 million for the specific purpose of on-lending to privately owned vocational training colleges. This loan is complementary to the proposed \$50 million investment loan focusing on improvement of the TVET system and public vocational colleges. Together, these two loans comprise the proposed Skills Enhancement Project.

116. To accommodate lower-income students, provision is made for reduced tuition or its elimination altogether for the following target groups: wounded soldiers, war orphans, ethnic minorities, and children from poor families with written certification from local authorities. It is expected that 15% of trainees should be exempted. Institutions receive a lump sum public subsidy, which is intended to offset about one-third of the income lost from the exemptions. Lower secondary students enrolling in vocational secondary school, rather than upper secondary, must pay fees, whereas upper secondary is tuition-free.

²⁴ For example, MOLISA has obtained approval to increase tuition in vocational schools from a ceiling of D150,000 per month to D200,000. MOET is requesting a rise of 40% in tertiary tuition for the 2010–2011 school year (D3.4 million compared with D2.4 million), followed by annual increases of 20% until 2014–2015. Fees for vocational schools and colleges would increase by similar proportions. However, secondary school graduates doing vocational training or those from poor families would have tuition reductions of 50%. Orphans, disabled, poor students, and those pursuing teacher training would be exempted from tuition. Viet Nam News. 2009. College Costs to Rise in 2010–11. 15 December.

117. **Institutional performance.** Unfortunately, few data sources on the outputs and outcomes of TVET in Viet Nam, e.g., graduates by field of study, are available. This is a serious weakness. However, available data seem to indicate reasonable internal and external efficiency of vocational training institutions. According to surveys of Vocational and Technical Education Project schools in 2003/04, the rate of graduation was more than 96%, and the rate of students achieving practical skills of good level and higher was 30%. More than 85% of vocational graduates being employed in enterprises were appraised as having good labor discipline and industrial style of work at an average level. Of these graduates, more than 50% were assessed as having a work ethic at a good level. With respect to external efficiency, the rate of vocational graduates finding jobs after graduation is around 70%. For enterprise-based training institutions, this rate is more than 90%. At ASEAN skills competitions, Viet Nam competitors very often receive high prizes (in 2008, Viet Nam was ranked fourth out of 10 countries and received four gold medals).²⁵

I. Assistance from Development Partners

118. TVET has enjoyed increasing attention, not only from the public budget, but also from external assistance. Around \$156 million of assistance has been completed under six projects, including two projects supported by the Government of the Republic of Korea, and two projects supported by the Government of Germany.

119. The bulk of past assistance, \$121 million, was for the Vocational and Technical Education Project supported by ADB, the Nordic Development Fund, and the French Development Agency (AFD), plus a grant from the Japan International Cooperation Agency (JICA). The project had a significant impact upon the system development of TVET. Several of the initiatives and strategies developed and piloted formed the basis for the Law on Vocational Training. A highlight of these strategies was the setting up of a national system for program accreditation, and for testing and certifying workers in various occupations (although full implementation was not achieved). Other initiatives included the setting up of two occupational standards development committees for drafting skills standards. This was implemented after the development of 46 skills standards, and the modernizing of vocational training curricula in line with new production techniques and technologies. A labor market information system was also developed in MOLISA, and annual labor market surveys were conducted before responsibility for labor market information was moved to GSO.

120. The project completion report found substantial achievements in policy reforms and capacity development, with the upgrade of 15 key institutions to higher standards and greater market orientation (Appendix 6). The completion report found that the project was highly relevant, satisfactory in achieving outcomes, efficient in the use of resources, and likely to be sustainable. The project had thorough impacts on the whole system, from macromanagement (laws and policies, market orientation, capacity enhancement, etc.) to specific key schools, contributing to expand the training scope and improve initial training quality, to meet the demand of labor markets. As stated in the completion report, “the

²⁵ ADB. 2008. *Technical Assistance to the Socialist Republic of Viet Nam for Preparing the Skills Enhancement Project*. Manila.

project has largely achieved its intended impact of reforming the TVET system in support of the Government's market-oriented industrialization policy by supplying well-trained workers and production technicians for key occupations."²⁶ Specifically, 86% of graduates from the 15 key schools obtained relevant employment within 12 months. Female graduates received 94% of male graduate remuneration. In addition, the student-teacher ratio decreased from 36:1 to 30:1, and the proportion of teachers with degrees increased from 63% to 94%. The annual dropout rate remained low at 4% per annum. In addition, expenditures per student increased from D2,000 (in 2001) to D4,000 by 2007. The proportion of female students increased from 41% to 52%.

121. There are currently 12 projects under implementation, worth a total of about \$215 million, including three projects financed by the Government of Germany, two loans from AFD, and two loans from the Government of the Republic of Korea. The Skills Enhancement Project (\$70 million), approved by ADB in 2010, continues support for many of the reforms started in the Vocational and Technical Education Project, provides assistance to 15 public TVET institutions at the newly introduced college level, and provides a credit line for the upgrading of an additional five to seven private training colleges. The Viet Nam Vocational Project, funded by the German Technical Assistance Agency (GTZ) and the KfW Development Bank (KfW), has improved the capacity of nine schools, and two teacher-training institutions. This project has also helped strengthen teaching-learning materials, the school curriculum, and cooperation with industry. Another small project, funded by the Government of Switzerland, focuses on strengthening vocational training centers. All of these projects have been successful in strengthening the lower levels of the vocational training system, and have expanded training opportunities for primary school and junior secondary school leavers. The German and ADB approaches are similar. They focus on helping national systems, and on strengthening specific institutions, e.g., centers of excellence, through comprehensive assistance. A similar approach is now being followed by AFD.

122. ILO has completed development of a labor market information system to provide better labor market information for national and local planning. It is also working with GDVT to develop skills standards and curricula in welding. This work includes training assessors to carry out skills testing, and preparing teachers to deliver the new curricula. Skills standards, skills testing, and certification are being developed for the hospitality and tourism sector by the European Union under the Viet Nam Human Resources Development in Tourism Project. Finally, the Korean International Cooperation Agency approved in June 2011 a project to build capacity to establish a national system for skills testing and certification. A listing of major ongoing projects is available in Appendix 7.

123. **Donor coordination.** The large number, and different approaches, of external donors suggest that some formal coordination would be advisable to achieve a more coordinated approach across the TVET sector. In response to this need, GDVT hosted the first donor coordination meeting in February 2011, and intends to hold further meetings at least annually.

²⁶ ADB. 2009. *Completion Report: Vocational and Technical Education Project in Viet Nam*. Manila.

124. Viet Nam has an extensive and forward-looking set of policies and strategies on TVET. Five of these are presented below, and several are explained in detail in Appendixes 8–11.

A. 2006 Law on Vocational Training

125. The law (see Appendix 8) explains government policies on vocational training including

- (i) encouraging investment in the vocational training network, and improving vocational training quality;
- (ii) improving quality through renewed syllabuses, curricula, teaching methods, trainer development, modernized equipment, and scientific research;
- (iii) developing some vocation training institutions to regional and world levels;
- (iv) paying due attention to disadvantaged areas, and supporting target groups such as the poor, disabled, homeless, orphans, landless agricultural workers, ethnic minorities, and veterans;
- (v) giving priority to training for occupations required by the market but that are difficult to “socialize;” and
- (vi) “socializing”²⁷ (or privatizing) vocational training by encouraging stakeholders to set up vocational training institutions.

126. In addition, the law provides forward-thinking guidance on flexible provision, quality control, governance and management, financing, and the role of enterprises.

127. The 2006 Law on Vocational Training is exceptionally well conceived to steer future skills development.

128. Some of the strengths are

- (i) The policy framework, not normally presented in a law, stresses quality, equity (attention to disadvantaged areas and groups), government role in supporting occupations difficult for private delivery, and importance of private training delivery.
- (ii) The law increases the flexibility in training provision, moving from two types (short-term and long-term training) to three distinct levels, adding the postsecondary college level, plus short continuous training.

²⁷ “Socialization” means direct support from learners and their families. “Socialization” of TVET means investment and participation in TVET by all forces of the society, including enterprises, organizations, and individuals.

- (iii) Quality control emphasizes self-assessment by training institutions.
- (iv) Training objectives stress acquisition of “practical capacities.”
- (v) Financial incentives allow training institutions to generate their own income tax-free.
- (vi) Private training provision denoting that all vocational training institutions are considered equal, both public and private, and are eligible for financial incentives such as land, premises, and credit.
- (vii) Expenses for enterprise-based training are deductible from taxable revenue of firms.
- (viii) The law defines a proper role for state management in policy and standards development, quality control, and monitoring (not provision.)

129. On balance, the law is exceptionally strong. Still, the law has some areas that could be improved.

- (i) The policy framework does not place adequate stress on the importance of enterprise-based training.
- (ii) The criteria for quality control only specify inputs, not outputs.
- (iii) Too much emphasis is placed on educational qualifications of teaching staff, and not enough on practical competencies.
- (iv) No external representatives are specified for institutional governance, especially employers and enterprise representatives.

B. Socio-Economic Development Plan, 2011–2015

130. The **Socio-Economic Development Plan (SEDP)**, 2011–2015 (Appendix 9) envisions that Viet Nam will become a modern industrialized nation, and sets as one of its main objectives that “[e]ducation and training, and science and technology are to meet the requirements of the country’s industrialization and modernization”. The Socio-Economic Development Strategy also specifies economic and social development indicators to be achieved by 2020. With the economic performance indicators, such as an average annual growth, the percentage of trained workforce over total labor force aims to be increased to 55% as one of the indicators related to human resources development. To achieve the objectives, the strategy provides orientations to promote development, renovation of growth model, and economic restructuring. It selects three key directions for action: (i) improvement of the socialist-oriented market economy institution, (ii) a rapid development of high-quality human resources, and (iii) development of a synchronous and modern infrastructure system. The detailed guidance is provided through the SEDP.

131. The SEDP gives some attention to TVET, but it is not clear what priority it is assigned compared with other education subsectors, and other economic sectors. An important priority within TVET is supplying the high-level skills needed for international competitiveness. In fact, one of the objectives is “making high quality human resources become Viet Nam’s main and long-term competitive advantage.” The principal quantitative target is that the proportion of the workforce that has been trained is to increase from 40%

of the labor force in 2010 to 55% by 2015. However, this target would give better direction to the vocational training system if it were more specific in defining the skills needed, and the type and standard of training required. This would help avoid a focus on strictly quantitative targets.

C. National Human Resources Development Master Plan, 2011–2020

132. The Viet Nam Human Resources Development Plan, 2011–2020 was approved by the Prime Minister in July 2011. It includes the following priorities:

- (i) training and improvement of high-level staff—managers, leaders, and policy makers;
- (ii) training for high-level skills in science and technology—mainly for university-level instruction, and research and development;
- (iii) training for business managers and entrepreneurs (the number of entrepreneurs increased dramatically after enactment of an enterprise law in 2000, growing from 86,000 to about 400,000 in 2009);
- (iv) training for engineers and technologists, who represent a small share of tertiary education at present;
- (v) training of highly skilled workers to replace expatriate workers and alleviate skill shortages;
- (vi) training of workers for export to boost foreign exchange earnings through remittances; and
- (vii) vocational training for farmers to upgrade the skills and productivity of those remaining in agriculture and to retrain others for new occupations outside agriculture.

Table 18. Number of Job Teachers and Trainers in 2015 and 2020

Training Level	2015	2020
College level (no. of persons)	13,000	28,000
Intermediate level (no. of persons)	24,000	31,000
Elementary level (no. of persons)	14,000	28,000

Note: Figures in 2015 and 2020 are estimates in the Human Resources Development Master Plan.

Source: Government of Viet Nam. 2011. Human Resources Development Master Plan, 2011–2020. Ha Noi.

Table 19. Needs of Laborers by Training Providers in 2015 and 2020

Laborers by a Kind of Training		2015	2020
Number of laborers	(million people)	55.0	63.0
Trained laborers	Number (million people)	30.5	44.0
	Percentage over total laborers (%)	55.0	70.0
Laborers receiving vocational training	Number (million people)	23.5	34.4
	Percentage over total trained laborers (%)	77.0	78.5
Laborers receiving training through education and training system	Number (million people)	7.0	9.4
Laborers receiving vocation	Percentage over total trained laborers (%)	23.0	21.5

Note: Figures in 2015 and 2020 are estimates in the Human Resources Development Master Plan.

Source: Government of Viet Nam. 2011. Human Resources Development Master Plan, 2011–2020. Ha Noi.

Table 20. Needs of Trained Laborers by Training Level in 2015 and 2020

Training Level	2015		2020	
	Number of Laborers (million people)	Percentage over Trained Laborers (%)	Number of Laborers (million people)	Percentage over Trained Laborers (%)
Elementary vocational training	18.0	59.0	24.0	54.0
Intermediate vocational training	7.0	23.0	12.0	27.0
Collegial vocational training	2.0	6.0	3.0	7.0
Tertiary vocational training	3.3	11.0	5.0	11.0
Postgraduate vocational training	0.2	0.7	0.3	0.7

Source: Government of Viet Nam. 2011. Human Resources Development Master Plan, 2011–2020. Ha Noi.

D. Ministry of Labour–Invalids and Social Affairs Vocational Training Development Strategy, 2011–2020

133. The Vocational Training Development Strategy, 2011–2020 was approved by the Prime Minister in May 2012 (Appendix 10). It sets out general and specific objectives, strategic tasks, nine sets of means (or “solutions”), as well as broad implementation and financing guidelines. The means include:

- (i) Innovate management of vocational training.
- (ii) Develop vocational teachers and managerial staff.
- (iii) Develop national vocational qualification framework.
- (iv) Develop training curriculum and instructional materials.
- (v) Strengthen facilities and equipment for vocational training.
- (vi) Enhance quality assurance for vocational training.

- (vii) Enhance the linkage between vocational training and labor market and enterprises.
- (viii) Improve awareness about vocational training development.
- (ix) Promote international cooperation in vocational training.

134. The Vocational Training Development Strategy, 2011–2020 has a great deal of merit. It gives first priority to the development of high-tech training, where the economic payoff is likely to be high. Still, it does not ignore the need to provide skills development for underprivileged regions and people. These are the two main strategic tasks. It accords important roles for enterprise-based training, and private provision in supplying the skills needed for economic growth.

135. There is significant stress in the strategy on quality and on reaching regional and international standards at least in some key institutions. The strategy calls not just for an expansion of training, but for a diversification of modes of delivery, including contract training. Both the targets (60% of enrollment in nonpublic institutions) and the means emphasize private training provision.

136. In addition, the strategy

- (i) specifies three types of providers by ownership—state-owned, enterprise-based, and private vocational technical institutions (Means No. 2);
- (ii) calls for diversification of training provision, and assigns priority to expanding “training orders” or contracts between enterprises and vocational technical institutions (No. 2);
- (iii) provides a menu of measures to promote quality assurance, including accreditation, occupational standards, and national testing (Means No. 4);
- (iv) asks for stronger partnerships among training institutions (No. 4), and cooperation with counterparts in developed countries (No. 9), i.e., “twinning;”
- (v) devotes one full section to enterprise-based training (No. 5), including encouraging development of training in the production line, and enterprise direct participation in defining training content, in setting skills standards, and in assessing worker skills;
- (vi) seeks equality between public and nonpublic vocational technical institutions;
- (vii) promotes cost-sharing in vocational training, allowing high-quality vocational technical institutions to charge (near) market rates, and leveling the playing field between public and private providers (No. 6);
- (viii) provides subsidies for disadvantaged groups (No. 6), and makes a priority of support to disadvantaged regions to reduce disparities in access to vocational training;
- (ix) calls for greater decentralization and autonomy for vocational technical institutions along with greater accountability (No. 7), which could go a long way to stimulating linkages to employment, raising effectiveness and efficiency in the delivery and use of resources, innovation, and creativity;
- (x) suggests that the role of nonstate stakeholders be strengthened in various stages of the training process; and
- (xi) explicitly articulates a circumscribed role of the state in vocational training—in high technology training (which tends to be costly) and in provision of training

opportunities for the disadvantaged (plus curricula development and teacher training) (No. 8). The implication is that private training can cover lower-cost training, and the state should not compete with that.

137. However, the strategy could be strengthened in several areas:
- (i) It tends to be vague about specific means to achieve objectives.
 - (ii) The strategy is presented without resource constraints.
 - (iii) Its quantitative targets may be considered too ambitious. This includes the objective to “universalize” vocational training for youth (No. 10), and to “meet training demand for everyone” (No. 13). The strategy calls for an increase in the number of vocational colleges (to 190 in 2015 and to 230 in 2020), an increase in vocational secondary schools (to 300 in 2015 and 400 in 2020), and an increase in vocational technical centers (to 920 in 2015 and 960 in 2020). These targets may not be achievable.
 - (iv) There also appears to be too much emphasis on school-based provision and not enough emphasis on enterprise-based training.
 - (v) The recommendations on enterprise-based training are exceptionally relevant (Means No. 5), but could stipulate more specific interventions required, rather than stating the intention to “develop models, forms and methods for partnership,” and “develop mechanisms, policies and incentives to maximize enterprise participation” (No. 6).
 - (vi) The recommendation to establish the National Vocational Training Council is not likely to be effective, unless the council has a major representation by enterprises and employers, and unless it has real authority to make decisions.
138. On balance, apart from ambitious quantitative targets, the draft strategy provides a strong, forward-looking basis for further development of vocational training.

E. Vocational Training for Rural Workers to 2020

139. The Rural Training Program (summarized in Appendix 11) states that “vocational training for rural workers is to improve the quality of rural labor in meeting the requirements of industrialization and modernization of the agriculture sector and rural areas.” There is a need to shift vocational training for rural workers from a supply-driven approach to a demand-driven approach, and to link training to socioeconomic development strategies and road maps nationally, regionally, sectorally, and for each locality.

140. The program seeks to provide vocational training for about an average of about 1 million rural workers per year, including training for 100,000 village civil servants. It also aims to improve the quality and efficiency of vocational training to generate employment, increase incomes, contribute to restructuring the rural economy and labor force, and support the industrialization and modernization of agriculture and rural areas. The program would develop a pool of qualified village civil servants to support industrialization and modernization of agriculture and rural areas (Article 1.1.2).

Table 21. Specific Objectives for the Rural Training Program

Category	2009–2010	2011–2015	2016–2020
Rural laborers trained	800,000 ^a	4,700,000	5,500,000
Of which: agriculture	...	1,600,000	1,400,000
nonagriculture	...	3,100,000	4,100,000
Of which: training orders	12,000	120,000	380,000
Employment rate after training (%)	80	70	80
Village civil servants trained	...	500,000	500,000
Total estimated cost (D billion)	1,894	11,363	12,723
Of which: rural workers	1,830	10,769	12,096
village civil servants	65	594	627

... = data not available.

^a Also, piloted vocational training models covering 18,000 rural workers, in four groups (mountainous areas, plains, midlands, fisheries), and 50 training programs.

Note: The cost of the program is estimated at about D26 trillion, equivalent to about \$1.4 billion.

Source: Government of Viet Nam. 2009. *Vocational Training for Rural Laborers up to 2020*. Ha Noi.

141. The Rural Training Program is a tangible expression of the overall priority to assist disadvantaged peoples and regions (as stated in the Vocational Training Law of 2006 and the Vocational Training Strategy). The proposals have been costed, and include both capital and recurrent costs. The amounts to be invested are substantial, which indicates the high priority these proposals are given by government. Other strong points include provision of financial incentives for rural workers to attend training, and allowance for follow-up credit by which graduates can establish self-employment.

142. However, the proposal could be strengthened in the following respects:

- (i) There is insufficient analysis of the need and case for rural training. The purposes of the training are unclear. Market surveys are indicated and provided with some allocation, but the surveys are more national and the amount budgeted seems insufficient. Local market surveys are essential to identify opportunities for income generation.
- (ii) The proposal makes no reference to the considerable international literature on methods and approaches to rural training. (See for example, ILO methods, and those used in southern Africa.) The approach could benefit from analysis of international experiences.
- (iii) The sources of financing to cover the costs are not indicated.
- (iv) It is not clear whether provincial governments will accord the program priority status and allocate required funds.
- (v) Allocations per institution for facilities and equipment have been set before training programs and equipment requirements have been identified.

V

Assessment of the Technical and Vocational Education and Training System in Viet Nam

A. Strengths of Technical and Vocational Education and Training

143. TVET has made tremendous strides in the past decade. The number of vocational training centers has increased almost fivefold to 684 institutions. The number of schools (vocational secondary schools and vocational colleges) increased 2.4-fold. Student enrollment increased threefold.²⁸ More importantly, a strong legal and policy framework has been put into place, including the excellent Vocational Training Law of 2006, the Vocational Training Strategy, and an innovation plan. Greater flexibility has been introduced, with the addition of vocational training at the college level. Many of the elements for raising quality of training have also been developed, including skills standards, curricula frameworks, and pilot learner assessment. Teachers have received upgrading through various ad hoc programs. Several key institutions have been strengthened and upgraded, in part with external assistance. The financial base has been widened through the introduction of cost-sharing and tuition. Nongovernment training providers are becoming an important source for skills. Contract training has been experimented with on a small scale, but with encouraging results. Facilities at the intermediate and higher levels are reasonably distributed throughout the country. The government has also adopted an ambitious program for agricultural and rural training.

144. The relevance of the system to market requirements has been strengthened through the following actions:

- (i) Strategy emphasizes better linkage between training institutions and enterprises.
- (ii) Skills standards are being developed with employer participation and ratification.
- (iii) There are 205 curricula frameworks have been developed.
- (iv) Labor market information initiatives include enterprise surveys, market surveys, and tracer surveys.
- (v) The Vocational and Technical Education Project has had good employment rates.

145. Equitable access has been raised through the following measures:

- (i) Priority attention is being given to disadvantaged regions and people in the strategy and plans—particularly the Rural Training Program (see Appendix 11).
- (ii) The Vocational and Technical Education Project has been successful in raising female enrollment, and in female graduates obtaining jobs at almost the same salary levels as males.
- (iii) Providing access to vocational training in rural districts has been successful.

²⁸ MOLISA (2009).

146. The organizational and management effectiveness of TVET has been improved through

- (i) the forward-looking Vocational Training Law of 2006 (Appendix 8);
- (ii) the good Vocational Training Development Strategy, 2011–2020 (Appendix 10);
- (iii) institutions enjoying a relatively high degree of autonomy;
- (iv) introduction of the college level in 2006 reflecting increasingly higher skill demands of the market;
- (v) “training linkage”—outsourcing training—showing flexibility; and
- (vi) organizational development of GDVT.

147. The effectiveness, or quality, of instruction has been raised by

- (i) a long history of traditional craftsmanship in villages;
- (ii) standards developed for 10 occupations, and another 107 under preparation;
- (iii) many high-quality institutions operating in Viet Nam, including those using external standards (e.g., City & Guilds) and assessors;
- (iv) accreditation being introduced (but two systems);
- (v) with which 205 curricula development frameworks completed (which allow 30% local content);
- (vi) modular training being introduced (teachers deliver both theory and practice); and
- (vii) teacher upgrading done through external assistance projects.

148. Financing and internal efficiency have been strengthened because

- (i) Cost-sharing is growing in TVET institutions. Many institutions are virtually self-sufficient in operating costs (e.g., Electricity Viet Nam).
- (ii) Private training providers are being encouraged, not using state funds.
- (iii) There has been experimentation with contract training (“training orders”).
- (iv) Overall investment in TVET has increased (to 10% of the education and training budget in 2011).
- (v) Private training provision has increased considerably.
- (vi) Dropout rates are relatively low, and completion rates are relatively high.

B. Weaknesses of Technical and Vocational Education and Training

149. Despite the far-reaching progress of the past decade, deep-seated problems remain for TVET. Perhaps the two most acute problems are the low level of enterprise support for training, and the extreme variability in the effectiveness of practical skills acquired by trainees. This variability could be due to a number of causes, including lack of instructors with practical skills, lack of output standards, lack of independent assessment of graduates, and overcrowding of workshops. The system also suffers from less than effective organization and management. These deficiencies include a lack of statistics on performance of the

system, fragmentation in training delivery, lack of integrated planning, and outdated financial management. TVET generally suffers from low status and prestige compared with general secondary and universities.²⁹ Serious inequities remain in access to skills development, particularly for females, and in rural areas.

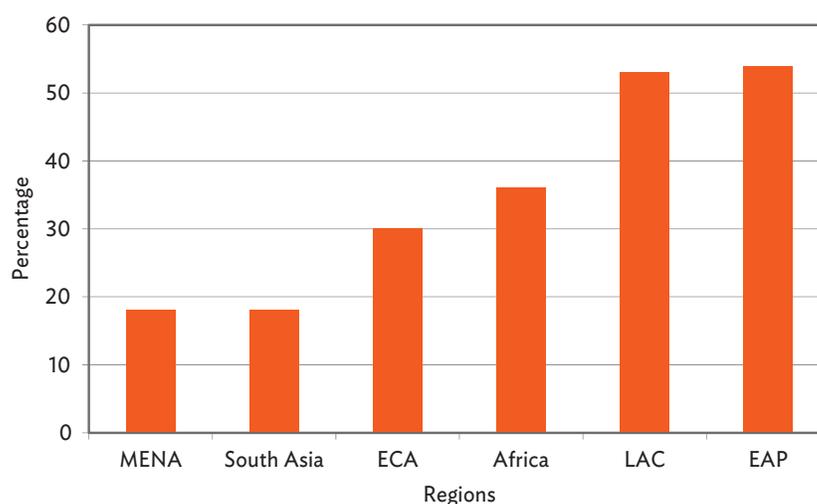
150. Each of the main issues is explained in greater depth below.

1. Insufficient Enterprise-Based Training

151. Many governments and businesses in East Asia have invested significant resources in improving the skills of their workforces through training within enterprises. The training of workers improves the productivity of enterprises, and promotes economic growth and poverty reduction. Training within the enterprise is seen to be market-responsive, and allows for continuous learning and adaptation to new technologies. On-the-job training can be a means to expand access to skills training, with the advantage that it can be delivered in less time than school-based training. Enterprise training varies considerably across regions and countries. East Asia and the Pacific has tended to invest the most of any developing region (Figure 18).

152. However, despite the potential advantages, the extent of enterprise training in Viet Nam is among the lowest in the regions, as shown in Figures 19 and 20.

Figure 18. Incidence of Formal Enterprise Training by Region, 2005

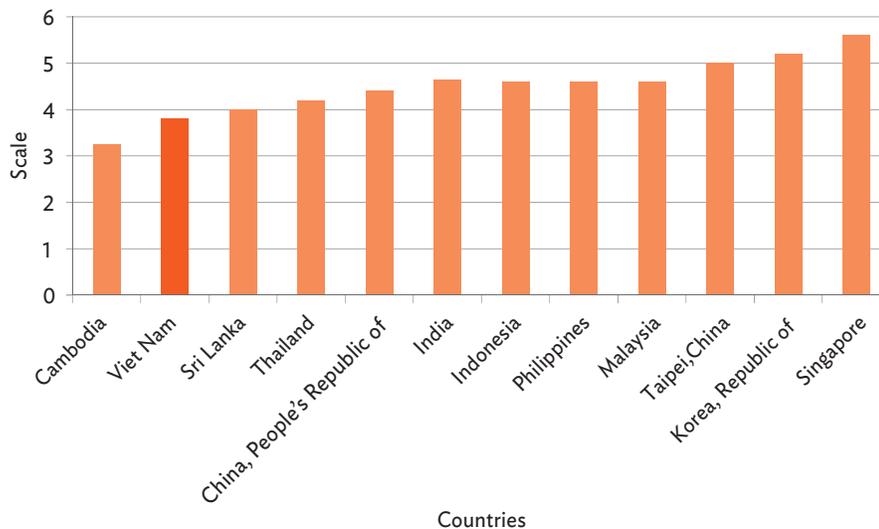


EAP = East Asia and the Pacific, ECA = Europe and Central Asia, LAC = Latin America and the Caribbean, MENA = Middle East and North Africa.

Source: Tan (2006).

²⁹ This is a common complaint worldwide, not just in Viet Nam. However, parental and student preferences for university education reflect an accurate reading of financial returns. Table 8 shows that college and higher education have the highest marginal financial returns.

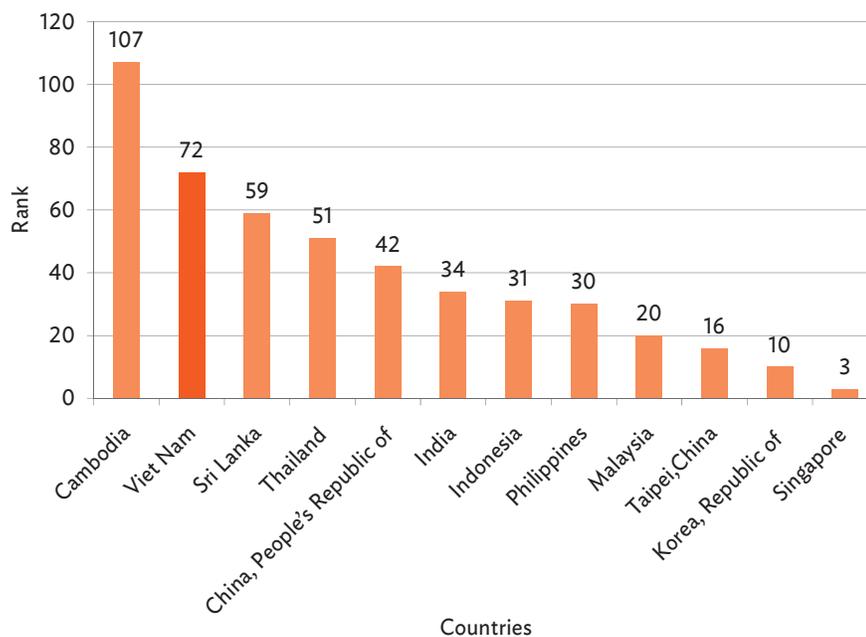
Figure 19. Extent of Enterprise Training, 2007–2008



Note: Scale of 1 to 6 in which 1 = invest little in training and employee development and 6 = invest heavily in training and employee development.

Source: World Economic Forum. 2008. Executive Opinion Survey 2007–2008. Geneva.

Figure 20. World Ranking on Extent of Enterprise Training, 2007–2008



Note: Out of 134 economies, with 1 being the highest rank.

Source: World Economic Forum. 2008. Executive Opinion Survey 2007–2008. Geneva.

153. In most countries, the incidence of enterprise training tends to be highest among FDI companies producing for competitive markets; those investing in new technologies; among larger enterprises; and, within the enterprises, for managerial and skilled occupations. No information could be found for the incidence of enterprise-based training in Viet Nam, but it is likely that it follows these same patterns.

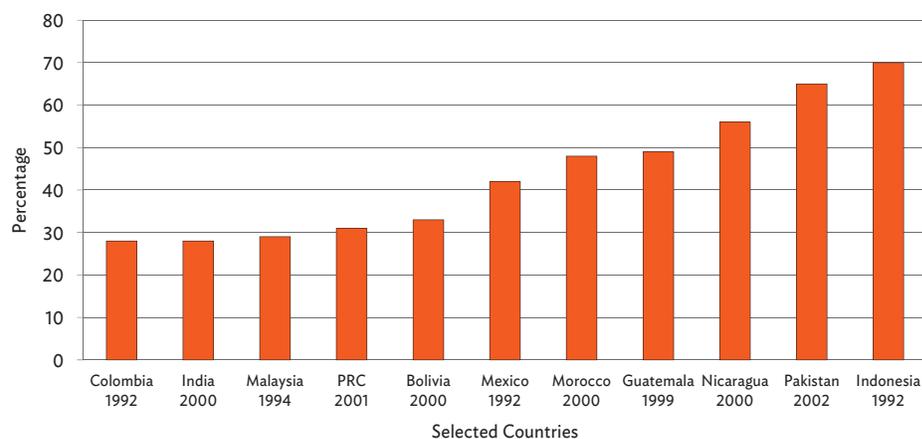
154. Franz stated that

“with the exception of state-owned companies, the preparedness of companies to invest in training is rather underdeveloped. A significant indicator for this problem is the widespread practice that TVET institutions provide financial compensation for training-related costs to companies if these accept trainees for attachments. In fact, TVET providers appear to compete for attachment places through the compensation amount they are able to pay to employers.”

The regulatory environment is generally favorable to establishment of private training institutions, but foreign companies reportedly face insurmountable bureaucratic hurdles when trying to open company training centers.

155. Low investment in worker training is correlated with low firm productivity. A 1995 World Bank report found that enterprise training in a number of developing economies including Colombia, Indonesia, Malaysia, Mexico, and Taipei, China “is associated with higher firm level productivity in all five economies.” The report concluded that this “should dispel any skepticism [employers have] about the beneficial effects of training on productivity” (Tan and Batra 1995). A subsequent study, which analyzed data from Investment Competitiveness Assessments, found the following productivity gains from enterprise-based training in developing countries:

Figure 21. Productivity Gain from Enterprise-Based Training in Selected Countries (%)



PRC = People's Republic of China.

Sources: Tan and Batra (1995), Batra (2000), Tan and Savchenko (2003).

Table 22. Strengths and Weaknesses of Enterprise-Based Training

Strengths	Weaknesses
<ul style="list-style-type: none"> • Self-supporting, does not require government subsidies or administration • Almost by definition tends to be practical and closely linked to enterprise requirements 	<ul style="list-style-type: none"> • Enterprises tend to undertrain because of fear of poaching • EBT tends to be selective, as firms investing in EBT for workers tend to be large, foreign-owned, and more likely to export; further, workers selected for EBT tend to be white-collar, in skilled occupation, and have higher levels of education
<ul style="list-style-type: none"> • Expands access to skills development to people without opportunity to attend formal training courses 	<ul style="list-style-type: none"> • Small and medium-sized enterprises cannot afford the time or money for organized training of their staff, as EBT applies mostly to larger enterprises
<ul style="list-style-type: none"> • Can be delivered in less time 	
<ul style="list-style-type: none"> • Allows for continuous learning and adaptation to new technologies 	
<ul style="list-style-type: none"> • Because firms may be able to extract benefits from general skills training when labor markets are imperfect, firms will invest in both general and firm-specific skills. 	
<ul style="list-style-type: none"> • Targeted EBT has been crucial to raising the skills of the workforce along with phased industrialization (e.g., Japan, the Republic of Korea, and Singapore) 	
<ul style="list-style-type: none"> • There is widespread evidence of firms' willingness to invest in EBT, particularly in East Asia. 	

EBT = enterprise-based training.

Source: ADB. 2009. *Good Practice in Technical and Vocational Education and Training*. Manila.

156. What accounts for the relatively low level of enterprise training in Viet Nam? Despite training's contribution to raising firm productivity, many enterprises underinvest in training because of market failure. Firms may underinvest in training their workers due to fear of poaching, or the "free-rider" problem. Trained workers are free to move from job to job, so enterprises can never be sure of recouping their investment in training of workers. Non-training competitors may seek advantage by "poaching" trained workers from other firms, thereby appropriating the benefits of the training at little or no cost. The fear of poaching reduces the incentives of firms to train. Worker turnover and "poaching" have been prevalent in Viet Nam. According to the Japanese External Trade Organization (JETRO), 69% of enterprises stated that increasing wages are a problem owing to scarce skills. Enterprises have started to compete for skilled workers by offering higher salaries in some provinces.³⁰

³⁰ JETRO (2006).

157. Additional explanations have to do with the level of industrial development in Viet Nam. Mass production enterprises producing at low cost tend not to value the development of their human resources compared with those producing high-quality goods with high technology. Enterprises may simply lack awareness of the role of enterprise-based training in productivity gains. Employers in lower-income countries tend not to see or appreciate the link between worker training and increased net profits.

158. There may also be a misconception about enterprise-based training, and this appears to be the case in Viet Nam. Enterprise-based training seems to be regarded—by the government and enterprises—as the operation of separate training schools by the enterprise, rather than more flexible kinds of on-the-job training. As such, enterprises may view enterprise-based training as too costly.

159. Apprenticeship training is recognized in the Vocational Training Law of 2006, but is not actively practiced in many firms. The government has no organized program to support apprenticeship training. It does allow the deduction of training expenses from gross operating profits before taxes, but gives few other incentives for enterprise-based training. The following table shows the strengths and weaknesses of enterprise-based training.

2. Wrong Skills Taught

160. Considerable reorientation has taken place over the past decade in courses offered and program content. This is reported in the retrospective to the National Socio-Economic Development Plan. However, several training institutions have reported that curricula frameworks, e.g., in automotive or computer technology, do not correspond to actual requirements in the workplace, even though they have been developed recently. This issue can be traced partly to the composition of the groups preparing curricula framework: they tend to be dominated by teaching staff, some of whose knowledge is dated, and do not include enough enterprise representatives. Greater effort is now being made to involve enterprise representatives in the development or ratification of skills standards and training curricula.³¹ The more that skills standards can be developed, and independent assessment achieved, the more training institutions should be given freedom to develop their own curricula to meet the output standards.

161. Several issues are of concern in the medium to long term. One is specialization of training institutions by economic sector. Many institutions have a history of providing specialized workers for particular sectors, e.g., transport, construction, agriculture, and industry. This was appropriate under a command economy, where the state owned the means of production and decided on growth in employment, and, by extension, enrollment by specialization. Another issue is the narrow specialization of programs of study—numbering 462 at the intermediate level and 396 at the college level.

³¹ As stated by Mori et al., “in-depth skill and labor demand surveys, curriculum review meetings with enterprises and enterprises’ involvement as management council members, are not regularly utilized yet” (p. 33).

162. However, sector specialization is much less appropriate in a market economy, where it is not known at the point of training what jobs will be open in the economy. Specialization is the enemy of flexibility. Training in a market economy must be for broad occupations that could be applied across sectors.

163. In the medium to long run, the content of long-term training programs will have to increase focus on general education (i.e., science, language, and mathematics). Graduates will need a stronger background in these subjects to learn new skills on the job, to undertake periodic upgrading, and to learn new jobs as the economic structure changes. In short, more general education is the necessary foundation for life-long learning.³²

3. Skills Not Properly Taught

164. Many high-quality institutions exist in Viet Nam, but a core problem is the extreme variation in quality (i.e., knowledge and skill attainments) of graduates. This holds true especially for practical skills, which account for the bulk of the time in vocational institutions. As stated by Mori et. al., “fundamental problems lie not in the number of workers with professional qualification, but the fact that graduates of TVET programs do not have the basic knowledge and enterprise skills required.”³³

165. Several factors explain the variance. First, output standards have been lacking. Second, assessment of trainees is done exclusively by the teachers. There has been no outside, independent assessment, and employers have not been involved (some high-quality institutions organize their own external assessment, in some cases even bringing in international assessors from other countries). As a result, vocational certificates are said to be virtually meaningless in attesting to achievement of minimum standards.

166. Among all the factors, instructors are one of the most critical problems. Qualified instructors are in short supply, and deficient as a group in practical expertise. This the case for a number reasons. First, there is an overemphasis on academic credentials. The Vocational Training Law of 2006 specifies minimum academic preparation, but also allows for the phrase “or be an artisan.” This is not widely practiced. Second, instructors typically lack industrial and enterprise experience in the fields in which they teach. This is not a unique phenomenon. It is a common weakness in TVET systems throughout the developing world. However, TVET instructors are seldom sent to internships for upgrading of their practical skills. Third, instructors lack competency-based pedagogical skills.

167. Overcrowded workshops in Viet Nam are also a widespread phenomenon. In general, there are about 35 trainees for each instructor, much higher than international

³² In the long run, the role of the vocational secondary school is likely to wither unless it changes considerably. Most entrants will already have completed upper secondary education, so instead of providing the equivalent of secondary education, the vocational secondary school will need to focus on short, intensive training for those entering the labor market, or to upgrade workers seeking new skills.

³³ Mori et al. (2009).

norms for TVET programs³⁴ (which are 15–20). Overcrowding means that the trainees do not obtain sufficient time in using equipment, and thus cannot master practical skills. Instead, they must observe a demonstration by an instructor, or work in a large group, to carry out exercises. A general shortage of TVET instructors may explain some of the overcrowding. Instructor shortages reportedly are endemic, in part because of the narrow system of supply, but also because of insufficient uptake in the profession owing to low salaries.³⁵

168. Moreover, the present financing system creates incentives for institutions to increase enrollment at the expense of training quality. TVET institutions under GDVT are not subject to enrollment limits. As public allocations for recurrent spending do not increase, raising tuition fees through increased trainee intake has become the most convenient way of increasing institutional income. As a result, increased intake has led to a lowering of units costs, for example through larger class sizes or lower per-trainee spending on materials—all impacting negatively on training quality. The perverse incentive is to enroll as many students as possible. This can happen because physical norms and standards are lacking for workshop facilities and equipment, or are not enforced. The archaic system of expenditure norms also tends to underfinance workshop equipment. The norms were developed in 1998, and applied mainly to universities. At the time, the “norm” for TVET was D4.3 million per student. This was supposedly based on an average calculated across eight occupational groups. However, it appeared only to be based on two fields, and the outcome was the same as for academic secondary education, which had larger class sizes and less requirement for equipment. The norm has never been updated since 1998. Indeed, actual budget provision seems to be more in the order of D2.5 million per student, 40% less than the intended norm. One of the consequences has been inadequate equipment provision for practical skills training.

169. Internships, if properly organized and supervised, can compensate for lack of effective time in workshops. However their use is sporadic, in part because of lack of employer interest. As reported by Mori et al., colleges sometimes struggle to find partners for internships or on-the-job training.³⁶

170. As a consequence of the wrong skills being taught improperly, a World Bank survey of human resources in Viet Nam found that 60% of graduates from vocational and technical schools had to be retrained by enterprises after recruitment.³⁷

4. Inequitable Access

171. The main obstacle for entry to TVET at the intermediate level and at the college level especially for poor, rural dwellers and ethnic minorities is that they tend to have lower educational levels and a higher incidence of school drop out.

³⁴ Good statistics are lacking here. However, institutions assisted under the Vocation and Technological Education Project managed to reduce the average teacher-student ratio from 35:1 in 2001 to 30:1 in 2007.

³⁵ Universities with vocational teacher-training programs eliminate tuition charges for students undertaking teacher training, but there is no requirement that they actually enter teaching on graduation and reportedly few do.

³⁶ Paras. 102–141.

³⁷ Hanh (2008).

172. Part of the reason for inequitable access is also structural. The movement between general education and TVET is one-directional. That is, graduates of general secondary education can enter vocational secondary school or vocational college, but graduates of vocational secondary schools and vocational colleges cannot enter professional colleges or university. The reason for this is the relatively low level of theory that students take in the TVET system. This accounts partly for the low status of TVET in comparison with general and higher education. The proposed solution, including creation of degree-level TVET in the form of a degree for applied engineering, risks keeping students in a parallel and inferior (in terms of general education foundation) structure.

173. Female enrollment in the TVET stream is reportedly only about 30% of the total, implying inequitable access to skills development by gender. The reasons for this are largely historical: vocational training institutions were established to train mainly for traditional male occupations in industry. However, this needs to change because many of the new jobs will be created in services and industrial branches where gender is not a consideration. Institutions under the Vocational and Technical Education Project had great success in increasing female enrollment and obtaining post-graduation employment at virtually the same salary levels (94%) as males.

174. Tuition fees are a critical element in mobilizing additional financing for TVET. However, this discriminates against trainees from low-income households. The government has policies in place that reduce or eliminate tuition for low-income students. However, the support policies reportedly are not applied uniformly. In one case, a training institution director said he could not afford to enroll students on reduced tuition as his institution is self-sufficient, and relies entirely on tuition for its operating expenses. More generally, concern has been expressed about the effectiveness of the exemption scheme.

175. Chapter III showed the lack of equal access to vocational skills between urban and rural areas. Great strides have been made in increasing access to skills development in rural areas. Reportedly, 40 provinces received new vocational training centers in the decade between 1998 and 2008, but much more needs to be done. The government's Rural Training Program seeks to fill the gap at a total expenditure of about \$1.3 billion equivalent. It is not clear whether the necessary funds will actually be appropriated by local governments to implement this plan. For example, other plans targeting training for disadvantaged groups have not had much success. The National Target Program on Poverty Reduction (Phase 2: 2006–2010) includes a vocational training component that aims to provide training for 150,000 poor people at free or reduced fees. By 2009, only 2% out of the 75% households that identified training needs had benefited from vocational training.

176. As a recurring theme in this report, little information is currently available—in this case, about the socioeconomic status of the beneficiaries of the TVET system. Such information (enrollments and graduates by gender, region, ethnicity, and family income) should be included routinely in a management information system for TVET, providing a means to monitor how well the system is reaching its social objectives.

177. Finally, the rapid development of private training provision is a clear plus for the TVET system, but it is not likely to have much impact on increasing equitable access. Private

training tends to concentrate in urban areas, and tends to cater to students who can afford the tuition. There may be exceptions, but private training providers generally do not provide scholarships for children of low-income families.

5. Less-Than-Effective Organization and Management of Skills Development

178. Several developments have strengthened the organization and management of skills training in Viet Nam. Notable among these was the creation of a new level of provision in the form of vocational colleges. This corresponds broadly to the higher skills required as industry develops. In addition, GDVT was further developed with the addition of two new departments. Several members of the Department of Labor, Invalids and Social Affairs also established units for handling TVET. However, more needs to be done in organizational development.

179. Two points stand out about the organization and management of TVET in Viet Nam: the multiplicity of public organizations administering TVET institutions, and the lack of consolidated statistics about the dimensions and performance of the system itself.

180. On the first point, the existing fragmentation and complexity of institutional ownership and governance complicates policy implementation, including efforts to improve the effectiveness of skills acquisition. Some institutions report to center; some report to province and, within that, to different sector departments. Functions are duplicated between MOET and MOLISA, including curriculum development, materials development, accreditation, and subsector planning. Each organization prepares separate plans and strategies for MOET and MOLISA. As a consequence of the organizational fragmentation, no one has an overview of all skills development, although the Ministry of Planning and Investment is preparing an integrated human resources development strategy to 2020. Fragmentation of state management of TVET is the main reason for poor coordination in TVET activities.

181. On the second point—except for numbers on institutions, total enrollment, and teacher qualifications—there is a paucity of national information and statistics as a basis for monitoring, evaluation, and planning of subsector progress. This is a major shortcoming in the management of skills development. Available figures are usually targets. The knowledge base about costs and expenditures in TVET is particularly weak. There is no requirement of parent organizations to report to GDVT about actual spending on TVET institutions.

182. A notable exception was the benefit and monitoring system established under the Vocational and Technical Education Project for the 15 assisted vocational training institutions. These data provide an excellent picture of basic indicators, such as enrollment by gender, percentage of teachers trained, unit recurrent costs, graduation rates, etc. (Appendix 6). Unfortunately, many of the institutions reportedly discontinued collection of these data because of the work involved and incompatibility with Ministry of Finance systems of accounting and reporting.

183. With the statistics that are presently available, no organization has a picture at national or provincial/city level for their jurisdictions, and it is therefore not easy to know

what is going on in the TVET system. However, considerable raw data does exist in GDVT. Specifically, the Training Department receives information about proposed enrollments from all public and private training institutions at the intermediate and college levels. Such information could be used to summarize enrollment by program. The Department for Vocational Teaching and Management has data on the total number of teachers by qualification and by gender (but not by level of institution). Unfortunately, these data are not tabulated, analyzed, and disseminated. The need to establish a practical, central information system that provides basic statistics is urgent.³⁸

184. Sector planning. Successful sector planning and policy development requires up-to-date data on key subsector indicators. For TVET, in addition to comprehensive information on the vocational training system, accurate data on the labor market and employment are also needed. At present, there is a dearth of such information. There is no national system for collecting data to monitor the development of the training system and report on annual performance. As a result, GDVT lacks data on even basic elements of the VET system, such as school and training program enrollments, and annual graduate output. A system for tracking and evaluating sector performance is urgently needed.

185. The main agencies involved in the production of labor market information are the GSO of the Ministry of Planning and Investment, and MOLISA. Various initiatives have already been undertaken to strengthen the labor market information system. Under the Vocational and Technical Education Project, a labor market information system was established, and ILO and other donors are continuing to support this work at the local level. Despite these efforts, the coverage and quality of labor market data remains poor. There is a lack of coordination between the GSO and MOLISA. The concepts, timing, and calculation of indicators in their surveys are different, and the release of survey results takes time. Moreover, MOLISA staff lack the analytical and forecasting skills needed to determine labor market trends. The absence of such data is a serious constraint upon virtually every aspect of the TVET system.

186. Another weakness in the system is budgeting and financial management. As explained elsewhere, inappropriate, outdated norms are used for public vocational training institution budgeting, and never adequately developed for vocational training. Moreover, public financing is not linked to performance. The system of public subsidies does not provide incentives for improving training outcomes.

187. The current structure of TVET contributes to some inefficiency. First, training for some occupations appears to take too long, and the matter should be studied. This could be avoided by rigorous application of modular competency-based training, with easy entrance and exit. At present, the structure assumes a vertical progression—almost all graduates of vocational secondary schools intend to enter vocational colleges. This means that 2 or

³⁸ Such basic statistics should cover the essentials: number of institutions by type and location; ratio of applicants to admissions by level and type and program; socioeconomic background of the students; enrollment by year of study, field of study, and gender; student repetition and dropout by year and program; full-time equivalent (FTE) teachers by level; average number of FTE students per FTE teacher; graduates by program and gender; recurrent costs per student; employment rates by field; and level of remuneration.

3 years at intermediate level is followed by 2 or 3 years at college level before entry to the labor market. However, TVET is expensive because of the need for equipment, consumable supplies, and smaller than normal class sizes for workshop practice. Spending 4–6 years in vocational training before employment entails costs that developing countries can ill afford.

188. In many respects, the system is still supply-driven, but driven by national targets for increased numbers. The overall target is to increase the proportion of the labor force with skilled training, which is quite a general target. Also, the financing system (income from tuition) places the incentive on increasing enrollments, regardless of the job market.

189. The administrative system devolves some authority to training institutions to run their own affairs. Generally, they can admit students of their own accord, and hire their own teachers (within national criteria on qualifications), but must follow national regulations on teaching programs. They test and certify their own graduates. They can keep all or most of the revenue generated at the institution.³⁹ Still, in the long run, devolution will need to go further, so that institutions can define their own markets, and train for them without undue bureaucratic interference. Devolution is no panacea, but it can help stimulate local initiatives, mobilize resources, and find and supply local markets. To work properly, the governance structures of vocational training institutions will need to change, especially at the college level. At present, no outside stakeholders participate in institutional governance,⁴⁰ but, in the future, enterprises and employers will need to play a greater role. Artificial ceilings on tuition fees will need to be lifted to enable institutions to raise a greater share of their own expenditures. Removal of tuition ceilings must be accompanied by financing for disadvantaged groups, perhaps as vouchers, so as to mitigate any adverse social consequences.

190. The current management of private training provision leaves something to be desired. In general, Viet Nam has an enlightened policy regarding private (nongovernment) training provision. It does not impose burdensome controls over private training providers. No guidelines exist for registration of private training providers, and no provision is made for follow-up after initial registration to ensure that the private training providers maintain quality. Official documents state that private training providers will be eligible for support in the form of land, rentals, and credit. This policy is now being realized, primarily through the Skills Enhancement Project.

191. Appendix 12 provides a more detailed assessment of the TVET system of Viet Nam.

³⁹ Government Decree No. 43/2006/ND-CP gave public service delivery institutions more authority and responsibility for their performance. Principals have the right to make decisions on recruitment of staff and on use of the allocated, self-mobilized, and retained funds. The actual payment that teachers receive depends in part of the income generated by the schools. (Hanh, p. 24)

⁴⁰ PLANCO Consulting, p. 17.

A. Technical and Vocational Education and Training Development Strategy to 2020

192. The following section presents some recommendations on actions to strengthen TVET over the coming decade. The two main recommendations are to strengthen the knowledge base on TVET as a means to raise performance, and to consider a payroll levy for training as a way to stimulate more enterprise-based training.

193. The overall strategy has five core elements:
- (i) provide the right skills,
 - (ii) teach skills more effectively,
 - (iii) reform further organization and management of TVET,
 - (iv) build equity in training provision, and
 - (v) stimulate greater enterprise-based training.

1. Provide the Right Skills

194. Viet Nam is moving in the right direction on skills training. The strategy will be to continue to reinforce what is already being done, and to plan for the future.

195. First, Viet Nam must continue the development of labor market information systems, and use these to identify and analyze occupational trends. Second, training institutions must perform periodic tracer studies of their graduates to find out levels of absorption into the labor market. The institutions must have the authority to act on results—to reduce enrollment or discontinue training in fields with low absorption and market saturation. Third, GDVT should take steps to introduce more employer involvement and labor market realism in its standards development and curriculum development frameworks. Vocational training institutions should be given greater freedom to amend the frameworks (beyond the current 30%) when local market requirements call for variation.

196. Similarly, vocational training institutions should be given more freedom to organize new courses to meet local market requirements. They should be given incentives, especially to organize short courses for enterprises.

197. Over time, it will be important to strengthen the general education foundation of graduates from TVET—in mathematics and languages (oral and written)—to promote lifelong learning as well as learning on the job. In view of market uncertainties and unanticipated changes, training content should also become less specialized, and establish a better foundation to learn on the job.

2. Teach Skills More Effectively

198. As stated in the previous chapter, the extreme variability in skills acquisition among vocational training institutions is a serious problem. A strategy for quality improvement has to focus on three elements: standards, instructors, and assessment of learning outcomes.

199. Part of the quality problem among vocational training institutions is the lack of standards—skills standards that define the desired output and input standards that define teaching parameters. Skills standards have begun to be developed, and this should remain a priority for the foreseeable future. In addition, input standards need to be developed appropriate to different levels and types of TVET, including equipment and facility standards, and trainee–instructor ratios. These standards must be enforced to ensure the ingredients for quality of training. (This will also require development of realistic expenditure norms, as indicated below.)

200. **Instructors.** Upgrading programs are integral parts of virtually all donor assistance. The upgrading should also be integrated into routine GDVT activities, so that, every 2–3 years, instructors have the opportunity for upgrading. This process should include exposing instructor groups to work experience in relevant enterprises, a major gap in the current teaching qualifications. However, the fundamental challenge is how to widen the source of qualified instructors, and how to ensure they enter and stay in TVET teaching. The current national Vocational Training Strategy does not address this issue. Solving this problem will require special incentives. What the incentives should be is beyond the scope of this report. A study is recommended on the incentive structure for TVET instructors, within the context of both market demand and civil service remuneration.

201. **Assessment.** Presently, teachers evaluate the performance of their own students. Without external assessment, many feel that the current forms of certification are meaningless. Some kind of external assessment is essential to quality training. Ideally, this would involve employers, as in Germany’s dual system of vocational training. As an alternative, professional societies should be tapped, to help ensure that required standards are met.

202. **Equipment.** Clearly, greater investment will also be needed to meet equipment standards.

203. Since Viet Nam aspires to regional and international standards for some of its TVET programs, it would be wise to develop and use more benchmarking for domestic institutions, and comparisons with institutions abroad.

3. Reform the Structure, Organization, and Management

204. One thing is clear: Viet Nam needs a greatly improved information base about the performance of the TVET system. Good data on enrollments, course outputs, and outcomes could be used as a tool to drive system innovations and improvements in performance, but these basic data are lacking. Ironically, much of the required data exist in raw form in GDVT. It is urgent that a management information system is established including a simple,

practical method of data collection, analysis, and reporting, which makes use of normal reporting processes.

205. Beyond this priority, the government should conduct an in-depth organizational and management assessment of TVET at all administrative levels, including management of training institutions, to form other specific recommendations.

206. Promising areas for reforms include the following:

- (i) **National organization.** Would it be desirable and feasible to establish a national skills authority? A national workforce council has been recommended, but councils without adequate authority tend to be ineffective. However, a national skills authority could be effective, provided the organization has real authority to take decisions and act, employers play a prominent role and their views are given weight, and the organization has an independent source of financing to support implementation of its decisions. Funds could come from the payroll levy supplemented by government financing.
- (ii) **Coordination of functions.** Finding ways to eliminate duplication of effort by MOET and MOLISA in curricula and materials development, accreditation, and subsector planning.
- (iii) **Structural reforms.** Rather than a vertical progression within the TVET system (from vocational secondary school to vocational college and eventually to a bachelor's degree in applied technology), which tends to be costly and inefficient, use general education plus short, focused skills training.
- (iv) **Management of TVET.** There may be a case for TVET to be managed by two ministries (MOET and MOLISA), as long as the purposes and content differ. However, there seems to be little reason for multiple ministries to continue to manage training institutions for their own purposes. Over time, other ministries should withdraw from direct management of training institutions.
- (v) **Decentralization.** More authority should be devolved to training institutions, starting at the college level, along with expanded training of institutional managers. Care would need to be taken to ensure that the management of individual schools has sufficient capacities and systems in place, e.g., business management skills, to use the scope of authority granted them through decentralization. The benefits could be substantial in greater resource mobilization and responsiveness to local markets. However, adequate account must be taken of different fiscal capacities to ensure that this does not result in greater inequity. State compensatory policies may be needed for poorer locations.
- (vi) **Financial management.** Implement more up-to-date budgeting and financial management. Calculate norms appropriate for TVET based on standards and actual costs, and keep them up to date. Consider the introduction of performance-based budgeting, once reliable statistics are generated on institutional performance.⁴¹

⁴¹ Possible indicators for performance-based allocations could include examination and graduation rates, job placement rates as measured through independent tracer studies, evidence of tangible cooperation with employers (e.g., number of apprenticeship contracts), and level of generation of income (Franz 2007).

Such a reform is well within the power of the government, and could perhaps impact performance more than any other. In addition, competition could be generated among training providers by expanding the current pilot tender system and opening it further to private providers.

- (vii) **Curricula.** Establish more efficient evaluation and approval procedures for new courses, as well as review mechanisms for curricula revisions to catch up with the demands of enterprises.

4. Increase Equity

207. Government policies are commendable in seeking equal access to skills development for disadvantaged groups and regions. The matter, therefore, is not to change policies, but to implement them. First, to monitor progress, GDVT needs to start collecting data on socioeconomic background of trainees. Second, it needs to analyze market requirements to provide better orientation for its ambitious rural training program. More attention needs to be given to increasing female enrollment in occupations that are in demand (e.g., in the growing service sector). Third, the success of the Vocational Education and Training Project suggests that a breakthrough is possible in female enrollment. Fourth, better targeting is also needed to provide public subsidies to disadvantaged groups and regions. In addition to implementing existing policies (tuition reductions, etc.), it may also be necessary to provide targeted support for living expenses. Vouchers might be used to deliver targeted support. Private training providers might also be requested or required to provide scholarships for low-income trainees, up to a given percentage of enrollment, say 5% or 10%.

208. In rural training, Viet Nam could benefit from the experience of other countries. It has long been recognized that successful employment-oriented skills training programs in rural areas are those closely linked to the local economy, and employ an appropriate community-based training methodology. In the early 1980s, governments, nongovernment organizations, and international organizations developed such methodologies specifically to promote income generation in rural areas. The TVET program in rural India, the ILO's Training for Rural Gainful Activities program in Nepal, and the Sida-supported Regional Project on Skill Development for Self-Reliance in East and Southern Africa all utilized community-based training approaches to the generation of local employment in rural areas. More recently, community-based training methods have been adopted in many developed countries, to address the training and employment needs of special target groups such as out-of-school youth, redundant workers, and the disabled. The Ontario Network of Employment Skills Training Projects and Association of Service Providers for Employability and Career Training programs in Canada are community-based training approaches run by nongovernment organizations, and they provide skills training for employment in local communities. Community-based training has also been used as a tool for strengthening vulnerable groups in rural areas. For example, the national Training for Rural Employment and Empowerment program in Pakistan is a community-based training methodology linking skills training to the economic empowerment of rural women. A similar approach has been in use by the national training authority in the Philippines, the Technical Education and Skills Development Authority, since the early 1990s.

209. These activities have evolved into a generic community-based training methodology, which is based on the following principles:

- (i) the identification and analysis of potential employment and income-generating activities in the local economy;
- (ii) the determination of appropriate training needs prior to deciding on training content and objectives;
- (iii) the collection of detailed information on the training target group;
- (iv) the participation of the local community in the training planning process;
- (v) the selection of an appropriate, flexible delivery system; and
- (vi) the provision of post-training support services—including access to credit and technical support services—to facilitate the successful application of training to income-earning activities.

210. In adapted form, the community-based training approach, supported by detailed training materials and field manuals, has been successfully applied to employment-oriented skills training in the rural areas of Asia, Africa, Latin America, and the Caribbean.⁴²

5. Stimulate Greater Enterprise-Based Training and Support

211. Perhaps the greatest weakness in Vietnamese skills development is the lack of enterprise-based training. One way to stimulate greater enterprise-based training is to introduce a payroll levy, and enterprise training funds.⁴³ More than 60 countries in the world use payroll levies for this purpose.⁴⁴

212. The rationale of enterprise training funds, or enterprise incentive schemes, is to increase the productivity and competitiveness of firms by raising the skills of workers. The obvious objective here is to increase the incidence of training within firms. The source of financing is enterprise levies, usually on payroll. The procedure varies according to type of scheme, but may include (i) cost reimbursement, (ii) levy-grant, and (iii) levy exemption (train or pay).

213. In many cases, levy schemes have led to an increase in the volume of training within enterprises. Malaysia and Singapore are examples. An evaluation of the Human Resource Development Fund, financed by a 1% payroll levy in Malaysia, found that (i) the levy was effective in the promotion of training within enterprises, particularly those of medium size; (ii) training increased firm-level productivity; and (iii) productivity growth is enhanced by repeated episodes of training.⁴⁵ The Singapore Skills Development Fund provides an incentive for employers to raise the qualifications of workers. It does so by assessing a 1% levy on workers who earn less than S\$1,500 per month. Enterprises can apply for assistance from the fund for an array of programs, regardless of the amounts paid into the fund. These include

⁴² ADB (2008b).

⁴³ Other recent reports have recommended serious consideration for establishment of incentives for enterprise-based training such as payroll levies. See Franz (2007) and Mori (2009).

⁴⁴ Johanson (2009).

⁴⁵ Tan (2001).

training vouchers for employees of small and medium-sized enterprises; training assistance in information technology; comprehensive company training plans; a skills certification plan (i.e., a proposal for the training of at least one-third of a company's workforce in certifiable skills over a 3-year period); a training leave scheme for older workers; and on-the-job training consultancies.⁴⁶

214. Stimulating enterprise training should be a priority in Viet Nam. Table 23 shows the advantages and limitations of levy systems. Appendix 13 shows the main types of payroll levy schemes and some of the advantages and weaknesses for each.

215. Some of the key issues that need to be considered when designing a training levy to stimulate enterprise-based training are

- (i) **Levy rate.** Experiences in Latin America and Africa show that a rate too high may lead to surpluses and lavish bureaucracies (one lesson, therefore, is to adjust the amount periodically to ensure that the training is neither underfunded nor leads to surpluses).
- (ii) **National or sector levies.** A standard, national payroll levy is preferred to a sector levy for its greater ability to permit funds to be allocated where training needs are greatest. On the other hand, keeping funds in the sector where they were collected can increase the sense of ownership of training.
- (iii) **Sector coverage.** Levy coverage should be as wide as possible across economic sectors and should include public enterprises.
- (iv) **Company size.** Exempt very small companies because they tend not to capture the benefits. Small and micro enterprises are usually excluded. The question is at which size of enterprise to apply the levy.
- (v) **Levy collection.** Use effective agents. How to collect the funds efficiently without costing more in administrative expenses than the levy collects? Integrating the levy collection with collection of taxes or social security often works, while separate collection by a training agency usually does not.
- (vi) **Security of the levy proceeds.** Avoiding diversion to other purposes, including treasury confiscation.
- (vii) **Employer buy-in.** Extensive consultations and consensus with employers is essential to establish the need and benefits before introducing a levy scheme. How to get enterprises to agree to the levy, which they often see as an additional tax that they will recoup by lowering wages of the workers?
- (viii) **Allocation decisions.** What role will employers and workers play in allocating the funds? Allowing employers to have a major, if not majority, say on fund allocations can go a long way to gaining their support for the levy. How can transparency be assured? What share of the fund, if any, should be earmarked for "cross-subsidization" e.g., training for those in the informal sector, or for small enterprises that have not contributed?⁴⁷

⁴⁶ Government of Singapore as presented on ILO website <http://www.ilo.org>

⁴⁷ Ziderman (2003).

Table 23. Advantages and Limitations of Levy Systems

Advantages	Limitations
<ul style="list-style-type: none"> Earmarked payroll levies can be viewed as “benefit taxation,” i.e., those that benefit (employers and workers) pay for the training. 	<ul style="list-style-type: none"> Earmarked taxation does not conform well to the principles of sound public finance, and weakens attempts to unify the national tax system.
<ul style="list-style-type: none"> Levy systems can augment substantially the resource base for training. 	<ul style="list-style-type: none"> Payroll levies raise the cost of labor to the employer, possibly discouraging employment.
<ul style="list-style-type: none"> Increased training resources, in turn, can substantially increase the incidence of training. 	<ul style="list-style-type: none"> Employers may shift the incidence of the levy on to workers in the form of lowered wages; in this case, workers and not the employers bear the burden of the tax.
<ul style="list-style-type: none"> Levies can provide a steady and protected source of funding for training, particularly in the context of unstable public budgets. 	<ul style="list-style-type: none"> Insecurity of income: Under fiscal pressure, government may divert levy proceeds into general public tax revenues for nontraining uses.
<ul style="list-style-type: none"> Levy-grant systems can encourage firms to intensify their training efforts, increase training capacity, and raise training quality. 	<ul style="list-style-type: none"> Unequal access: many firms, particularly small ones, do not benefit from the scheme; this breeds resentment, opposition, and compromises the status of training levies as “benefit taxation.”
<ul style="list-style-type: none"> Training levies collected from formal sector employers can serve as a vehicle for cross subsidization, e.g., for smaller employers and especially for firms in the informal sector. 	<ul style="list-style-type: none"> Inefficiency: Payroll levies may constitute an oversheltered source of funding, leading to unspent surpluses, inefficiencies, and top-heavy bureaucracies.
<ul style="list-style-type: none"> Funds with tripartite management can forge cooperation among the social partners and facilitate formulation of appropriate training policies. 	<ul style="list-style-type: none"> Red tape may erect high barriers for firms to access funds.
<ul style="list-style-type: none"> Funds can influence the quality of training through accreditation procedures and helping stimulate a competitive training market. 	
<ul style="list-style-type: none"> Levy-financed funds can also help correct imbalances in training access by pooling funds—e.g., for training disadvantaged segments of society, unemployed, those in the informal sector. This redistribution can be termed “cross-subsidization.” 	
<ul style="list-style-type: none"> Establishment of a separate training fund account can facilitate transparency and minimize distrust between employers and the public sector. 	

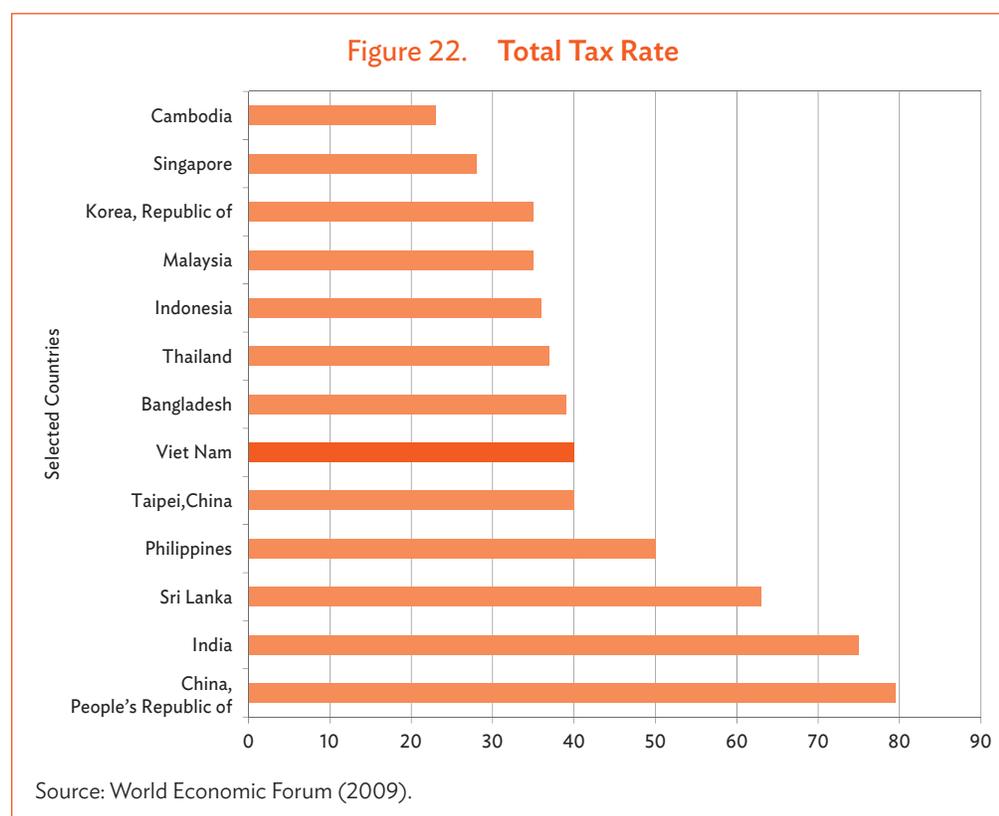
Sources: Johanson (2009), Ziderman (2003), and CEDEFOP (2008).

216. The main consideration is not to forcefully impose a levy on enterprises. The understanding, acceptance, and support of employers are essential for success. Thorough discussions and debate are necessary before introducing a levy, and then only with employer support.

217. The Viet Nam Chamber of Commerce and Industry expressed doubts that employers would accept levy financing. However, it is possible that enterprises would be open-minded toward such a system, if they had confidence it would work properly. There are concerns about a high bureaucratic burden and misuse of the fund's resources. One way to overcome initial employer resistance is to ensure that employers have a major say in how the funds would be allocated.

218. A common objection is that taxes are already too high. However, in Viet Nam the tax burden on enterprises is not among the highest in Asia, ranking 61 out of 129 countries in 2009 (Figure 22). Total tax rate is a combination of profit tax, labor tax and contribution, and other taxes.

219. The Government of Viet Nam also has an important role to play in supporting enterprise training. It should advocate training as a means to increase productivity and profits within enterprises. The government should also continue to raise the basic skill levels of entrants to the labor market, while stimulating the training of low-educated workers and



workers in small enterprises who have little access to training. Finally, the government can work to build the capacity of trade and sector associations to provide training services to their members.⁴⁸

B. Future Directions for Development Assistance

220. The importance of continuity and long-term commitment to support TVET is well recognized. An ADB 1999 evaluation report stated

The [developing member countries], with the support of aid agencies, need to commit to support TVET over the long term, given the long development cycle of the subsector. Past experience suggests that long-lasting impact cannot be attained through a single project, but only through a series of overlapping projects with consistent core objectives, carried out over a long period.⁴⁹

221. In terms of ADB support, the Skills Enhancement Project is the second project ADB has approved to support the development of TVET in Viet Nam. It builds upon the achievement of the previous project, the Vocational and Technical Education Project, and therefore provides strong continuity in ADB support. The Skills Enhancement Project was designed to meet the specific need for more and better-qualified skilled workers. To achieve this, it will strengthen the capacity of the TVET system to train highly skilled workers and technicians, who can master the modern technologies of the industrial and service sectors. This will occur through support of the excellent set of policies enshrined in the Law on Vocational Training, itself an outcome of the Vocational and Technical Education Project's work. Under this law, the TVET system is being transformed by a new focus on higher-level skills, through the recent establishment of a college or diploma level for more complex skills training.

222. The Skills Enhancement Project carries forward several of the strategic actions identified in the Vocational and Technical Education Project. The project promotes the teaching of the right skills, by addressing specific skills shortages in highly skilled occupational areas. It also promotes more effective teaching of skills, by strengthening the capacity of the TVET system to train skilled workers and technicians, who can master modern technologies in the industrial and service sectors. Project activities will take place in 15 public and five private vocational colleges, located in five economic zones across the country. These project activities will upgrade training in a range of areas, including automotive technology, electrical manufacturing, hospitality and tourism, information and communication technology, and manufacturing, as well as enhancing noncognitive soft skills such as problem solving,

⁴⁸ Firms may underinvest in general types of training because worker mobility may prevent them from reaping the benefits of such training. For this reason, basic types of training should be organized on an industry-wide basis where firms are induced to cooperate in the effort via membership in industry associations, with a good deal of firm involvement in running the training schemes. (ADB, *Good Practice in Technical and Vocational Education and Training*, 16–18.)

⁴⁹ ADB. 1999. *Impact Evaluation Study of the Technical and Vocational Education Projects in Malaysia, Pakistan, Papua New Guinea, and Sri Lanka*. Manila. p. 4.

teamwork, etc. The project will also promote better management of the TVET system, by developing an information system to provide the sorely needed data on the performance of the TVET system. Greater and more effective participation of the private sector is encouraged. Incentives include a credit line to provide financing for private entrepreneurs to develop private vocational colleges, in addition to other measures that will strengthen ties between the TVET sector and industry. A study to investigate the feasibility of an enterprise training levy will also be carried out. A summary of project objectives can be found in Appendix 14.

223. The key interventions mentioned above will require continued support from the government and development partners in the medium term. This support should include the development and regular revision of skills standards, management information systems, curricula, instructor training, and skills assessment procedures. In addition, devolution of greater authority to training institutions is desirable. Continued support for the development of management teams in vocational training institutions should receive priority. Support for centers of excellence should also continue, but a strategy to extend the benefits to a wider array of institutions is needed, i.e., a strategy for “going to scale.”

224. Another approach that has proven effective worldwide would be financial support for the “twinning” of specific institutions with high-quality counterpart institutions abroad. This approach may be superior to a large external contract for expert services to be imported from overseas.

225. High priority, in terms of medium-term new investment, should be directed toward encouraging enterprise-based training. If a levy for enterprise-based training is found to be feasible, future support may be given to establishing a training fund financed by the levy.⁵⁰

226. To maximize its impact on the TVET system as a whole, development partners should consider merging their investments with the government’s National Target Investment Program. In this way, the same criteria and procedures can be used for selection of investment projects across Viet Nam. In preparation for such a merger, a study would need to be carried out on the effectiveness of the current target program.

227. More broadly, over the medium term, development partners could consider proposing to the government the option of adopting of a partial sector-wide approach (SWAP) methodology⁵¹ for future investments in TVET. This would have to be based on further development and refinement of the government’s medium-term plans for TVET, and the specific policy framework, for which a good basis exists at present. It would require the development of a common investment program—integrating all costs from various TVET programs (which are isolated at present, even within GDVT)—and attention to the merging of donor and government processes. The SWAP methodology would also involve

⁵⁰ Establishment of a training fund is recommended by ADB. 2008. *Completion Report: Vocational and Technical Education Project Viet Nam*. Manila. para. 55.

⁵¹ Including establishment of a collaborative process with government in the lead, a common policy framework, a medium-term expenditure framework, and harmonization of donor procedures. Excluding perhaps pooled funds and possible use of government procurement practices.

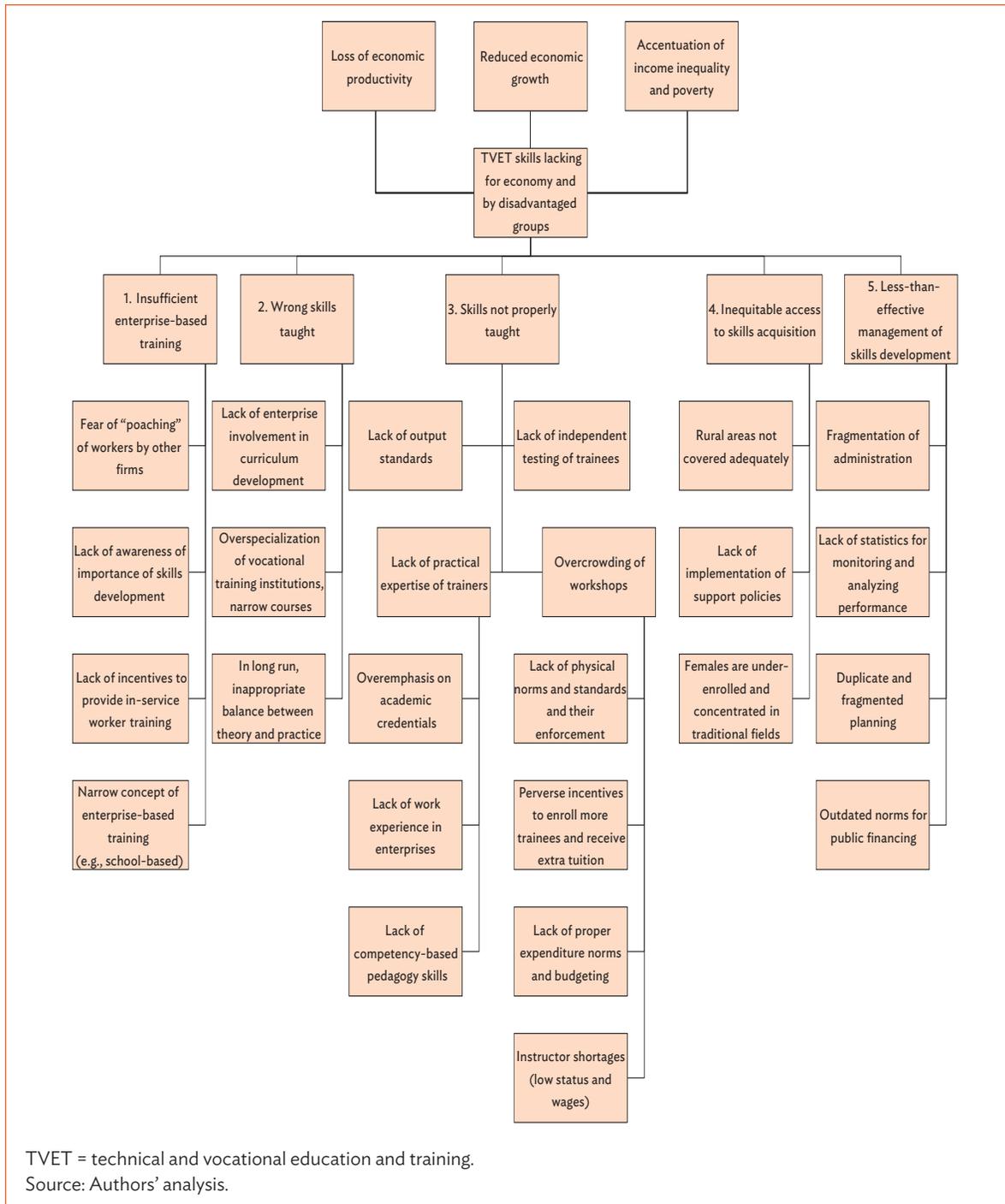
linking TVET policies explicitly with TVET budget allocations. Among other things, a SWAP approach would achieve better development partner coordination.

228. Another key area that can be considered for development assistance in the long term is the transformation of the labor force from agriculture to industry and services. This is an area lacking significant international assistance at present, yet is central to transforming the labor market into higher productivity activities. The ADB-supported Demand-Driven Skills Training for Poverty Reduction in the Cuu Long (Mekong) River Delta Project⁵² aims to equip poor people with skills and knowledge for employment, or for starting up a small business with microcredit support. It also develops the capacity of local administrators to design and implement skills development programs suited to local needs. The project is testing different approaches to improving the livelihoods of poor people through vocational training, which will later be used by the government to strengthen its extensive Rural Training Program (Appendix 11). A strong emphasis on labor market analysis, and a reduced emphasis on supply-driven targets benefits, will also strengthen not only this program but all vocational training programs offered in Viet Nam.

⁵² ADB. 2008. Proposed Grant Assistance to Viet Nam for the Demand-Driven Skills Training for Poverty Reduction in the Cuu Long (Mekong) River Delta. Manila.

Appendix 1

Problem Tree Analysis of the Vocational Training Sector



Appendix 2

Gender Segregation in the Workforce

Male- and Female-Dominated Occupations in Viet Nam

Industry	Total	Male	Female	Difference
Male-dominated occupations				
Forestry workers	0.38	0.46	0.25	0.22
Aquaculture	3.06	4.11	1.27	2.84
Laborers in coal mining	0.49	0.57	0.37	0.19
Laborers in oil and gas drilling	0.07	0.09	0.03	0.05
Metal mining workers	0.08	0.10	0.05	0.05
Mining for rocks and stones	0.86	1.18	0.32	0.87
Tobacco products	0.06	0.07	0.03	0.04
Other nonmetal mineral production	1.94	2.06	1.75	0.31
Metal production and products	0.28	0.37	0.12	0.25
Metal products (e.g., tools, boiler, etc.)	1.27	1.76	0.43	1.33
Other equipment and machinery	0.20	0.24	0.14	0.11
Motor vehicles and spare parts	0.09	0.09	0.08	0.01
Other transport equipment	0.45	0.60	0.19	0.40
Furniture production	2.12	2.74	1.07	1.67
Recycling and reprocessing	0.07	0.07	0.07	0.00
Electricity production and distribution	0.59	0.81	0.22	0.59
Extract, clean, and distribute water	0.17	0.20	0.12	0.08
Construction	11.93	17.50	2.44	15.06
Vehicle sales, maintenance, and repair	0.84	1.15	0.32	0.83
Wholesale and agent sales	1.13	1.21	1.01	0.20
Road, railroad, and pipeline transport	2.31	3.44	0.39	3.05
Water transport	0.49	0.70	0.15	0.55
Airline transport	0.06	0.08	0.03	0.05
Services in transport	1.13	1.49	0.51	0.98
Real estate	0.10	0.12	0.06	0.06
Rental of equipment and computer-related activities	0.09	0.11	0.06	0.05
Other business activities	0.57	0.63	0.45	0.18
Government administration and national defense	4.63	5.87	2.55	3.32
Communist party, professional associations	0.95	1.13	0.64	0.48

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Table continued

Industry	Total	Male	Female	Difference
Female-dominated industries				
Wood processing and production	1.81	1.67	2.05	(0.38)
Paper and paper products	0.39	0.32	0.52	(0.20)
Printing and publishing	0.34	0.29	0.42	(0.13)
Coke, crude oil, uranium processing	0.05	0.04	0.05	(0.00)
Chemicals and chemical products	0.47	0.46	0.49	(0.03)
Plastic and rubber production	0.51	0.37	0.73	(0.36)
Office and computer equipment production	0.06	0.06	0.07	(0.01)
Other electronic equipment	0.27	0.26	0.30	(0.05)
Communication equipment	0.12	0.08	0.17	(0.09)
Medical and laboratory equipment	0.07	0.02	0.15	(0.12)
Retail sales workers	2.85	2.33	3.74	(1.41)
Workers in hotel and restaurant	1.63	0.88	2.93	(2.05)
Post and telecommunications	0.46	0.41	0.53	(0.12)
Financial intermediary	0.23	0.18	0.31	(0.13)
Insurance and pensions	0.19	0.15	0.27	(0.12)
Assistance in finance	0.29	0.21	0.41	(0.20)
Science and technology activities	0.25	0.22	0.30	(0.08)
Education and training	6.50	3.17	12.15	(8.99)
Social relief (hospital, clinics, etc.)	1.48	1.00	2.30	(1.30)
Culture and sports	0.51	0.51	0.52	(0.02)
Public sanitation	0.43	0.39	0.49	(0.10)
Other services (ironing, laundry, etc.)	0.74	0.60	0.96	(0.36)
Personal services	1.51	0.69	2.89	(2.20)
Total	100.00	100.00	100.00	0.00

() = negative.

Source: Hyun H. Son. 2007. Occupational Segregation and Gender Discrimination in Labor Markets: Thailand and Viet Nam. *ERD Working Paper Series*. No. 108. Manila: Asian Development Bank. Appendix Table 2, pp. 16–17.

Appendix 3

Ownership of Vocational Training Institutions

Number of Institutions Owned by Ministries, Other Organizations, State-Owned Enterprises, Provincial People's Committees, and the Private Sector (September 2011)

No.	Agency	Total	Vocational College	Vocational Secondary School
Ministries, other organizations (subtotal)		104	45	59
1	Ministry of Agriculture and Rural Development	19	15	4
2	Ministry of Defense	22	2	18
3	Ministry of Construction	14	5	9
4	Viet Nam Labor Federation	19	3	16
5	Ministry of Transport	11	6	5
6	Ministry of Culture, Sports and Tourism	4	4	0
7	Ministry of Labour-Invalids and Social Affairs	4	3	1
8	Cooperatives Alliance	5	2	3
9	Ministry of Industry and Trade	4	2	2
10	Ministry of Health	1	1	0
11	Viet Nam Women's Union	1	0	1
State-Owned Enterprises (subtotal)		37	19	18
1	Viet Nam Textile Group	3	3	0
2	Viet Nam Coal and Minerals Group	3	3	0
3	Song Da Corporation	2	2	0
4	LILAMA Machinery Erection Corporation	2	2	0
5	Paper Corporation	1	1	0
6	Steel Corporation	1	1	0
7	Railway	1	1	0
8	Petro Viet Nam	1	1	0
9	Electricity of Viet Nam	1	1	0
10	Industrial Construction Corporation	1	0	1
11	LOCOGI Corporation	1	1	0
12	VINACONEX Corporation	1	0	1
13	VINASHIN Ship Building Group	13	1	12

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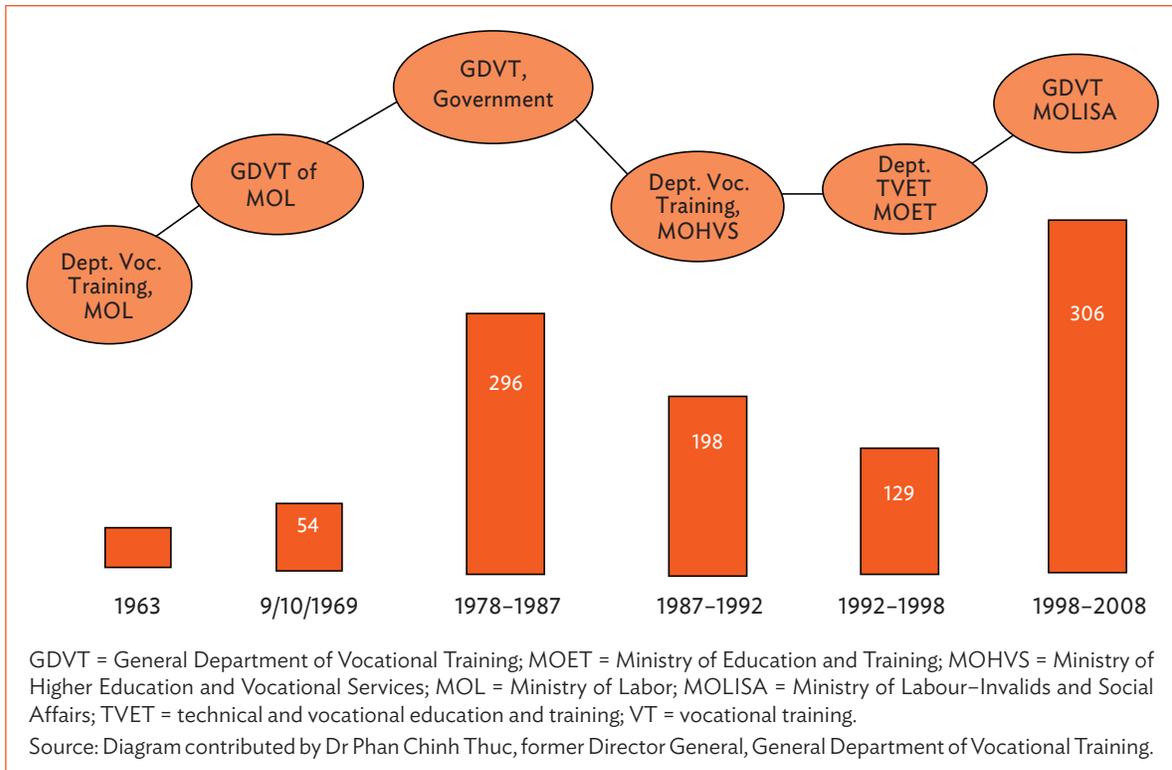
Table *continued*

No.	Agency	Total	Vocational College	Vocational Secondary School
14	VIGRACERA Corporation	1	1	0
15	Mechanical-Construction Corporation	1	0	1
16	Construction Materials Corporation	1	0	1
17	Cement Corporation	1	0	1
18	Irrigation Mechanic Corporation	2	1	1
	Provincial People's Committees (subtotal)	163	32	131
	Private Sector	134	32	102
	Total	438	128	310

Source: General Department of Vocational Training, Ministry of Labour-Invalids and Social Affairs. 2011.

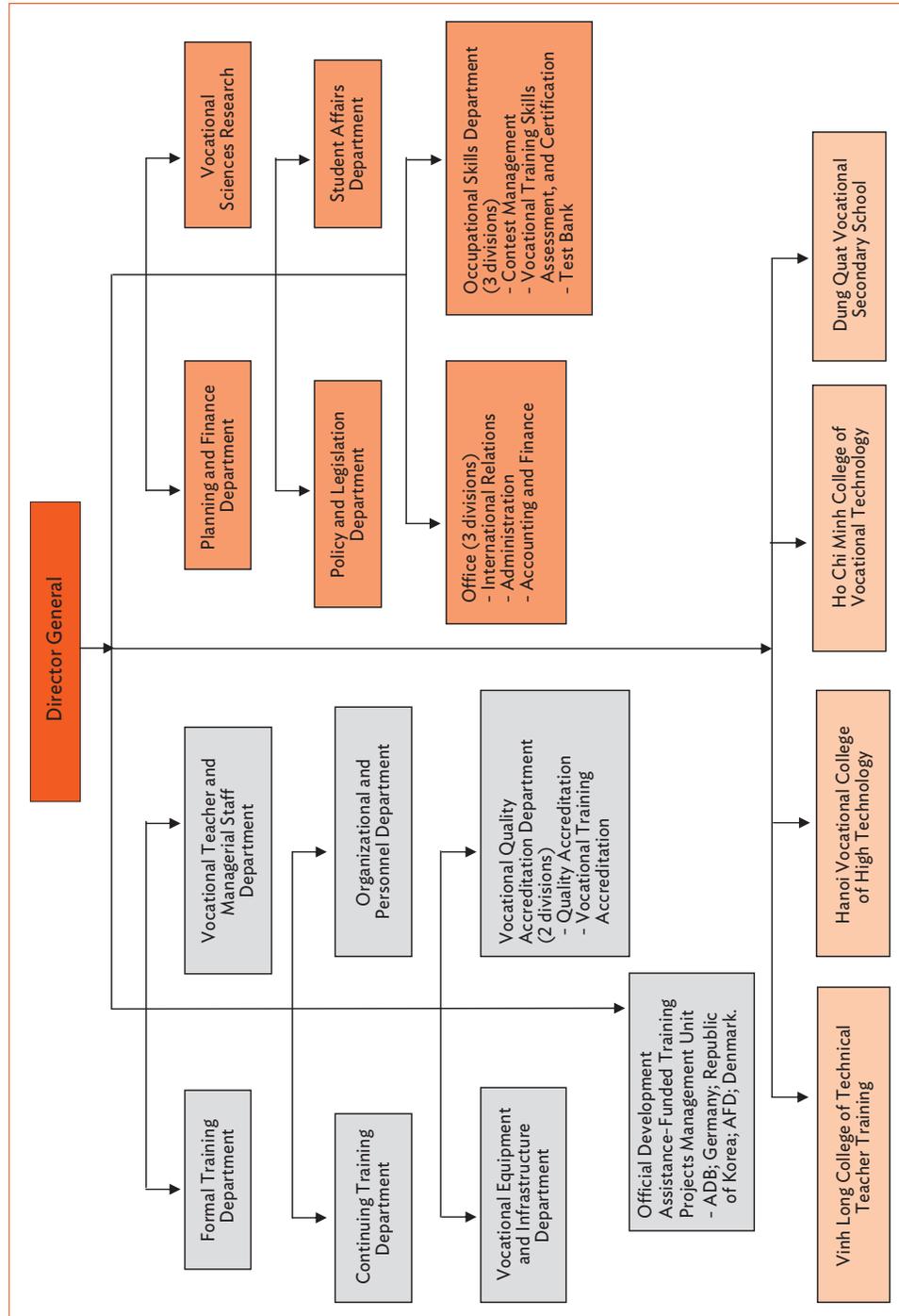
Appendix 4

State Management Body of Vocational Training, 1969–2011



Appendix 5

Organizational Structure of the General Department of Vocational Training



Appendix 6

Vocational and Technical Education Project: Summary of Results

1. This \$121 million project was financed by loans from the Asian Development Bank (ADB), Nordic Development Fund (NDF), and the Asian Development Fund (ADF), plus a grant from the Japanese International Cooperation Agency (JICA). It was implemented from 1999 to 2008. The Vocational and Technical Education Project (VTEP) sought to (i) make the vocational and technical education system more market-oriented, (ii) improve management and institutional capacities, and (iii) develop 15 key schools in vocational training system. The overall goal of the project was to reform the technical and vocational education and training (TVET) system to support the government's market-oriented industrialization, and supply well-trained, skilled workers, and production technicians for key occupations. The objectives were to (i) improve the market orientation of the system, (ii) develop key schools to improve the internal efficiency of TVET programs, and (iii) strengthen the capacity of the General Directorate of Vocational Training (GDVT) to implement the TVET reforms effectively.

A. Achievements

2. **Market orientation.** The project succeeded in establishing elements of a labor market information system. Guidelines were developed, and four rounds of labor market surveys were conducted. Guidelines were also published on career guidance. In addition, a methodology and process for curriculum development was adopted; 48 curriculum development committees (and 12 national curriculum appraisal boards) were established by the Ministry of Labour–Invalids and Social Affairs (MOLISA); and 97 curriculum guidelines (27 at college level, 43 at secondary, and 27 for mobile training) and 100 computer courseware products were produced.

3. **Development of 15 key schools—provision of facilities, equipment, and staff development.** A staff development master plan was prepared. Some 4,700 staff members were trained. A benefit monitoring and evaluation system was established in the 15 vocational training institutions (VTIs) and produced systematic information on key indicators.

- (i) Policy reforms and capacity development were established and conducted.
- (ii) Accreditation policy was developed and adopted (the Viet Nam National Accreditation System); accreditation was introduced in the 15 key schools.
- (iii) A methodology was developed for preparing skills standards, and standards were developed for 48 occupations. A qualifications framework was drafted defining the knowledge and skills to be attained at elementary, intermediate, and college levels. Test banks were developed and piloted for two occupations. GDVT established a new department for skills testing and certification.
- (iv) Equitable access for women and minorities—an action plan was prepared, two pilot programs were introduced for training women, three mobile training centers were established, and 27 mobile training programs were delivered. Female enrollment in

the 15 project institutions increased from 41% to 52% of the total. Female graduates commanded 94% of the wages of males.

- (v) A manual was developed, and workshops were conducted. The key schools established advisory councils.
- (vi) MOLISA published a circular on revised cost recovery and fee-collection system; 15 production units were established in the 15 key schools.

4. **Impact.** The project completion report¹ found that the project was highly relevant, satisfactory in achieving outcomes efficient in the use of resources, and likely to be sustainable. The VTEP had thorough impacts on the whole system from macromanagement (laws and policies, market orientation, capacity enhancement, etc.) to specific key schools. This contributed to expanding the training scope and improving training quality, as well as meeting the demand of labor markets. As stated in the project completion report, “The project has largely achieved its intended impact of reforming the VTE system in support of the Government’s market-oriented industrialization policy by supplying well-trained workers and production technicians for key occupations.” (para. 36).

5. Specifically, 86 % of graduates from the 15 key schools obtained relevant employment within 12 months; female graduates received 94% of male graduate remuneration. In addition, the number of students per teacher decreased from 36 to 1 to 30 to 1, and the proportion of teachers with degrees increased from 63% to 94%. The annual dropout rate remained low at 4% per annum. In addition, expenditures per student increased from D2,000 (in 2001) to D4,000 by 2007. The proportion of female students increased from 41% to 52%.

6. Weaknesses

- (i) The management capacity of MOLISA and GDVT was underestimated (p. 2).
- (ii) Projections on staff development proved to be too ambitious. Only 4,700 teachers received training, compared with an original target of 20,000.
- (iii) An excellent computer-based benefit-monitoring system was established at the 15 project institutions. This system produced highly relevant monitoring indicators on improvements in the 15 institutions. However, many of the institutions reportedly have discontinued using the system because of the effort involved, and its incompatibility with the government’s computer financial management system.
- (iv) The advisory technical assistance would have been more effective by focusing on development of administrative capacity than technical capacity (p. 2).

7. General Recommendations

- (i) Improvements realized in the 15 project institutions need to be transferred to other institutions (paras. 46–47).
- (ii) More needs to be done to develop institutional management capacity, the key to overall success (para. 48).

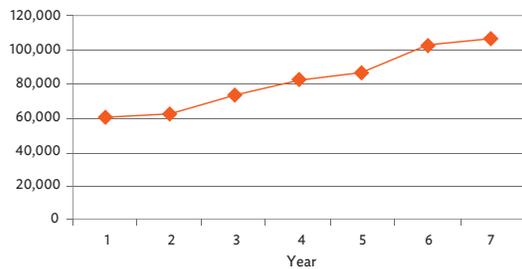
¹ ADB. 2008. *Completion Report: Vocational and Technical Education Project in Viet Nam*. Manila.

- (iii) Teacher remuneration needs to be commensurate with qualifications and experience, and provide an incentive for teachers to upgrade themselves, and keep abreast of technological development (para. 49).
- (iv) Regulations should be promulgated on VTI partnership with enterprises; VTIs should establish units to manage liaison with enterprises.
- (v) A study should be undertaken on financing of TVET, particularly the feasibility of establishing a fund for skills development (para. 51).

TRENDS IN INDICATORS ACROSS KEY SCHOOLS, 2001-2007

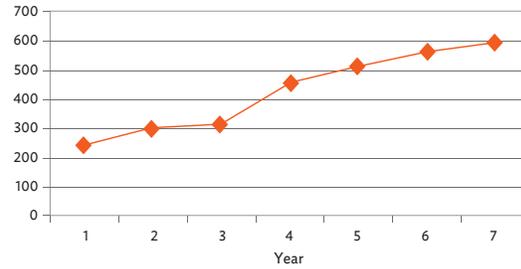
1. The key output indicators show substantial growth over the period of the Vocational and Technical Education Project in the number of students (equivalent full-time), long courses, graduates, teachers (equivalent full-time), and expenditure and revenue. The percentage of female students has increased substantially, and there are more partnerships with industry. The ratio of students per teacher has remained constant, while the average expenditure per student (equivalent full-time) has increased over the project life mainly because of rising prices for training equipment and materials. The graduate employment rate averaged 85% per year for the life of the project.

Figure A5.1. Number of Students



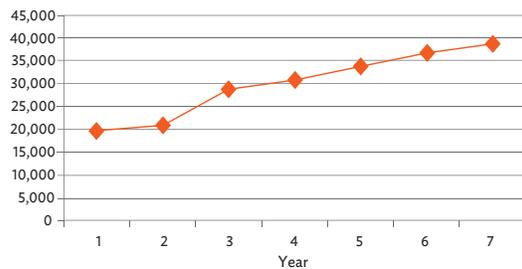
Source: Project benefit monitoring and evaluation (BME) data.

Figure A5.2. Number of Long Courses



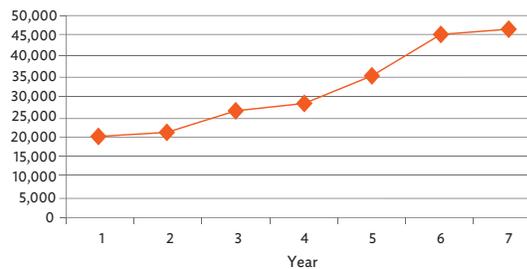
Source: Project BME data.

Figure A5.3. Number of Graduates



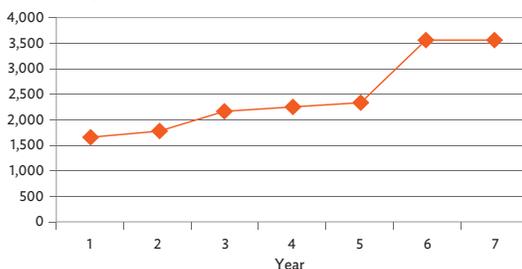
Source: Project BME data.

Figure A5.4. Number of Female Students



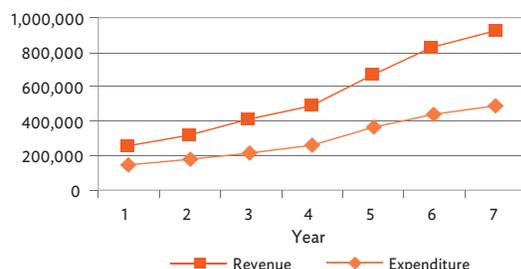
Source: Project BME data.

Figure A5.5. Number of Teachers

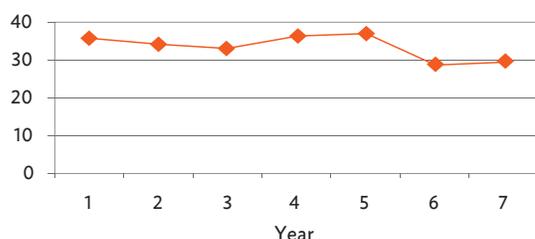


Source: Project BME data.

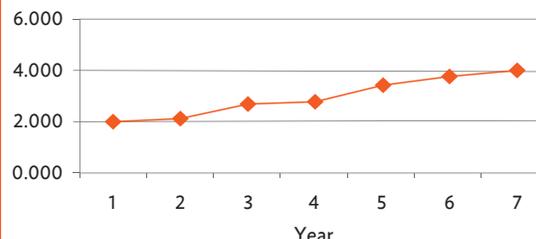
Figure A5.6. Revenue and Expenditure



Source: Project BME data.

Figure A5.7. Students per Teacher

Source: Project BME data.

Figure A5.8. Expenditure per Student

Source: Project BME data.

2. Descriptive Data

Table A5.1. Basic Indicators on Key Schools, 2001–2007

Item	2001	2002	2003	2004	2005	2006	2007	Total
Students	60,717	63,081	73,395	83,030	87,402	104,023	107,000	578,648
Female students	20,083	20,912	26,256	28,223	35,111	45,221	46,437	222,242
% female students	41	42	43	48	49	50	52	46
Wastage (dropout) rate	2,336	2,504	5,777	3,597	3,517	4,116	4,222	26,069
Graduates	19,622	20,911	28,838	30,789	33,844	37,156	38,900	210,060
Revenue	142,867	178,696	215,297	256,675	365,233	438,621	484,671	2,082,060
Expenditure	121,844	135,674	192,041	232,411	299,771	394,505	432,773	1,809,019
Teachers	1,700	1,814	2,200	2,272	2,348	3,583	3,617	17,534
Nonteacher	708	687	738	723	848	1,137	1,111	5,952
Teachers with degrees	1,068	1,237	1,294	1,582	2,018	3,380	3,429	14,008
Long-term courses	241	301	317	460	515	565	597	2,996

Notes:

1. Students are the total estimated equivalent full-time of students across all courses (including short courses and new demand courses).
2. No. of graduates is the total number of graduates across all courses.
3. Revenue is the total school revenue from all sources (1 unit = D1,000,000).
4. Expenditure is the total school recurrent expenditure (1 unit = D1,000,000).
5. Teachers are the total estimated equivalent full-time of teachers working in the school.
6. No. of long-term courses is the total number of formal courses (excluding short courses of less than 12 months duration) with enrolled students.
7. The indicated year is the applicable census year, with information collected for that year or measured at 31 December, and normally reported in the following year.

Source: Project BME data.

3. Internal Efficiency

Table A5.2. Internal Efficiency Indicators on Key Schools, 2001–2007

Item	2001	2002	2003	2004	2005	2006	2007
Students per teacher	36	35	33	37	37	29	30
Teachers: Nonteachers	2	3	3	3	3	3	3
Unmet demand	2	2	2	2	3	3	3
Wastage (dropout) rate (%)	4	4	8	4	4	4	4
Teachers with degrees	63	68	59	70	86	94	95
Cost/Student	2.007	2.151	2.617	2.799	3.430	3.792	4.045

Notes:

1. Students: Teachers is the ratio of the equivalent full-time of students per equivalent full-time of teachers.
2. Teacher: Nonteachers is the ratio of the number of teachers per nonteacher.
3. Unmet demand is the ratio of applicants to entrants (>2.0 indicates strong demand: <1.0 indicates applicant records not kept).
4. Wastage rate is the number of dropouts as a percentage of entrants.
5. Teachers with degrees is the percentage of teachers holding (at least) a university degree.
6. Cost/Student is the per capita school cost (total expenditure per equivalent full-time student) in D million.

Source: Project BME data.

4. External Efficiency

Table A5.3. External Efficiency Indicators on Key Schools, 2001–2007

Item	2001	2002	2003	2004	2005	2006	2007
Graduate employment rate (%)	94	84	83	84	85	87	86
Female graduate remuneration	8,356	9,062	9,433	10,193	10,921	11,416	12,013
Male graduate remuneration	8,556	9,253	10,083	11,038	11,710	12,281	12,827

Notes:

1. Employment rate is the percentage of graduate gaining relevant employment within 12 months of graduation.
2. Remuneration by gender is the average annual salary of graduates 3 years following graduation; the average remuneration across all key schools and genders was D8,088,000 in 2002 and D11,010,000 in 2003.

Source: Project BME data.

Source: ADB (2008a), Appendix 5.

Appendix 7

Major Development Partners in Technical and Vocational Education and Training

Sectors and Themes	Development Partner	Project Name	Duration	Amount
1. Economic growth (knowledge, science and technological capacities)	ADB/NDF/ÁFD/ JICA	Vocational and Technical Education Project	1999–2008	\$121 million
	GTZ/KfW/Inwent	Promotion of Technical and Vocational Education and Training	2008–2013	€16.4 million
	GTZ/KfW/Inwent	Programme Vocational Training 2008	2010–2014	€13 million
	Lux-Development	Strengthening Human Resources in Hospitality and Tourism	2009–2012	€2.5 million
	Lux-Development	Bac Kan Vocational Training	2006–2010	€4.35 million
	EDCF, Government of the Republic of Korea	Five Viet Nam–Republic of Korea Vocational Colleges Establishment Project	2008–2011	€35 million
	Danida	Supply of Teaching Equipment to Dung Quat Vocational Intermediate School	2003–2011	...
	AFD	Development of Three High-Performance VET Institutions ^a	2010–2014	€20 million
	ADB	Skills Enhancement Project ^a	2010–2015	\$70 million
	ADB/NDF/ÁFD/ JICA	Vocational and Technical Education Project	1999–2008	\$121 million
2. Capacity development (institutional development)	ECDF	Human Resources Development in Tourism	2004–2010	€10.8 million
	EU/ILO	Better Information for Creating Jobs and Developing Skills in Viet Nam	Dec 2007– Dec 2010	€11.7 million
	GTZ/KfW/Inwent	Promotion of Technical and Vocational Education and Training	2008–2011	\$2.4 million
	GTZ/Inwent	TVET System Advisory Services	2008–2011	€1.5 million
	GTZ/KfW/Inwent	Programme Vocational Training 2008	2010–2014	€13 million

continued on next page

Table continued

Sectors and Themes	Development Partner	Project Name	Duration	Amount
	JICA	Development of Technicians at Hanoi University of Industry	2010	...
	APEFE	Capacity Building for Vocational Teachers and Administrators	Jan 2009– Dec 2011	€446,000
	KOICA	Strengthening Assistance to Capacity to Build the National Skills Testing and Certification System	2011–2014	\$1.5 million
	ADB	Skills Enhancement Project ^a	2010–2015	\$70 million
3. Social development (human development)	ADB	Demand-Driven Skills Training for Poverty Reduction in the Cuu Long (Mekong) River Delta	2008–2012	\$1.3 million
4. Gender development (gender equity in capabilities)	ADB/NDF/ÁFD/ JICA	Vocational and Technical Education Project	1999–2008	\$121 million
	Government of Switzerland	Strengthening of Vocational Training Centers (nonformal)	1994–2008	\$9.7 million

... = data not available.

ADB = Asian Development Bank, AFD = Agence Française de Développement, APEFE = Association pour la Promotion de l'Éducation et de la Formation à l'Étranger, Danida = Danish International Development Agency, EC = European Commission, ECDF = Economic Cooperation Development Fund, EU = European Union, GTZ = German Technical Cooperation, ILO = International Labour Organization, Inwent = Capacity Building International, JICA = Japan International Cooperation Agency, KfW = Kreditanstalt für Wiederaufbau (German Reconstruction Credit Institute), KOICA = Korea International Cooperation Agency, NDF = Nordic Development Fund, TVET = technical and vocational education and training.

Source: ADB. 2010. Manila. Updated 2011.

Appendix 8

Legal Framework for Technical and Vocational Education and Training

A. Pertinent Laws

1. Apart from the 2006 Law on Vocational Training, summarized and analyzed below, two other laws bear mention for their implications on technical and vocational education and training (TVET): the Education and Training Law of 2005, and the Law on Gender Equality (2006). The latter law provides for women's and men's equality in education and training. It stipulates provisions for (i) gender equality in accessing and benefiting from the policies on education, training, and fostering professional skills; (ii) the establishment of proportions for men and women in training; (iii) assisting female laborers in rural areas in vocational training; (iv) supporting female public servants with children under 3 years old to participate in training, and priority to be given to women in the case of equal qualifications between women and men; and (v) establishing that it is a violation of the law to conduct career-oriented education, and compile and disseminate textbooks that contain gender bias. Other government incentives include, for instance, Decree No. 23/CP Policy, which reduces taxes for businesses that employ women.

B. 2006 Law on Vocational Training¹

2. The 2006 Law on Vocational Training regulates the organization, management, and operation of vocational training. The following section presents some highlights of the law.

3. **Objectives.** The objectives of vocational training are to train a “technical workforce in direct production and service provision who have practical capabilities compatible to their qualifications so that after graduation, trainees can find a job or be self-employed or acquire further education, meeting the national requirements for industrialization and modernization” (Article 4).

4. **Policies on vocational training.** The law explains government policies on vocational training, including:

- (i) Encouraging investment in the vocational training network and improving vocational training quality;
- (ii) Improving quality through renewed syllabuses, curricula, teaching methods, trainer development, modernized equipment, and scientific research;
- (iii) Developing some vocational training institutions to regional and world levels;

¹ Socialist Republic of Viet Nam, National Assembly; Law No. 76/2006/QH11: Law on Vocational Training.

- (iv) Paying due attention to disadvantaged areas; and supporting the following target groups: the poor, disabled, homeless, orphans, landless agricultural workers, ethnic minorities, and veterans;
 - (v) Giving priority to training for occupations required by the market but that are difficult to “socialize;” and
 - (vi) “Socializing”² (or privatizing) vocational training by encouraging stakeholders to set up vocational training institutions. “Vocational training institutions are equal and enjoy incentives in land, tax and credits” (Article 7).
5. **Levels of Vocational Training.** The Law stipulates three levels of vocational training:³
- (i) Primary-level training delivered through vocational training centers lasting from 3 months to 1 year. A primary certificate is awarded on successful completion.
 - (ii) Intermediate-level training delivered through vocational secondary schools. The duration varies by level of educational qualification: 3–4 years for lower secondary graduates, or 1–2 years for upper secondary graduates. The qualification awarded is a vocational school certificate.
 - (iii) Higher-level training given through vocational colleges. The duration varies by entering qualification: 2 years for vocational secondary school graduate, or 2–3 years for upper secondary graduates. The qualification awarded is a vocational college diploma (Article 6, and Articles 10–30).
6. In addition to full-time training, the law provides for “regular training” (i.e., short, continuous training) by vocational institutions “to be held in flexible time, venue and training methods to meet trainees’ needs, facilitating lifetime study by workers and improving technical skills” (Article 32).
7. **Flexible provision.** Higher-level institutions are also allowed to offer vocational training at lower levels. That is, registered universities can offer vocational college programs. Vocational colleges can deliver intermediate- and primary-level courses, and vocational secondary schools can deliver primary training programs. In particular, businesses, cooperatives, production and trading units, specialized schools, and other educational institutions are allowed to deliver primary training after registration (Article 15).
8. **Practical orientation.** The objectives of each level of training include recognition of the importance of “practical capabilities” (Articles 12, 17, and 24).

² “Socialization” means direct support from learners and their families. “Socialization” of TVET means investment and participation in TVET by all forces of the society, including enterprises, organizations, and individuals.

³ The three levels were first stipulated in the Education and Training Law of 2005.

9. **Teaching staff.** The law specifies the following minimum teaching qualifications divided between teachers of theory and practice:

Table A8. Vocational Training Levels and Qualifications in Viet Nam

Level and Institutions	Theory	Practice
Primary (vocational training center)	Vocational secondary school certificate	Vocational secondary school certificate, or be an artisan
Intermediate (vocational secondary school)	Bachelor's degree	Vocational college diploma, or be an artisan
Higher (vocational college)	Bachelor's degree	Vocational college diploma, or be an artisan

(Article 58)

10. The law states that “vocational trainers shall enjoy incentives for knowledge improvement and on remuneration (Article 62), and shall receive extra proceeds for teaching difficult, hazardous or dangerous vocations.”

11. **Quality control.** The law specifies the general conditions for setting up new centers, schools and colleges, namely: adequate premises, funds and equipment, and adequate numbers of qualified teachers and managers (Article 40). Chapter VIII (Articles 73–78) explains content and procedures for quality control. It emphasizes self-evaluation by vocational training institutions, but also recognizes the role of the “state vocation management office,” i.e., the Ministry of Labour–Invalids and Social Affairs and the General Directorate of Vocational Training. Institutions are required to provide information and documents for quality control to the state vocational management office.

12. The law also covers definition of occupational skills standards, responsibilities for managing the process of their development (Chapter 9, Articles 79–82), and workers’ rights to assessment of their “accumulated work skills.”

13. **Governance and management.** Managers of vocational training centers and vocational secondary schools are appointed at the provincial level. Managers of vocational colleges are appointed at the national level (Articles 45–46). The law does not specify any outside participation in the management of public vocational institutions (Article 47). However, it does state that curriculum appraisal committees at each public institution can include “employers who are knowledgeable of the vocation” (Article 49).

14. The state “shall unanimously control vocational training.” Ministries, in coordination with the “central state vocational management office,” carry out the state management of vocational training. People’s committees at all levels carry out state management, and are responsible for investment in the development of vocational training to meet the local requirements of the workforce (Article 84).

15. The state role in management of vocational training includes:

- (i) establishing strategies, plans, and policies on vocational training development;
- (ii) issuing legal documents;

- (iii) setting objectives, contents, methods, and curricula;
- (iv) setting standards for trainers and physical facilities, and statutes for selection of trainees and their certification;
- (v) implementing quality control;
- (vi) maintaining statistics and information on the organization and operation of vocational training;
- (vii) organizing and managing the training structure, and training of management and teaching staff;
- (viii) organizing and managing research on vocational training;
- (ix) managing technical cooperation;
- (x) mobilizing, managing, and using resources for the development of vocational training; and
- (xi) inspecting the observation of laws and regulations on vocational training (Article 83).

16. **Financing.** Training institutions are allowed to set up businesses and carry out production, trading, and servicing (Article 50, 2, d). Government policy is to “grant or lease land and premises, provide credit incentives, reduce or exempt tax for vocational training centers; products produced by training activities shall be exempted from tax” (Article 53, 1 on Incentives).

17. The law allows for the establishment of vocational training funds to support trainees, which can be financed by businesses, organizations, and individuals, as well as the state budget. Such funds are nonprofit and exempted from tax (Article 86).

18. **Enterprises.** Businesses are allowed to set up training institutions, to provide vocational training for their workers, and to set up joint ventures with vocational training institutions. They are invited to participate in curricula and syllabus appraisal committees, to participate in establishing skills standards, and in assessing trainee results. Expenditures of their training institutions that directly serve the business are deductible from taxable revenue, as are expenses on training workers employed by the firm (Article 55).

C. Assessment of the Law

19. The 2006 Law on Vocational Training is exceptionally well conceived to steer future development of the system of skills development.

20. Some of the strengths are as follows.

- (i) The policy framework, not normally presented in a law, stresses quality (paragraph 4, (i)–(iii)), equity (attention to disadvantaged areas and groups), government role in supporting occupations difficult for private delivery, and importance of private training delivery.
- (ii) The law increases the flexibility in training provision, moving from two types (short-term and long-term training) to three distinct levels, adding postsecondary college level, plus short continuous training.

- (iii) Quality control emphasizes self-assessment by training institutions.
 - (iv) Training objectives stress acquisition of “practical capacities.”
 - (v) Financial incentives—training institutions are allowed to generate their own income tax-free.
 - (vi) Private training provision—all vocational training institutions are considered equal, both public and private, and are eligible for financial incentives such as land, premises, and credit.
 - (vii) Expenses for enterprise-based training are deductible from taxable revenue of firms.
 - (viii) The law defines a proper role for state management in policy and standards development, quality control, and monitoring.
21. On balance, the law is exceptionally strong. Still, the law has some areas that could be improved.
- (i) The policy framework does not place adequate stress on the importance of enterprise-based training.
 - (ii) The criteria for quality control only specify inputs, not outputs.
 - (iii) Too much emphasis is placed on educational qualifications of teaching staff, and not enough on practical competencies.
 - (iv) No external representatives are specified for institutional governance, especially employers and enterprise representatives.

Appendix 9

Socio-Economic Development Plan, 2011–2015

1. The following section excerpts some of the technical and vocation education and training (TVET) aspects of the government's draft Socio-Economic Development Plan (SEDP), 2011–2015 (October 2011).

2. **Retrospective.** The retrospective analysis (taken from the May 2010 draft) indicates that the quality of education is still low compared with development requirements, and that education and training are not well linked to employment.

3. In terms of achievements, the SEDP states that “vocational training schools have been established in almost all large inhabited areas, regions, provinces.¹ Enrollment in technical training grew at an annual of 13.6% per annum compared with 16.3% for colleges and universities. In total about 7.7 million people undertook technical and vocational training in 2006–2010. After graduation, about 80% of pupils found work that corresponded to their training. The graduates of technical training in telecommunications, oil, and gas reached international standards and could replace expatriate workers. The proportion of the labor force having received technical vocational training increased to 40% of total workers in the economy in 2010, attaining the planned target” (p. 37).

4. Beside the positive results, education and training have many limitations and weaknesses. Vocational training activities have not met the demands of the labor market. They have also failed to mobilize enterprises, industrial zones, and trade villages to join vocational training. The proportion of short-term and primary vocational training (under 3 months) makes up over 80%; hence it is impossible to supply high-skill workers (pp. 37–38).

5. **Background: the world and domestic situation.** The SEDP points out (Part II, pp. 1–2) that Viet Nam is entering a new development period, where the world has changed rapidly and unpredictably. It warns that the world economy in the future contains many difficulties, with slower world and regional growth rates. Meanwhile, other issues related to energy security, food security, climate change, etc., will directly affect the stability and development of the world economy. The SEDP notes that globalization continues to develop with positive and negative effects, as well as opportunities and challenges. This forces countries to adopt policies and coordinate their responses.

6. Developing countries will have higher growth rates than in developed countries, as well as exceeding the overall world growth rate. The Asia and Pacific region, including Southeast Asia, will continue to development more dynamically, and evolve into diverse

¹ By March 2009, the country had 2,270 vocational training institutes: 93 vocational colleges; 245 professional training schools; 757 vocational centers; and more than 1,000 manufacture, business, and services units in which vocational training is carried out.

forms of cooperation. However, some potentially destabilizing factors still exist, including competition for resources, energy, markets, technology, capital resources, and quality human resources.

7. While the supply of official development assistance in the world is declining due to the high public debt levels of some developed countries, capital flows of foreign direct investment are benefiting the East Asian region, and can also benefit Viet Nam if it captures the opportunity, and designs proper institutions. Some industries are moving from the People's Republic of China, and could relocate to Viet Nam. The availability of foreign investment for public–private partnerships could also help Viet Nam develop a more modern infrastructure system.

8. Still, there are many challenges facing Viet Nam domestically, including high inflation, a slowing economic growth rate (to reach 6%–6.5% in 2012), and an unsteady macroeconomic balance. Bottlenecks to growth consist of poor market economy institutions, low quality human resources, and inadequate infrastructure.

A. Overall Objective of the Socio-Economic Development Plan

9. The overall objective of the SEDP is to (i) prioritize inflation curbing, and stabilize the macro-economy; (ii) maintain reasonable growth associated with economic restructuring, and develop innovative growth models toward improving quality, efficiency, and competitiveness; (iii) ensure welfare and social security, and improve the material and spiritual lives of the people; (iv) protect environmental resources, and actively respond to climate change; (v) strengthen international integration, and maintain political stability; and (vi) create a foundation for Viet Nam to become an industrialized country by 2020 (p. 6).

10. It is expected that the world economy will recover, but the growth rate will be lower than before the financial crisis. In this context, it is expected that inflation will be controlled within Viet Nam, macroeconomic balance will become stable, and economic restructuring will be strengthened. The average growth rate from 2011–2015 is expected to increase by about 7% per annum. Agriculture, forestry, and fisheries will increase by 2.6%; industry and construction by 7.7%; and services by 8%.

B. Specific Tasks

11. The SEDP focuses on three major breakthroughs: (i) complete the development of a market economy with socialist-oriented institutions, (ii) rapidly develop human resources, and (iii) construct comprehensive infrastructure systems. More specifically:

- (i) Complete the development of the market economy with socialist-oriented institutions, focusing on a fair competitive environment and administrative reform. Ensure fair competition and transparently among businesses of all sectors, reform planning, and plan and implement social policies. Establish uniform and the smooth

operation of different types of markets (goods, finance, securities, real estate, labor, science, and technology).

- (ii) Rapidly develop human resources, especially high-quality human resources, and focus on innovating national education. Concentrate on training high-quality human resources, train experts in various fields, especially new and modern business lines, with particular emphasis on improving the quality of teachers and scientific researchers, and train talented people in key areas such as agriculture, electricity, oil and gas, mechanical engineering, material production, agro-industry and fisheries processing, software and hardware development, telecommunications, electronics, and marine transport (p. 11).
- (iii) Construct a comprehensive infrastructure system focusing on transport systems, and major urban infrastructure.

C. Education and Training

1. Objectives and Targets

12. Enhancing high-quality human resources to meet the requirements of social and economic development is one of the three arms of the Socio-Economic Development Strategy, 2001–2015 and the SEDP 2011–2015. The quality of human resources must be enhanced as this is one of the major, long-lasting, and most competitive aspects of Viet Nam. The main targets are to ensure that

- (i) 95% of all children aged 5 attend schools for two sessions per day by 2015, and that 99% of children will attend primary school at the right age;
- (ii) new university and college enrollments will increase by 6%–7% per year on average, while new enrollments in vocational colleges and vocational schools will increase by 8% per annum; and
- (iii) the percentage of trained workers by 2015 will be 55% of the workforce.

2. Means to Achieve the Objectives

a. General

- (i) Reform educational management, strengthen the decentralization of education management; and improve cooperation between line ministries, sectors, and provinces in education management;
- (ii) Implement the master plan for human resources development 2011–2020;
- (iii) Assure that all children of school age go to preschool, and strengthen universal primary and secondary education at the right age;
- (iv) Reform teaching methods and learning assessment for all teachers, promote the use of information and communication technology in teaching and learning, revise all programs and textbooks in primary and secondary education, and make education more practical and stimulating; and

- (v) Review the master plan for colleges, universities, and vocational training institutions for the whole country; improve teaching methods; and link the development of educational institutions to training quality.

b. Vocational Training

- (i) Expand the network of vocational training institutions, and concentrate on vocational training in sectors that use high technology, in order to transfer the labor structure to high-level labor;
- (ii) Develop vocational training in enterprises;
- (iii) Diversify vocational training forms and methods to be coherent with learning subjects and production requirements, concentrating upon developing vocational training for rural labor to transform the labor structure to meet the requirements of industrialization of the rural sector;
- (iv) Strongly focus on using international advanced training programs to meet labor requirements that are based on professional skills standards or professional analysis;
- (v) Update new technology and technical knowledge in production, business, and services;
- (vi) Renovate and develop training programs for transfer between different levels of vocational training and into other training levels in the national education system;
- (vii) Develop good teachers and good education managers, with modern content, methods and tools; and reform the teacher-training system;
- (viii) Establish an internal control system on education quality and vocational training quality. Regulate public and nonpublic institutions, and disseminate the results. Classify and rank general education and vocational training institutions.

D. Labor and Jobs

13. **Objectives.** Promote the shift in labor structure and create more jobs to meet the requirements of the country's industrialization and modernization. From 2011 to 2015, 8 million new jobs will be created for workers, 45,000 of whom will work overseas, reducing the unemployment rate among urban workers to 4% by 2015. The economic structure in 2015 is expected to consist of agriculture, forestry, and fisheries (18%); industry and construction (42%); and services (40%). It is further expected that the percentage of trained workers in 2015 will be 55% of the total workforce.

14. **Means.** Improving and supplementing institutions and policies to create more jobs, especially focusing on policies on improvement of workers' professional skills; issuing policies which encourage the participation of businesses and the private sector in vocational training through priorities over taxation, teacher training, and infrastructure investment, etc. (pp. 100–101).

E. Assessment

15. The SEDP gives attention to TVET, but it is not clear what priority it is assigned compared with other education subsectors and other economic sectors. An important priority within TVET is supplying high-level skills needed for international competitiveness. In fact, one of the objectives is to make high-quality human resources one of Viet Nam's main and long-term competitive advantages. The principal quantitative target seems to be the proportion of the workforce that has been trained, to increase it from 40% of the labor force in 2010 to 55% by 2015. However, this target does require more detailed explanation, by defining the type of training, the sector/occupational focus, the training program length, the standards to be reached, and the training and employment objectives.

Appendix 10

Ministry of Labour–Invalids and Social Affairs: Vocational Training Development Strategy, 2011–2020

A. General Objective

1. “By 2020, the vocational training sector will supply sufficient and good-quality technical workers for direct production and services, who have high qualifications, are skilled, responsive to occupational ethics, personality, professional capability and physical health requirements for economic sectors and zones, especially for key economic sectors and labor export. Expand vocational training scope for laborers, effectively serve structural change in the agricultural and rural labor force, create more high-paid employment, improve living standards for laborers, universalize essential vocational training for youth” (p. 10).

B. Specific Objectives

- (i) Up to 2020, about 27.5 million people will receive vocational training, including 10 million rural laborers; the proportion of people receiving vocational training will increase to 55%, of which 28%–30% will be at intermediate level or higher; about 90% of vocational training graduates will get jobs, and 70% will find relevant jobs for which they have been trained.
- (ii) The number of vocational training institutions will increase nationwide.
- (iii) The strategy seeks to invest in schools that have adequate quality assurance conditions, develop some training occupations up to standards of regional and international countries, and pilot development of curricula for applied engineers. More specifically, the strategy aims to apply curriculum of developed countries for 30 training occupations at regional standards, and 20 training occupations at world standards; 100% of training programs at intermediate level and diploma level will have standard lists of training equipment (p. 11).
- (iv) One hundred percent of vocational colleges, vocational secondary schools, vocational training centers, and training programs at diploma and intermediate level will be accredited; 100% of common occupations will have skill standards and tests for national skills assessment. National skills assessment and certification will be conducted for 8 million people.
- (v) One hundred percent of disadvantaged people or special groups who are interested in vocational training will be financially supported.
- (vi) The number of students attending nonpublic institutions will account for 60% of total students, of which about one-third will be trained on production lines in enterprises.

Table A10.1 Number of Vocational Training Institutions by Level, 2008–2020

	2008	2020	Increase
Vocational colleges	92	230	138
Vocational secondary schools	214	310	96
Vocational training centers	684	1,050	366

Source: Ministry of Labour–Invalids and Social Affairs.

C. Strategic Tasks

2. During 2011–2020, the vocational training subsector will “have to fulfill the following two strategic tasks:”

- (i) Train a high-level technical workforce for direct production and services. Quality training will be delivered to serve economic sectors and zones, especially for key economic sectors, to effectively support the integration and industrialization of the country.
- (ii) The scale of vocational training will be expanded for rural laborers, to accelerate structural change in the economy, especially agriculture, and changes in the structure of rural labor; and to change, create more employment, increase income, reduce poverty steadily, and ensure social security (p. 11).

D. Means to Achieve the Objectives¹

3. **Improve awareness of the value and importance of vocational training.** This involves communication with society about the role of vocational training in job placement, with the party and state to prioritize investment in vocational training; raising awareness among enterprises about training benefits; and provision of career guidance among members of mass organizations (pp. 11–12).

4. **Expand the scale and structure of training and popularize vocational training for youth.**

- (i) Develop a network of vocational training institutions in three directions: high-quality vocational colleges and secondary schools capable of delivering to regional and international standards; vocational colleges and secondary schools capable of meeting the direct demand for technical workers; and district-level vocational training centers to generate employment, increase income, and raise living standards, especially for rural workers, demobilized soldiers, and ethnic minorities (pp. 12–13).
- (ii) Establish gradually a comprehensive vocational training system, including state-owned vocational training institutions, mainly large and modern vocational colleges and secondary schools, to deliver high-tech occupations, and specific occupations in demand requiring large investments; enterprise-based vocational

¹ Translated as “solutions.”

- training institutions to deliver in-house vocational training, to introduce and update production technologies; and private vocational training institutions to meet labor market demand and employment needs of laborers.
- (iii) Diversify forms and methods of vocational training (formal, continuing, enterprise-based, occupational village-based, etc.). Give priority to expanding training orders, or training contracts between enterprises and vocational training institutions. “Meet training demand for everybody, especially rural laborers, strive for popularization of vocational training for youth” (pp. 12–13).
5. **Enhance quality assurance to achieve a breakthrough in training of technical workers.** The means start with a general urging to “further innovate vocational objectives, contents, curricula and teaching methods with a view to improving competencies for learners” (p. 13). Other means include
- (i) Develop facilities through comprehensive investment, including developing some modern vocational colleges and secondary schools to focus on key high-tech occupations to regional and international standards.
 - (ii) Invest intensively in developing teaching staff who have qualifications and skills at regional and international standards.
 - (iii) Convert honors students, people with postgraduate qualifications, and experts in production and business, into teachers by providing them with training on vocational teaching methodologies.
 - (iv) Develop curricula to enable articulation among various levels, including from vocational college to university.
 - (v) Implement accreditation; train and develop a pool of quality assessors, implement skills testing for workers based on national occupational skills standards, and establish a network of national skills testing centers.
 - (vi) Strengthen inspection and supervision of vocational training, focusing on professional activities (pp. 13–14).
6. **Develop vocational training standards.**
- (i) Develop standards for vocational training including occupational skills standards; vocational teacher standards (at the regional and international levels), and facilities and equipment standards, commensurate with those in production and business units. Invest comprehensively in facilities and equipment to meet those standards.
 - (ii) Broadly apply information and communication technologies in vocational training, and enhance training in technical English.
 - (iii) Strengthen partnerships between vocational training institutions and other training institutions in the national education system to improve efficiency and effectiveness of training.
 - (iv) Apply quality control and management to vocational training, e.g., accreditation and developing test bank for occupational skills. Encourage the use of occupational skills from developed countries (pp. 14–15).

7. **Enable enterprises to become important stakeholders in vocational training.**
 - (i) “Develop mechanisms and policies to enable enterprises to establish vocational training schools; partner with vocational training schools in training and job placement; and accept students for practical training at enterprises. Develop models, forms and methods for partnership and linkage between enterprises and training institutions to improve employability of trainees after graduation. Develop enterprise-based vocational training institutions to deliver training for enterprises and society; encourage development of training at enterprise’s production line.
 - (ii) Mobilize enterprises to directly participate in vocational training activities, such as: development of training objectives, contents and methodology; development of occupational skill standards; involvement in assessing occupational skills of workers; preparation of vocational training strategy and plan; and membership of the National Vocational Training Council. Encourage enterprises to contribute to training costs once they employ trained laborers.
 - (iii) Supplement and finalize relevant policies (school investment and development policy, tax policy, and land acquisition policy) to promote the role of enterprises in vocational training” (pp. 17–18).

8. **Strengthen resource mobilization (socialization²) for vocational training.**
 - (i) Mobilize foreign investment and cooperation (and include teachers from nonpublic vocational training institutions as beneficiaries of foreign assistance projects).
 - (ii) Develop mechanisms, policies, and incentives to maximize enterprise participation; support all organizations and individuals to establish vocational training institutions (access to credit, grant or lease land for construction of schools, tax exemption or rebate, etc.).
 - (iii) Create equality between public and nonpublic vocational training institutions. Vocational training institutions offering high-quality training are allowed to charge tuition fees close to market rate to cover costs; the state supports special and disadvantaged groups to attend relevant training programs.

9. **Strengthen management of vocational training.**
 - (i) Decentralize state management functions to ministries, sectors, and localities to raise responsibilities, accountabilities, proactiveness, and creativeness of all levels.
 - (ii) Create autonomy and accountability for schools in training, organization, staffing, and finance. Establish transparency, democracy, rights, and responsibilities of principals and school councils (public) and boards of directors (nonpublic).
 - (iii) Improve the management capacity of state management agencies in vocational training at all levels.

² “Socialization” means direct support from learners and their families.

- (iv) Strengthen the roles of stakeholders in monitoring training quality. Establish the National Vocational Training Council composed of state agencies, experts, enterprises, employers, employees, and other stakeholders.
10. **Ensure resources for development of vocational training.**
- (i) Increase the investment share for vocational training in the state budget for education and training (because investment in vocational training is investment for sustainable development, and is an obligation of the current generation to future generations).
 - (ii) Focus the state budget on key vocational training institutions and key occupations; economically disadvantaged areas and people (so as to narrow the gap of beneficiaries of vocational training services among regions, areas, and income groups); teacher training and upgrading; and curricula development.
 - (iii) Attract international resources to vocational training, through projects and programs.
 - (iv) Mobilize resources from enterprises, organizations, and individuals, both domestically and overseas.
11. **Promote international cooperation in vocational training.**
- (i) Expand study exchanges with developed countries.
 - (ii) Encourage vocational training institutions to cooperate with counterparts in developed countries, and to exchange trainers, curricula, and methods.
 - (ii) Offer convenient conditions to investors and internal reputable institutions to establish training in Viet Nam.
 - (iv) Cooperate in studies and research on vocational training.
12. **Implementation.** The Ministry of Labour–Invalids and Social Affairs (MOLISA) will cooperate with line ministries and sectors to translate the strategy into annual and 5-year plans; guide and monitor line ministries, sectors, and local authorities in implementing the strategy; identify shortcomings in implementation and propose adjustments; and supervise implementation of the strategy. Line ministries and local authorities will be responsible for implementation. The Ministry of Planning and Investment will allocate the budget for implementation of the strategy.
13. **Financing.** Financing for the strategy will come from the state budget, enterprises, and international support. The financing will be defined and channeled through specific programs.

E. Assessment of the Strategy

14. The strategy has a great deal to recommend it. It gives first priority to the development of high-tech training, where the economic payoff is likely to be high. Still, it does not ignore the need to provide skills development for underprivileged regions and people. These are the two main strategic tasks. It accords important roles for enterprise-based training and private provision in supplying the skills needed for economic growth.

15. There is a strong stress on quality, and on reaching regional and international standards at least in some key institutions. The strategy calls for not just an expansion of training, but for a diversification of modes of delivery, including contract training. Both the targets (60% of enrollment in nonpublic institutions) and the means emphasize private training provision.
16. In addition, the strategy
- (i) specifies three types of providers by ownership—state-owned vocational training institutions, enterprise-based vocational training institutions, and private vocational training institutions (Means No. 2);
 - (ii) calls for diversification of training provision, and assigns priority to expanding “training orders” or contracts between enterprises and vocational training institutions (No. 2);
 - (iii) provides a menu of measures to promote quality assurance, including accreditation, occupational standards, and national testing (Means No. 4);
 - (iv) asks for stronger partnerships among training institutions (No. 4), and cooperation with counterparts in developed countries (No. 9), i.e., “twinning;”
 - (v) devotes one full section to enterprise-based training (No. 5), including encouraging development of training in the production line, and enterprise direct participation in defining training content, in setting skills standards, and in assessing worker skills;
 - (vi) seeks equality between public and nonpublic vocational training institutions;
 - (vii) promotes cost-sharing in vocational training, allowing high-quality vocational training institutions to charge (near) market rates, and leveling the playing field between public and private providers (No. 6);
 - (viii) provides subsidies for disadvantaged groups (No. 6), and makes a priority of support to disadvantaged regions to reduce disparities in access to vocational training;
 - (ix) calls for greater decentralization and autonomy for vocational training institutions along with greater accountability (No. 7), which could go a long way to stimulating linkages to employment, raising effectiveness and efficiency in the delivery and use of resources, innovation, and creativity;
 - (x) suggests that the role of nonstate stakeholders be strengthened in various stages of the training process; and
 - (xi) explicitly articulates a circumscribed role of the state in vocational training—in high technology training (which tends to be costly) and in provision of training opportunities for the disadvantaged, plus curricula development and training (No. 8). (The implication is that private training can cover lower-cost training, and the state should not compete with that.)
17. However, the strategy could be strengthened in several areas.
- (i) It tends to be vague about specific means to achieve objectives.
 - (ii) The strategy is presented without resource constraints.
 - (iii) Its quantitative targets may be considered too ambitious. This includes the objective to “universalize” vocational training for youth (No. 10), and to “meet training demand for everyone” (No. 13). The strategy calls for an increase in the number of vocational

colleges (to 190 in 2015 and to 230 in 2020), an increase in vocational secondary schools (to 300 in 2015 and 400 in 2020), and an increase in vocational training centers (to 920 in 2015 and 960 in 2020). These targets may not be achievable.

- (iv) There also appears to be too much emphasis on school-based provision and not enough emphasis on enterprise-based training.
- (v) The recommendations on enterprise-based training are exceptionally relevant, (Means No. 5) but could stipulate more specific interventions required, rather than stating the intention to “develop models, forms and methods for partnership,” and “develop mechanisms, policies and incentives to maximize enterprise participation” (No. 6).
- (vi) The recommendation to establish the National Vocational Training Council is not likely to be effective, unless the council has a major representation by enterprises and employers, and unless it has real authority to make decisions.

18. Apart from some ambitious and possibly unrealistic quantitative targets, the strategy provides a strong, forward-looking basis for further development of the vocational training system.

Appendix 11

National Rural Training Program

A. Principles

1. The Vocational Training for Rural Workers up to 2020 (27 November 2009) states that

“vocational training for rural workers [aims] to improve the quality of rural labor in meeting the requirements of industrialization and modernization of the agriculture sector and rural areas . . . vocational training is the right and obligation of rural workers in order to create jobs, shift jobs, increase income and improve the quality of life” (Article 1.1.1).

There is a need to shift vocational training for rural workers from a supply-driven approach to a demand-driven approach, and to link training to socioeconomic development strategies and road maps nationally, regionally, sectorally, and for each locality. Further, there is a need to innovate and improve the quality and efficiency of vocational training, and to strengthen the training and upgrading of civil servants at the village level in leadership, management, and professional knowledge.

B. Objectives

2. The overall objectives are both quantitative and qualitative. First, the program seeks to provide vocational training for about an average of about 1 million rural workers per year, including training and upgrading for 100,000 village civil servants. Second, it aims to improve the quality and efficiency of vocational training to generate employment, increase incomes, contribute to restructuring the rural economy and labor force, and support the industrialization and modernization of agriculture and rural areas. Third, it would develop a pool of qualified village civil servants to support the industrialization and modernization of agriculture and rural areas (Article 1.1.2).

3. The following table shows the specific objectives for various time segments.

Table A11.1. Specific Objectives for the Rural Training Program

Category	2009–2010	2011–2015	2016–2020
Rural laborers trained	800,000*	4,700,000	5,500,000
Of which: agriculture		1,600,000	1,400,000
nonagriculture		3,100,000	4,100,000
Of which: training orders	12,000	120,000	380,000
Employment rate after training	80%	70%	80%
Village civil servants trained		500,000	500,000
Estimated costs: total (D billion)	1,894	11,363	12,723
Of which: rural workers	1,830	10,769	12,096
village civil servants	65	594	627

*Also, piloted vocational training models covering 18,000 rural workers, in four groups (mountainous areas, plains, midlands, and fisheries), and 50 training programs.

Source: Rural Training Program.

4. **Target beneficiaries.** Priority for the vocational training is assigned to veterans, poor households, ethnic minorities, the landless, and the disabled (II.1).

5. Policies spell out financial support for various categories of rural laborers, including access to loans at subsidized interest. Rural workers completing training will be eligible to borrow money for self-employment from the National Employment Fund. The program also specifies remuneration and other financial incentives for teachers and trainers, and allocations to various types of training institutions by locations.

C. Means and Activities

6. **Financing.** Local governments are expected to allocate their own budgets to implement financial support for rural trainees. The central government will cover the remaining activities. Some resource mobilization is expected from international organizations, vocational training institutions, enterprises, and communities. Enterprises can deduct such expenditures from gross profits for tax purposes. The Ministry of Agriculture and Rural Development is to pilot vocational training vouchers in agricultural training programs.

7. **Implementation.** The responsibilities of ministries are specified. The Ministry of Labour–Invalids and Social Affairs takes the leading role, supported by ministries of Agriculture and Rural Development, Home Affairs, Education and Training (for career-oriented guidance on vocational training in lower and upper secondary schools), Planning and Investment, and Finance, Trade and Industry, and Information and Communications. Local governments are responsible for implementing vocational training within their jurisdictions, including preparation of annual implementation plans.

Table A11.2. Rural Training Program: Activities, Content, and Allocations

Activity	Content	Amount (D billion)
Vocational Training for Rural Workers		
1. Publicity and counseling	Mass media and publicity about vocational training	125.0
2. Surveys and forecasts of training needs	Determining training demands from enterprises, economic sectors, and labor market; determining list of training programs	15.0
3. Piloting rural vocational training models	Covering 18,000 rural workers, in four groups (mountainous areas, plains, midlands, and fisheries), and 50 training programs	54.5
4. Upgrading facilities and equipment of public vocational training institutions	Specifies types of institutions by location	3,905.0
5. Curricula and materials development	Preparation of 500 vocational curricula and learning materials	90.0
6. Teacher and managerial staff development	Development and delivery of programs for 7,500 new teachers and upgrading of 12,000 people in management skills	76.5
7. Trainee support	Short-term training for 6.5 million rural workers; training orders for 512,000 laborers	20,308.2
8. Monitoring and evaluation		120.0
Subtotal		24,694.2
Training/Upgrading Village Civil Servants		
1. Determine training needs	Surveys and development of list of training programs	4.0
2. Training programs and contents	Development of standards and curricula	6.0
3. Teaching staff	Development of standards, norms, and incentives; provision of upgrading programs	75.0
4. Norms and policies for trainees		1.0
5. Training provision	Delivery of training and upgrading programs for about 1.2 million village civil servants	1,200.0
Subtotal		1,286.0
Total		25,980.2

Source: Excerpted from text of the Rural Training Program.

D. Assessment of the Program

8. The Rural Training Program is a tangible expression of the overall priority accorded to assisting disadvantaged peoples and regions (as stated in the Vocational Training Law of 2006 and the Vocational Training Strategy). The proposals have been costed out, and include both capital and recurrent costs. The amounts to be invested are substantial—indicating the high priority given to these proposals by the government. Other strong points include provision of financial incentives for rural workers to attend, and allowance for follow-up credit by which graduates can establish self-employment.

9. However, the proposal could be strengthened in the following respects:
- (i) There is insufficient analysis of the need and case for rural training. The purposes of the training are unclear. Market surveys are indicated and provided with some allocation, but the surveys are more national and the amount budgeted seems insufficient. Local market surveys are essential to identify opportunities for income generation.
 - (ii) The proposal makes no reference to the considerable international literature on methods and approaches to rural training. The approach could benefit from analysis of international experiences.
 - (iii) The sources of financing to cover the costs are not indicated.
 - (iv) It is not clear whether provincial governments will accord the program priority status and allocate required funds.
 - (v) Allocations per institution for facilities and equipment have been set before training programs, and equipment requirements have been identified.

Appendix 12

Assessment of the Technical and Vocational Education and Training System

Criterion	Strengths	Weaknesses
1. External efficiency	<ol style="list-style-type: none"> 1. Strategy emphasizes better linkage between training institutions and enterprises 2. Skills standards being developed with employer participation and ratification 3. Curricula frameworks developed 4. LMI initiatives 5. Good employment rates for VTEP graduates 	<ol style="list-style-type: none"> 1. Supply driven to meet aggregate targets of the % of LF training or to train 1 million farmers. Also, the financing system (income from tuition) places the incentive on increasing enrollments, regardless of the job market (another example is establishment of the Commission on Skill-Driven Training, which ironically only includes members from government) 2. Not enough flexibility for training institutions to include content they know is relevant to the local labor market 3. No outside stakeholders in institutional governance 4. Low level of EBT, few government incentives to stimulate EBT 5. Wrong concept of EBT-SOE schools 6. Relatively low interest by enterprises in participating in guiding TVET 7. Some inflexibility in the length of training 8. Some recently developed curricula do not correspond to market requirements 9. Overspecialization of schools in the long run will not correspond to multiplicity of market requirements
2. Equity	<ol style="list-style-type: none"> 1. Priority attention given to disadvantaged regions and people in the strategy and plans 2. Success in VTEP in raising female enrollment and in female graduates obtaining jobs at almost the same salary levels as males 3. Success in providing access to vocational training in rural districts 	<ol style="list-style-type: none"> 1. Lack of coverage for females 2. Lack of articulation between the two TVET systems 3. Fee policies discriminate against the poor, and the support policies (tuition reduction or elimination) are not working well 4. "Includes a vocational training component that aims to provide training for 150,000 poor people at free or reduced fees. By 2009, only 2% out of the 75% households which identified training needs had benefited from vocational training." (RRP SEP, App. 9, p. 53) 5. Need study on beneficiary incidence

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Table continued

Criterion	Strengths	Weaknesses
3. Organizational and management effectiveness	<ol style="list-style-type: none"> 1. Forward-looking Vocational Training Law of 2006 2. Good draft Vocational Training Strategy 2020 3. Institutions enjoy relatively high degree of autonomy 4. Introduction of college level in 2006 reflects increasingly higher skill demands of the market 5. "Training linkage" (outsourcing training) shows flexibility 6. Organizational development of GDVT 	<ol style="list-style-type: none"> 1. Confusion by employers in the dual structure 2. Fragmentation, complexity of institutional ownership, and governance complicates policy implementation, including efforts to improve effectiveness of skills acquisition 3. Lack of national statistics as a basis for planning and M&E of subsector progress. With present statistics there is no clear picture at national or provincial/city level. It is not possible to know what is going on in the TVET system. 4. Partly this is a reflection of the fragmentation of ownership. Some institutions report to center, some to the province, and within that to different sectoral departments. 5. Duplication of functions between MOET and MOLISA (e.g., curriculum development, accreditation) 6. Separate plans and strategies for MOET and MOLISA skills development. Is integration lacking? 7. No guidelines for registration of private training providers. 8. Need for better coordination of donors in TVET 9. As a consequence of the organizational fragmentation, no one has an overview of all skills development (although MPI is preparing an HRD strategy to 2020)
4. Quality of training	<ol style="list-style-type: none"> 1. Long tradition of traditional craftsmanship in villages 2. Standards developed for occupational levels 3. Many high-quality institutions operate in Viet Nam, including those using external standards (e.g., City & guilds) and assessors 4. Accreditation being introduced (but two systems) 5. Development frameworks completed 100% curricula, allowing for some local content (30%) 6. Modular training introduced; teachers deliver both theory and practice 7. Teacher upgrading done through external assistance projects 	<ol style="list-style-type: none"> 1. Extremely wide variance in quality (i.e., knowledge and skill attainments) of graduates 2. Lack of competency output standards 3. Assessment process. Lack of objective evaluation of trainee competencies. Teachers assess their own students. Certificates are virtually meaningless. 4. Curricula development has been incestuous, which results in out of date programs 5. Teachers reportedly lack practical skills, especially industrial experience 6. Lack of up-to-date equipment 7. The financing system (tuition but limited state funds) creates incentive to enroll more without commensurate increases in equipment. The result was overcrowding in workshops (20–30 students watching workshop demonstrations rather than doing). 8. High teacher turnover owing to weak salary structure; low teacher supply owing to status/salary issues and distortion of enrollments (free tuition, but no requirement to join the teacher force) 9. Irregular use of internships 10. No guidelines for registration of private training providers. 11. Registration. Pressure to approve, no follow-up after initial registration.

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Table continued

Criterion	Strengths	Weaknesses
5. Finance and internal efficiency	<ol style="list-style-type: none"> 1. Financing: 2. Cost-sharing is growing in TVET institutions; many institutions virtually self-sufficient in operating costs 3. “Socialization” encourages private training providers; not using state funds 4. Experimentation with contract training (“training orders”) 5. Overall investment in TVET has increased (to 7.5% of budget in 2008) 6. PTP has increased considerably 7. Student flows 8. Relatively low dropout and relatively high completion rates 	<ol style="list-style-type: none"> 1. Policies to support private training providers have not been implemented fully 2. Outdated norms used for public budgets, and never adequately developed for vocational training (same as general secondary) 3. Ceilings on tuition, in some cases, constrain development of TVET institutions 4. Lack of enterprise contributions to TVET 5. Training for some occupations takes too long. 6. Duplications from dual system in curriculum development, teaching materials 7. Vertical progression in TVET could waste public funds (i.e., 2–3 years intermediate followed by 2–3 years college before entering labor force) 8. Low teaching loads (hours per week) 9. Study needed on EBT and training levy

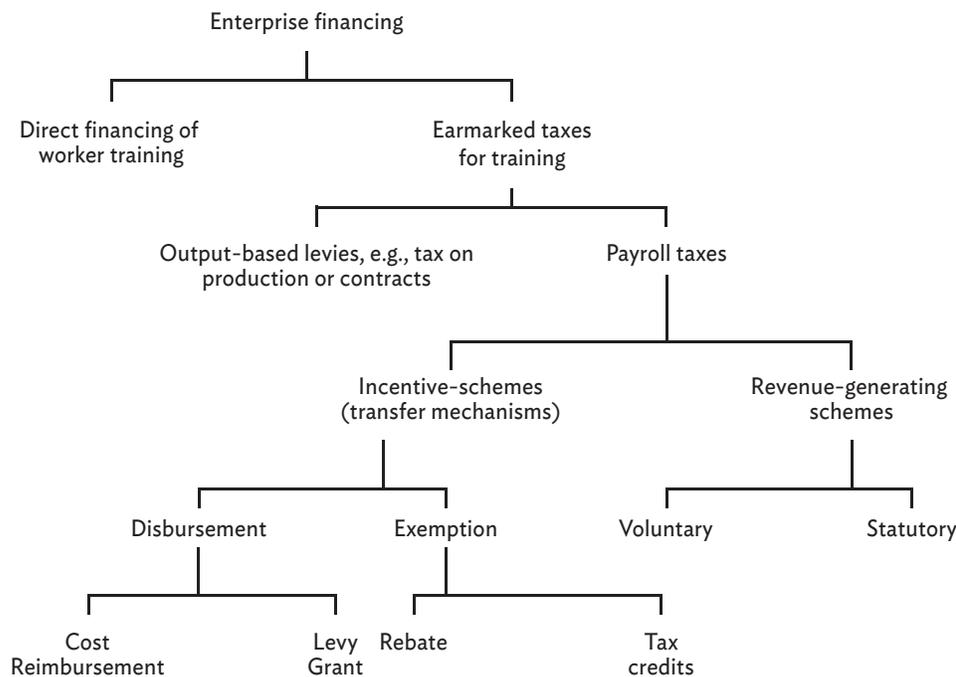
EBT = enterprise-based training, GDVT = General Directorate of Vocational Training, HRD = human resources development, LF = labor force, LMI = labor market information, MOET = Ministry of Education and Training, MOLISA = Ministry of Labour-Invalids and Social Affairs, MPI = Ministry of Planning and Investment, M&E = monitoring and evaluation, PTP = private training provider or provision, RRP = report and recommendation of the President, SEP = Skills Enhancement Project, SOE = state-owned enterprise, TVET = technical and vocational education and training, VTEP = Vocational and Technical Education Project.

Appendix 13

Types of Levy Financing

1. Within the context of enterprise training, the following diagram depicts the various types of levy-financed training funds.
2. Payroll training levies are basically of two types: revenue generating levies, and incentive schemes. Incentive schemes, in turn, are made up of three types: cost reimbursement, levy grant, and levy exemption or rebate. However, distinctions among these types of training levies should not be pushed too far. Few pure models exist. They also tend to change over time. For example, training levies that started as purely revenue-generating schemes have become mixed with the inclusion of elements of levy grant or rebate. Also, funds tend toward multiple uses.

Figure A13. Types of Levy Financing



Source: R. Johanson. 2009. A Review of National Training Funds. *SP Discussion Paper*. No. 0922. Washington, DC: World Bank.

Table A13. Advantages and Limitations of Enterprise Training Incentive Schemes by Type

Type of Incentive Scheme	Advantages	Disadvantages
Cost-Reimbursement	<ul style="list-style-type: none"> • Supports industry training initiatives • Leads to improvement of company training in some countries, e.g., development of training policies, requirement of company training plans, and central advisory guidance on training 	<ul style="list-style-type: none"> • Imposes high administrative and maintenance costs that reduce the amounts that can be returned to employers • Tends to favor routine training instead of new programs • Deters many enterprises from applying because of bureaucratic requirements and paperwork • Delays training within enterprises in some cases because of a slow approval process
Levy-Grant	<ul style="list-style-type: none"> • Promotes the allocation of resources to priority training programs • Supports industry-wide training initiatives • Changes priorities flexibly in accordance with changed circumstances 	<ul style="list-style-type: none"> • Imposes high administrative costs • Requires effective management skills and capacities • Excludes many enterprises paying the levy from funding
Levy-Exemption	<ul style="list-style-type: none"> • Keeps financial allocations within enterprises; employers are free to plan, manage their funds, and administer their training. • Economizes on costs. Central administration of funds is not required; the national cost of administration is low. • Forges links among employers, schools, and agencies, and stimulates the development of private training markets through the option for training institutions to compete for employer grants (e.g., French apprenticeship tax). 	<ul style="list-style-type: none"> • Ineffective spending of the compulsory allocation in some cases • Cannot support broader sectoral (or national) training priorities and activities.

Sources: Johanson (2009), as adapted from ADB (1997) and Ziderman (2003).

Appendix 14

Skills Enhancement Project: Summary of Objectives

1. Viet Nam's poverty reduction and economic growth achievements in the last 15 years represent a success story in economic development. Viet Nam was one of the fastest growing economies in Southeast Asia prior to the global economic crisis, and has remained so in the postcrisis period. In 2009, Viet Nam joined the ranks of lower middle-income countries. Exports have been the main drivers for growth, and foreign investments have been buoyant. This economic growth has changed the economic structure. The share of industry and services in the country's gross domestic product (GDP) has steadily increased, while the share of agriculture, including fisheries and forestry, has declined. The government plans to further reduce the contribution of agriculture, forestry, and fisheries, and to increase the contribution of industry and services.

2. The capacity of the Vietnamese economy to provide employment has been growing steadily, reaching an employment rate of 73% in 2010. The growth in industry and services is expected to intensify over the coming decade, changing the composition of the labor force. Projections of future needs for skills indicate that the demand for skilled labor in particular will continue to grow strongly. In 2010, however, only 13% of the employable workforce had vocational qualifications. According to the Ministry of Labour-Invalids and Social Affairs (MOLISA), the shortage of highly skilled workers has reached an alarming level, particularly in foreign invested enterprises.

3. Viet Nam has become an attractive host country for foreign direct investment (FDI), as the third-largest recipient of FDI inflows in the Association of Southeast Asian Nations (ASEAN), behind Singapore and Malaysia. Initially, FDI enterprises were attracted to Viet Nam by the abundance of good and low-wage production line workers, but, once salaries start to increase, assemblers may move to other countries with lower labor costs. In the long run, if Viet Nam is to expand as an industrialized nation, it must develop highly skilled industrial human resources, who can increase productivity and manufacture high-tech products, and value-added products and services. For the first time, a shortage of labor has become an obstacle to expanding business. The shortage of qualified human resources is also inhibiting Viet Nam's absorption of FDI. A major challenge for the vocational education and training (VET) sector, therefore, is to produce more and better qualified skilled workers who can enhance the pace of economic growth.

4. The Skills Enhancement Project (SEP) has been designed to meet this need. The project aims to strengthen the capacity of the VET system to train highly skilled workers and technicians who can master the modern technologies required by enterprises in the industrial and services sectors. The project will support implementation of the excellent set of policies enshrined in the recent Law on Vocational Training. Through this law, the VET system is being transformed by a new focus on higher-level skills, through the recent establishment of a college or diploma level for more complex skills training. The project will address specific skills

shortages in highly skilled occupational areas, including automotive technology, electrical manufacturing, hospitality and tourism, information and communication technology (ICT), and manufacturing, as well as enhancing noncognitive “soft skills” such as problem solving, team work, etc. Effective participation of the private sector will be encouraged through a credit line, to provide financing for private entrepreneurs to develop private vocational colleges, in addition to other measures to strengthen ties between the VET sector and industry. Project activities will take place in 15 public and five private vocational colleges, located in five economic zones across the country. Two of the colleges are in areas with significant ethnic minority populations, most of whom are poor. To ensure that girls benefit from the project, a dual approach was followed. The industry sectors selected include two in which girls are well represented, while pilot programs will be developed through school gender action plans to attract more girls into male-dominated sectors such as electronics.

Output 1. Quality and Management of Vocational Training Improved

5. The main means to achieve the output:
 - (i) Strengthen sector through comprehensive professional development for 400 General Directorate of Vocational Training (GDVT) and Department of Labor, Invalids and Social Affairs (DOLISA) staff.
 - (ii) Make more comprehensive information on VET available through a vocational training information system (VTIS) operational by end of year 3.
 - (iii) Improve financial management through the introduction of a financial management information system (FMIS) by end of year 3.
 - (iv) Implement external accreditation system for 30 vocational training centers per year from 2012 (90 total).
 - (v) National skills standards developed and issued by MOLISA by end year 1 for SEP training programs.
 - (vi) Complete skills certification for 2,000 workers and 2,500 students by year 5.
 - (vii) Revamp, approve, and implement pre-service vocational teacher-training program by 2013.
 - (viii) Implement in-service training program on competency and work-based teaching and assessment for 2,000 teachers by 2015.
 - (ix) Performance standards for improved vocational college management implemented by GDVT and DOLISA by 2012.

A. Strengthen Vocational Education and Training Management and Planning

- (i) Train 400 staff from GDVT and MOLISA in management skills.
- (ii) Implement a management training program for 300 provincial staff members at DOLISAs and other ministries on effective planning and implementation of VET at the local level.

- (iii) Implement a professional development training program for managerial staff and officials of GDVT for effective management of VET system.
- (iv) Pilot a cost study of SEP occupation programs, and develop a cost methodology.
- (v) Develop and implement a new financial management information system.
- (vi) Review the current Education Management Information System (EMIS) and develop a user-friendly, simplified VTIS.
- (vii) Carry out training to apply VTIS in GDVT and all SEP vocational colleges by end of year 2 and a further 75 vocational colleges by end of year 5.
- (viii) Provide equipment to GDVT and 100 vocational colleges for VTIS.
- (ix) Carry out data collection in year 3, and release report by the middle of year 4.
- (x) Employers' relations units (ERUs) carry out two tracer studies on graduates of SEP vocational training centers in years 4 and 6.
- (xi) Train 60 technical staff from SEP vocational colleges and GDVT on performance monitoring and evaluation (M&E).
- (xii) Carry out baseline, midterm and end-of-project surveys.

B. Improve the Quality Assurance System

- (i) Review and strengthen institutional accreditation standards and procedures for use by GDVT in the first 6 months of the project.
- (ii) Assist the 15 SEP vocational colleges to be accredited by GDVT by end of year 2.
- (iii) Update training program, and train 150 quality assessors/auditors, with 50 of the quality assessors to be women.
- (iv) Review institutional accreditation system, and identify appropriate external systems for adaptation.
- (v) Support an additional 50 vocational colleges to achieve accreditation by end of year 5.
- (vi) Implement a computerized vocational training quality assurance management system.
- (vii) Develop a program accreditation system with GDVT in year 1, and produce an accreditation procedures guide.
- (viii) Pilot the program accreditation system in SEP vocational colleges by the end of year 2.
- (ix) Produce templates for training program development and quality review procedures for quality assessors/auditors in year 1.
- (x) Develop a curriculum maintenance model for application by GDVT by end of year 2.
- (xi) Implement 15 occupational training programs in new formats from year 3.
- (xii) Establish national curriculum development teams as part of a teacher development plan in year 1.
- (xiii) Accredite all SEP occupational programs by end of year 3.
- (xiv) Accredite one program at each of 10 other vocational colleges by end of year 4.

C. Develop Skills Standards, Skills Testing, and Certification Systems

- (i) Establish six national skills standards development committees (NSSDCs) for six industry subsectors to develop standards for 15 occupations in year 1.
- (ii) MOLISA to develop and issue national skills standards for 15 occupations, aligned with each level of the vocational qualifications framework by year 2.
- (iii) Executive officer operational for each SEP NSSDC in year 1 of the project.
- (iv) MOLISA to develop standards capable of regional or international recognition by international industry or professional body by end of year 2.
- (v) Review assessment and certification arrangements and facilitate adoption of revised or strengthened policy options within the first 9 months, including standards for assessors.
- (vi) Develop procedures for assessment and certification of skills standards within year 1, including assessor standards and a training course to be completed by selected candidates to become recognized assessors.
- (vii) Develop assessment tools that will ensure occupationally relevant, nationally consistent, and reliable assessment processes and outcomes are achieved for each of the 15 occupational programs by year 3.
- (viii) Select and support local service providers to train 200 assessors, and mentor their initial work in conducting assessments, which conform to adopted GDVT policies and procedures in year 2.
- (ix) Design and develop a national register of assessors, for use by GDVT and the broader VET system by year 2.
- (x) Strengthen SEP vocational colleges to be approved national skills assessment centers in at least two SEP occupations by year 2.
- (xi) Develop a set of assessment tools by year 3, aligned to national skills standards, in each of the 15 SEP occupational training programs.
- (xii) Implement a pilot project to test and certify about 2,500 graduates from the priority occupational programs by end of year 5.

D. Strengthen Quality and Professionalism of Teachers

- (i) Develop professional standards for teachers.
- (ii) Develop and approve a short in-service, competency-based teacher-training program by adapting an international program.
- (iii) Modernize and approve the pre-service teacher-training program at vocational training centers incorporating competency-based approaches.

E. Improve Acceptability of VET and Access to VET Programs

- (i) Develop and implement a social marketing plan by end of year 2 to improve the image of VET and to increase enrollments in VET secondary and college programs.
- (ii) Implement a pilot vocational training support program to encourage and financially support 250 women to complete SEP occupation programs.

Output 2. 15 Vocational Colleges Upgraded to Deliver Priority Occupational Training Programs

6. Means:
- (i) Train 150 vocational college managers in demand-driven approaches to managing vocational colleges in year 1, and a further 250 staff members from nonproject colleges by end of year 3.
 - (ii) Assist each SEP vocational college to prepare a satisfactory school business plan by end year 1 based on a new management approach.
 - (iii) Assist SEP vocational colleges to develop a marketing plan to attract more students, including more women.
 - (iv) Ensure each SEP vocational college prepares an annual report on performance against the school business plan, with involvement of local industry.
 - (v) Complete civil works, and provide equipment to 15 vocational colleges in accordance with approved school business plans, for 12 occupational training programs.
 - (vi) Develop a short in-service, competency-based teacher-training program by adapting an international program.
 - (vii) Train 50 teacher trainers to deliver the competency-based teacher-training program.
 - (viii) Pilot the in-service training program with 750 teachers from SEP vocational colleges.
 - (ix) Train an additional 1,125 teachers from other vocational colleges.
 - (x) Update and modernize the 6-month preservice teacher-training program, incorporating competency-based approaches.
 - (xi) Pilot the delivery of the new preservice training program in 15 vocational college teaching faculties, using master trainers.
 - (xii) Upgrade 75 instructors to teach the new occupational training programs.
 - (xiii) Train 40 technicians and company supervisors as “enterprise trainers” for vocational colleges (6–7 per sector).
 - (xiv) Establish an M&E system in all SEP vocational colleges.
 - (xv) Train 100 staff members from SEP vocational colleges in M&E.

Output 3. Partnerships with the Private Sector Strengthened

7. Improve sustainability of vocational colleges:
 - (i) Create improved vocational programs by ensuring each SEP vocational college develops a plan to attract more contracts with industry.
 - (ii) Assist SEP vocational colleges to sign two partnership agreements with local enterprises, annually.
 - (iii) Establish policies and mechanisms to enable SEP vocational colleges to generate and keep income from enterprise-based activities by end of year 2.
 - (iv) Establish ERU and learner support services at SEP vocational colleges.
 - (v) Train 125 staff members from SEP vocational colleges to manage and operate ERUs.
 - (vi) Assist ERUs to prepare and deliver about 75 skills-upgrading courses at SEP vocational colleges to at least 2,000 workers (contract training with enterprises).
 - (vii) Implement a pilot program to train 25 student management department heads on how to provide social and employability skills, and student counseling services.

8. Assist private vocational colleges to expand and improve program quality. Expand and modernize the facilities and training equipment of five to six private vocational colleges, through an on-lending fund for private colleges.

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Technical and Vocational Education and Training in the Socialist Republic of Viet Nam: An Assessment

This publication is an assessment of the subsector's major trends, strengths, and issues, focusing on formal skills development programs operated by the General Department of Vocational Training of the Ministry of Labor, Invalids and Social Affairs of the Socialist Republic of Viet Nam. It analyzes the country's technical and vocational training system as well as subsector policies and strategies. Data on related issues (such as growth in employment, education indicators, and enrollment rates) were collected, consolidated, and displayed in tabular form to give readers an overall picture and comprehensive view of the development of the subsector.

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