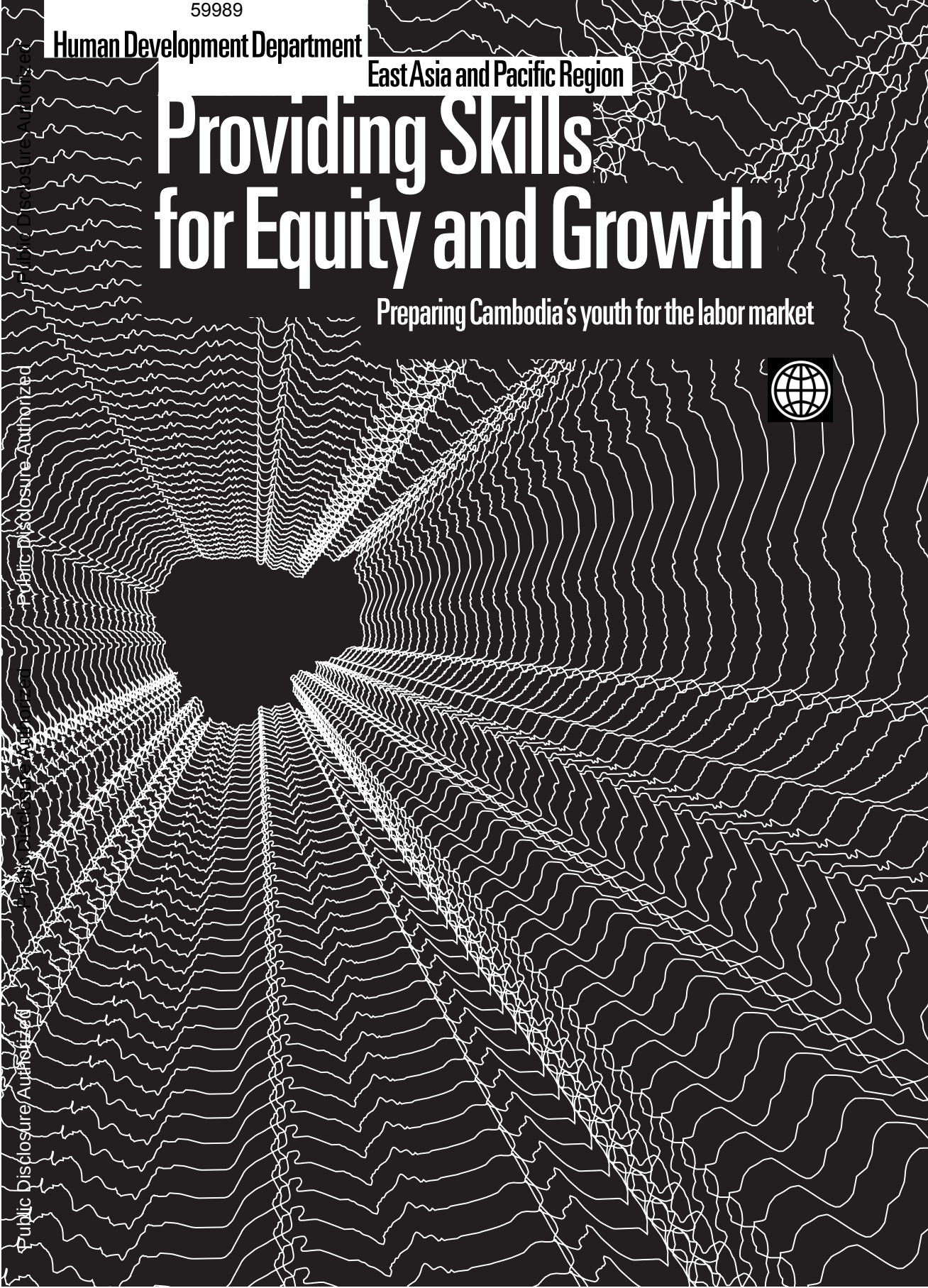
Human Development Department

East Asia and Pacific Region

Providing Skills for Equity and Growth

Preparing Cambodia's youth for the labor market



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Acronyms

Accreditation Committee of Cambodia	ACC
Asian Development Bank	ADB
French Development Agency	AFD
Acquired Immune Deficiency Syndrome	AIDS
Cambodia Federation of Employers and Business Associations	CAMFEBA
Cambodia Education Sector Support Project	CESSP
Community Learning Center	CLC
Cambodia Socio-Economic Survey	CSES
Don Bosco Foundation of Cambodia	DBFC
Directorate-General of Technical Vocational Education Training	DGTVE
Development Partner	DP
Executive Opinion Survey	EOS
Education Sector Development Program	ESDP
Gross Domestic Product	GDP
Garment Manufacturers Association in Cambodia	GMAC
German Agency for Technical Cooperation	GTZ
Human Immunodeficiency Virus	HIV
Investment Climate Assessment	ICA
International Labour Organization	ILO
Information Technology	IT
Japan Fund for Poverty Reduction	JFPR
Japan International Cooperation Agency	JICA
Korea Research Institute for Vocational Education and Training	KRIVET
Ministry of Education, Youth and Sports	MoEYS
Ministry of Labor and Vocational Training	MoLVT
Ministry of Women's Affairs	MoWA
Non-Governmental Organization	NGO
National Institute of Statistics	NIS
National Qualification Framework	NQF
National Strategic Development Plan	NSDP
National Training Board	NTB
National Training Fund	NTF
National TVET Qualification Framework	NTQF
National Technical Training Institute	NTTI
Post-Harvest Technology	PHT
Pour un Sourire d'Enfant (For a Child's Smile)	PSE
Provincial Training Center	PTC
Royal Government of Cambodia	RGC
Recognition of Prior Learning	RPL

RTC	Regional Training Center
SME	Small and Medium Enterprise
TVET	Technical and Vocational Education and Training
UN	United Nations
UNCT	United Nations Country Team
UNDP	United Nations Development Programme
UNESCO	United Nations Educational, Scientific and Cultural Organization
UNICEF	United Nations Children's Fund
VSTP	Voucher Skills Training Program
WDC	Women's Development Center
WEF	World Economic Forum
YODIFEE	Youth with Disabilities Foundation for Education and Employment

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Executive Summary

Over the past decade, Cambodia has endured dramatic growth that has brought to the forefront of economic activity new sectors such as garments, tourism and construction. At the same time, sustained growth has brought with it new challenges. One of the major ones is to train a largely unskilled labor force to sustain growth in the medium term and to share more equitably in the benefits of development. This is not an easy task: Cambodia's youth lack technical skills but also "soft" skills, something which employers perceive to be a severe constraint. Complicating things, a skills development strategy needs also to address bottlenecks in both the educational and the technical and vocational education and training (TVET) systems, and to improve the skills of those who are already out of school.

The scope of this report is twofold. First, it documents skills gaps and mismatches and attempts to understand the reasons for them. Second, it provides a framework for thinking about skills development, drawing on international best practices, with the intent of stimulating further discussion.

Given the breadth of the task, in this report we narrow the focus on a particular segment of the labor force: unskilled youth. There are several reasons sustaining this choice. First, unskilled youth – most of whom are out of school and have little chance to integrate themselves into the labor market – represent a significant share of the labor force that will remain active for the next 30 or 40 years. If nothing is done, out-of-school youth will benefit at best only marginally from growth, and may even become an obstacle to sustaining growth in the long term. Second, the current educational system still faces a strong challenge in retaining students, and unskilled youth are likely to remain high on the agenda in the next decade or even longer. Finally, in the past decade, training programs designed specifically for out-of-school youth have begun to emerge around the developing world, in particular in Latin America, and recent evaluations suggest that they can be effective in increasing productivity and the chance of finding employment. Nevertheless, many of the findings of this report extend to overall skills development in Cambodia. In particular, the report points to significant market failures preventing both firms and training providers from offering quality training at all levels, as well as the need to develop certification and accreditation systems that are valued and recognized by employers and span all levels of education.

Similarly, many of the topics covered extend to all sectors, although most of the analysis focuses on the sectors that are likely to be the drivers of growth in the future – i.e. (garment) manufacturing, construction

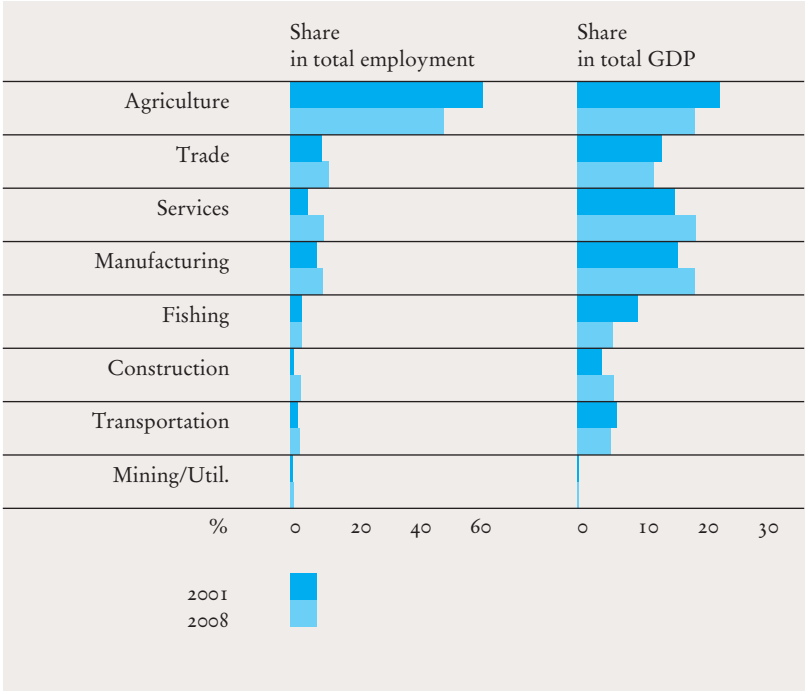
and tourism. In doing so, the report may fail to give full justice to all the ongoing initiatives providing training to people active in the informal sector, in particular in agriculture, where the largest share of the labor force is active and is likely to remain active in the next decades. Some of the findings also may not apply to the informal sector. However, the report should be read as complementary to these initiatives.

The report proceeds in four chapters. The first covers demographic trends and the labor market. The second looks at skills gaps and mismatches. The third reviews existing training providers. The concluding chapter considers policy options in going forward.

Demography, labor markets and skills

Cambodia is facing a dramatic expansion of its labor force, with large cohorts of youth now joining the labor force. Cambodia stands out as one of the most youthful countries of the Asia-Pacific region, with 60 percent of the population younger than 24 years of age. The country now has a demographic window of opportunity, whereby large youth cohorts, with fewer children and elderly family members to support, are now entering the labor market and will remain active for the next 30 to 40 years. Whether this sizeable young labor force will be a blessing or a burden will depend to a large extent on their opportunities to acquire skills that will be rewarded in the labor market.

Sustained growth has, until now, kept up with the increase in the working-age population by boosting the creation of jobs outside of agriculture. Gross domestic product (GDP) growth in the past decade averaged close to 10 percent per annum, and was accompanied by profound transformations in the structure of the economy and the nature of employment. The country has diversified away from agriculture, thanks mainly to the growth of (garment) manufacturing, services, construction and tourism, which have driven recent economic growth and now have almost as much weight in GDP as agriculture. These sectors have helped keep job creation up with the increase in the working-age population. Accordingly, the relevance of agriculture, both as a driver of the economy and as a sector of activity, has fallen; pending world recovery from the global slowdown, it is likely to fall steadily further. To give an idea, in 2001 nearly 64 percent of workers relied on agriculture for employment; just seven years later, the share of agriculture in total employment had shrunk to 51 percent, mostly to the benefit of the services and industry sectors (see figure below).



Share of employment and GDP by sector, 2001-2008

Note: The services sector includes activities classified as finance, real estate, renting, business activities, public services and other personal and community services. The trade sector includes hotel and restaurant activities. It was not possible to further disaggregate by sector of activity, since in some categories there were too few observations for proper inference. Source: Labor Force Survey 2001 (NIS, 2001); (NIS, 2008).

Productivity growth has sustained strong economic performance despite a poorly educated labor force – up to now. Between 2001 and 2008, real GDP per capita increased 59 percent, of which 98 percent can be attributed to productivity gains. Half of this productivity increase can be attributed to workers migrating to more productive sectors; the other half comes from productivity gains within sectors. This migration pattern reflects labor movements out of agriculture into booming sectors such as tourism, services and manufacturing, where workers need to acquire different sets of skills. In these new sectors, the large majority of employers complain about the lack of "soft" skills at all levels of qualification, such as discipline, team spirit and creative thinking. This has not yet impacted productivity, but it is important to address such bottlenecks so that growth is not affected in the future. Moreover, although poor technical skills are not yet a major constraint to growth, production technologies are becoming more sophisticated and, as such, there is a need to ensure that the education system follows suit. And, given the significant challenges the general education and TVET systems are currently facing, it is important to act now in improving the quality of education so as to better prepare the next generation of workers to enter the labor market.

Unemployment remains low but, in the absence of formal safety nets, this does not provide a good picture of the health of the labor market.

The unemployment rate, below 1 percent, remains surprisingly low by all standards. Even when a "relaxed" or "expanded" definition of unemployment is taken into consideration (see Chapter 1), it stands at 5.6 percent, which is still lower than in most middle- and high-income countries. Youth unemployment is also very low (i.e. 1.5 percent for youth against 0.6 percent for non-youth) and remains concentrated around a minority of well-educated, better-off youth who are able to spend time looking for good employment opportunities. Low rates of unemployment are not unusual in fast-growing low-income countries such as Cambodia: in the absence of effective safety nets, individuals cannot afford to be idle and must occupy themselves in any type of job to earn an income. In these settings, unemployment cannot therefore be used to judge the health of the labor market, and quality of jobs often represents a more important marker than employment status.

In going forward, the real issue will be not unemployment but the low quality of jobs… In Cambodia, most young workers start their career in low-paying jobs in agriculture or family enterprises, instead of accessing more productive jobs. As they grow older, they shift away from family-based jobs towards self-employment activities or low-skilled informal sector jobs, which remain poorly remunerated.

…and poor job quality is caused largely by poor quality of education and training. Of Cambodia's youth (i.e. those between 15 and 24 years of age), 63 percent are out of school, either having never attended school or having left school before completing basic education; and 94 percent of the youth labor force have not completed secondary education. Leaving school early is a major obstacle to ensuring gainful and productive work. Even for those who stay in school, poor quality of education means that attending school is not always rewarded: returns to education are among the lowest in the region, which could be part of the cause of high dropout rates.

Skill gaps and mismatches

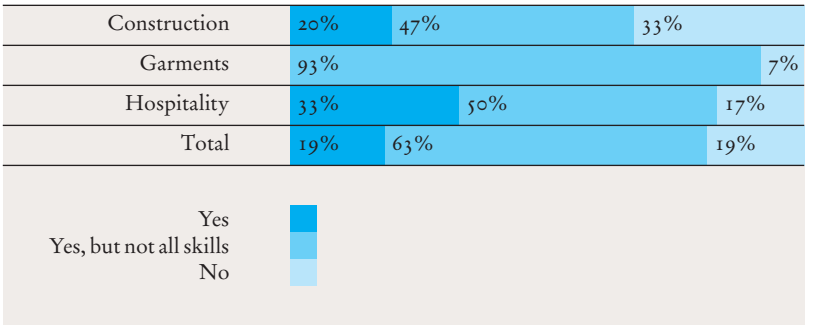
The rising demand for workers with a mix of good soft and technical skills remains largely unmet. Employers' surveys suggest a growing demand for workers with a mix of soft and technical skills that remains largely unmet all up the education ladder, including in vocational training. In the three booming sectors outside of agriculture (i.e. garments, tourism and construction), only one out of five firms reports

that vocational training graduates (who, in theory, have been trained for specific jobs) have the necessary set of skills to perform their job (see figure below). All other employers complain of moderate or severe skills gaps. Poor skills have not yet hindered growth but, if they remain unaddressed, they could do so in the future. For instance, employers may find it more and more difficult to adapt to new, more productive technologies that require better skilled workers. Accordingly, Investment Climate Assessments (ICAs) show that the percentage of firms identifying skills as a relevant constraint, although still relatively low, more than doubled in four years, from 6.5 percent in 2003 to 15.5 percent in 2007 (World Bank, 2008). Starting to address skills issues now will therefore not only lead to greater poverty reduction but also support long-term productivity, competitiveness and growth.

Skills gaps in vocational training, 2009

Note: Percentage of formal sector firms reporting that vocational training graduates have the skills necessary to perform their jobs.

Source: HR Inc Cambodia (2009).



Skills definitions

Source: Nam (2009); World Bank (2006).

This report analyzes soft and hard skills sought by employers. "Soft" (or "life") skills generally refer to competencies and personal attributes that enable individuals to deal effectively with the demands and challenges of everyday life, e.g. problem solving, creativity, communication and teamwork. According to the 2007 World Development Report (World Bank, 2006), soft skills can be classified into two groups:

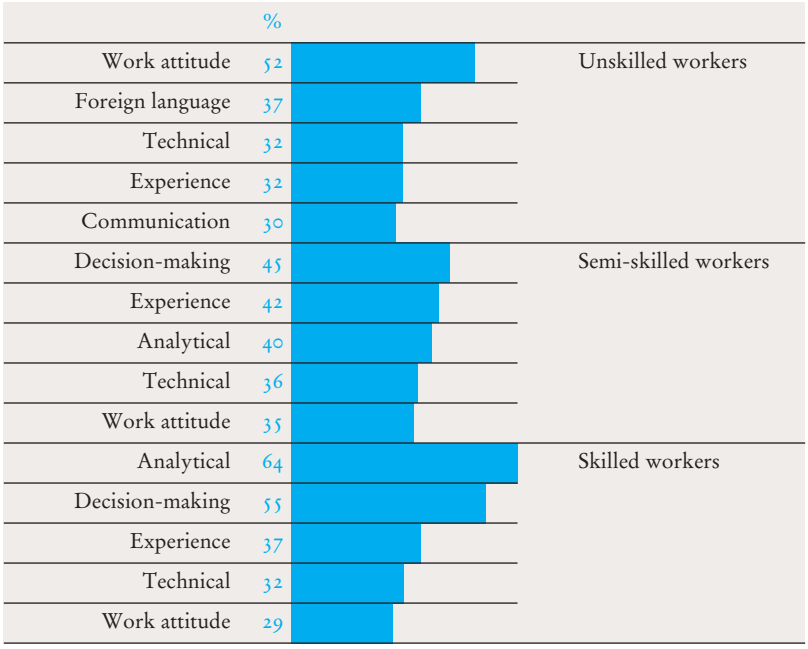
- *Thinking skills* such as critical and creative thinking and
- *Behavioral skills*, which include perseverance, self-discipline, teamwork, the ability to negotiate conflict and manage risks

In line with the above definitions, the analysis in this report covers the following soft skills: commitment, communication, creativity, decision making/leadership, problem solving, self-motivation and teamwork. The more recent literature on human capital emphasizes the importance of soft skills, both in the process of human capital development and as a determinant of schooling and employment outcomes (see Bowles et al., 2001; Heckman and Rubenstein, 2001; Thiel and Thomsen, 2009).

Some of these soft skills, such as punctuality and teamwork, are doubtless learned best "on the job." But other skills are probably best learned in institutional settings like schools and training centers, whose curricula need to be revised.

Generally, "soft" skills complement "hard" skills, which are technical abilities and tend to be specific to a certain type of task or activity. Examples of hard or technical skills include machine operation and computer literacy. These skills are usually easier to observe and quantify, and are relatively easier to impart in schools or at the workplace.

Employers identify soft skills as the most important skills lacking in most employees, in particular among out-of-school youth. Formal employers in construction, garments and hospitality affirm that, at all qualification levels, good soft skills are more difficult to find than technical skills. For unskilled workers, 52 percent of employers identify work attitude as the top skill lacking, followed by a foreign language (a response driven by the tourism sector), with technical skills coming in only third. Soft skills appear to be a severe constraint in particular for out-of-school youth: 89 percent of employers state that they have difficulties working with out-of-school youth because of behavioral issues.



Skills identified as the most difficult to find among workers, 2008

Note: Unskilled worker – laborer or non-technical person whose work is mostly manual and repetitive; semi-skilled or specialized worker – work is mostly repetitive, requires some level of skill or understanding; skilled or professional staff worker – works independently, performs a variety of tasks, requires a high level of skills or understanding. Source: CAMFEBA (2008).

The lack of soft skills is a major challenge, but poor technical skills that do not match employers' needs also represent an obstacle to produc-

tivity growth – in particular for the unskilled. Foreign languages, IT, sewing, plumbing, carpentry and blacksmithing are all skills that are in high demand but difficult to find. In the hospitality sector, employers identify difficulties finding chefs, receptionists and food and beverage managers. In the garment sector, positions that stand out as the most difficult to fill are in sales and sewing. In the construction sector, it is hard to recruit carpenters, plumbers, blacksmiths and electricians.

Non-formal training programs

A variety of providers deliver non-formal training programs to out-of-school youth, ranging from public Provincial Training Centers (PTCs), to private providers, to NGOs, to small businesses offering informal apprenticeships. Such a heterogeneous set of providers generates significant coordination challenges and has implications for the harmonization of training and quality assurance.

Public provision of non-formal training faces several challenges. First, it is shared across various ministries, leading to strong coordination and harmonization issues. The Ministry of Labor and Vocational Training (MoLVT) manages 22 PTCs, which deliver short non-formal programs to a predominantly rural population. In addition, although smaller in scale, the Ministry of Education, Youth and Sports (MoEYS) and the Ministry of Women's Affairs (MoWA) operate non-formal programs for out-of-school youth, delivered through Community Learning Centers (CLCs) and Women's Development Centers (WDCs), respectively. There also appears to be some overlap in responsibilities for overall non-formal training between MoLVT and MoEYS, as the role of each ministry remains poorly defined. Second, training provision remains underfunded and is often of poor quality. PTCs in particular tend to be poorly managed, face insufficient funding and have little interaction with employers. Finally, public programs lack certificates that are recognized by employers. The situation appears to be better in agriculture, in which most people work and in which the Asian Development Bank (ADB) Voucher Skills Training Program (VSTP) is supporting non-formal training to communes and villages in the skills that they have identified and requested.

Several non-governmental organizations provide classroom-based non-formal training. It has been estimated that between 28 and 50 NGOs provide non-formal training, mostly for disadvantaged youth. Most

NGOs benefit from funding from abroad, and can therefore offer better quality training. Overall, they tend to have better infrastructure, teaching materials, student-teacher ratios and qualified teachers. The largest NGOs in the field also tend to have better links with industry partners for curriculum development, staff training, equipment procurement, student work experience, assessment of students and certification. Although some NGOs offer certificates that are validated by a ministry, recognition by employers remains a problem, since certificates bear value only for the few employers that know of and value them. Also, although NGOs offer among the best quality training, given the relatively higher costs involved it is uncertain how much the model can be scaled up.

Much of the current provision of non-formal training, however, is provided by private, for profit institutions and small shops through informal apprenticeships. It has been estimated that nearly 750 private businesses are delivering non-formal training in Cambodia. Most of these institutions offer training courses to low-skilled students in basic marketable skills such as language, computers, beauty care, cosmetology, tailoring, motor repair, carpentry, welding and electricity. In addition, a considerable amount of training is provided through informal apprenticeships in small shops, in skills such as motor repair, electricity and beauty care. The quality of training varies considerably, and small teaching centers and informal apprenticeship schemes often suffer from narrow theoretical knowledge, outdated technologies and an absence of formal recognition of the skills students have acquired.

Overall, there is little coordination and harmonization in the provision of non-formal training programs. In 2009, there were only 316 technical and vocational training providers registered with MoLVT, which represents only a small fraction of all providers – in particular if informal apprenticeships are included. Many providers remain unregistered, including some large private providers, NGOs and programs operated by other ministries (MoEYS, MoWA, Health and Agriculture, etc). The biggest challenge, however, is not registration but coordination and harmonization. Each provider structures its courses differently and offers its own certificate, often of little value to employers. Complicating things, there seems to be little collaboration between MoLVT, which is responsible for certifying the quality of the technical training provided, and other ministries offering non-formal training.

In addition, formal and non-formal training programs do not seem to

be addressing the training needs of the new sectors driving economic growth. Both public and private providers offer a narrow range of courses, mostly tailored to self-employment, which do not cover the broader needs of employers in the new booming sectors. Although (formal) employers in these sectors demand technical graduates with skills in tourism and hospitality, foreign languages, IT, plumbing, carpentry and blacksmithing, courses offered in these areas are few or nonexistent in the public training system. The private sector seems to score better but, again, there is no certification guaranteeing the quality of the training provided. A strong disconnect and poor collaboration between employers and training providers appear to lie beneath the skills mismatch.

Poor quality of training and lack of certification and accreditation are part of the system's problems. Training providers have difficulties finding qualified teachers (in particular given the limited fees they can charge, which in turn limits salaries) and lack appropriate teaching materials, specialized equipment for teachers and facilities. Even for institutions that deliver good quality training, such as some of the NGOs, strong challenges persist, as there is no system valued by all stakeholders that recognizes training received through certification of students and accreditation of providers.

NGOs are also the only training providers teaching soft skills – although mostly only to disadvantaged youth. Through their focus on disadvantaged youth, NGOs such as Pour un Sourire d'Enfant and Mith Samlanh have made great efforts to incorporate the teaching of soft skills in their curricula. This, and their strong collaboration with employers in designing curricula and providing internship opportunities, is reflected in fairly high success rates in terms of providing trainees with employment despite their disadvantaged backgrounds. In designing curricula that incorporate the teaching of soft skills, drawing on the experiences of Cambodian NGOs could therefore bring strong value added.

The challenges highlighted in this report point to the existence of market failures that could, in part, be solved by the public sector playing a bigger role in regulating and coordinating the provision of training. It is difficult for students to judge the quality of training institutes, and even more so for unskilled people. The lack of effective certification and accreditation processes allows some providers to provide poor quality training that has low returns in the labor market. Moreover, high work-

er turnover in the formal sector means there is little incentive for firms to provide training to their workers. There is therefore a strong need for the public sector to coordinate accreditation and certification activities in order to solve these market failures. Because of strong capacity constraints, however, such a task must be piloted and evaluated, and expanded only gradually. Guaranteeing good governance will also be of utmost importance, since accreditation and certification systems work well only if they are perceived as effective by all stakeholders involved.

Towards an integrated skills development framework

To address poor youth preparation for the labor market, an integrated approach should be adopted to address poor quality of general education, high dropout rates and the need for technical training – which is the focus of this report. Efforts should aim at improving both general and technical skills of students who are still in school, while at the same time increasing the productivity of out-of-school youth, who currently represent a large share of the labor force. These efforts should consist of a three-pronged approach to address the three main bottlenecks to skills development: poor quality of education that does not provide students with the skills sought after in the labor market; high dropout rates at both primary and secondary levels; and the need to improve existing workers' productivity through better technical training. The latter is particularly important for the large share of the workforce that has dropped out of school and has little chance of being reintegrated into formal education. Given the focus of the report on unskilled youth, we look here mostly at technical training, although some issues – in particular those concerning soft skills – extend to all levels of education.

A strategy for improving the quality of training could consist of three pillars, covering certification, accreditation and financial support to high-performing institutions and poor students. The first pillar should promote the development of a certification system based on competency-based assessments. The entire process (from curriculum design to program implementation) should be run in a tripartite manner, involving the Royal Government of Cambodia (RGC), employers and training providers. The second pillar should aim at developing outcome-focused curricula and accreditation of training providers. Accreditation is particularly important for providers that will be authorized to certify internal and external candidates, and in selecting institutions to support

financially. Accreditation criteria should be based not only on inputs (e.g. teacher-student ratio, learning materials and physical facilities) but also on outcomes, which include the alignment of curricula with market needs, incorporation of life skills into teaching methods and provision of internships and intermediation services. The last pillar should solve financial bottlenecks by funding institutions according to agreed performance indicators. On the demand side, poor students could also receive financial support.

Across these three pillars, but also in the general education curriculum, particular attention should be devoted to promoting the teaching of soft skills. Teaching soft skills is not an easy task, and this report does not have any magic recipe. In theory, teaching methods should be tailored to soft skills by moving away from teacher-centered methods towards student-centered ones that promote team spirit and creative thinking. This is a complex and lengthy task and will require a change in teaching mentality and significant teacher training. However, some of these skills can be taught with traditional methods, and modules for teaching soft skills could be developed by drawing on other countries' experiences.

Some elements of implementation will require particular attention. First, it is important to start small and gradually, as implementing the three proposed pillars at once is sure to be a recipe for failure. Certification could be developed first in a few sectors where good training providers already exist and where the formal sector industry is well organized. Subsequently, some elements of accreditation could be introduced, as well as financial support for both training providers and poor students. Second, it is important to engage both industry and training providers: if industry and training providers are not engaged at all levels, the system will be prone to failure. It will also be important to evaluate and improve interventions to better understand which designs have been most successful in improving employment and wages of unskilled youth. Finally, it will be essential to guarantee good governance all through the system. Ensuring good governance is particularly important in this context as, if certification and accreditation systems are perceived to be flawed, they lose all their value, for both employers and employees.

1. Labor Markets, Demography and Skills

Cambodia is facing a dramatic expansion of its labor force. Large cohorts of young workers are joining the labor force each year, and they will remain economically active for the next 30 to 40 years. Although employment generation and productivity growth have sustained strong economic performance up to the present, it is vital now to provide relevant education and training to new workers to avoid poor skills becoming an impediment to growth in the future. This is a major challenge. Compared with neighboring countries, Cambodia stands out for its low-skilled labor force: 63 percent of Cambodian youth either have never attended school or left school before completing basic secondary education, with 94 percent of the youth labor force not having completed secondary education. Returns to education are among the lowest in the region, and most young workers become unpaid family laborers on household farms or in family enterprises instead of accessing more productive jobs. When they grow older, cohorts of unpaid family workers remain self-employed in low-paid and low-skilled informal sector jobs.

In the past decade, Cambodia has managed to sustain economic growth, thanks to migration out of agriculture towards more productive sectors. But these sectors require a different set of skills. Moreover, as production technologies become more sophisticated, it is important to ensure that the skills of the labor force keep up. As this is a long-term process, it is important to continue working on improving the quality of both general and technical education. Efforts must concentrate on all levels: keeping children in school but also enhancing the employability and productivity of the majority of the labor force who have dropped out of school. It is these youth who are the focus of this report.

The demographic challenge

Cambodia is facing a massive expansion of its labor force. After the fall of the Khmer Rouge and the baby booms that occurred over the 1980s and at the beginning of the 1990s, Cambodia faced a dramatic expansion of its population. Almost 60 percent of the population is aged below 24 years, making it one of the most youthful countries of the Asia-Pacific region alongside East Timor (66 percent) and Laos (61 percent; UN, 2008). This is in strong contrast with neighboring countries such as Thailand and Vietnam, which are rapidly aging. With the decline in fertility rates and with the baby boomers now entering into the labor market, Cambodia's age structure has begun to acquire the so-called

"youth bulge" shape (Figure 1.1). The age structure is shifting away from children towards young persons, the dependency ratio (i.e. the ratio of dependants to working-age population) has started to decline and the number of Cambodians entering into the economically active age range is peaking. Overall, it is expected that Cambodia will increase its ratio of working-age population to dependants until around 2045, when dependency ratios will slowly rise again – this time because of aging.

Rapid expansion of the labor force can be a blessing but can also be a curse. Rapid expansion of a well-educated labor force in a business-prone environment can attract foreign investments that provide the necessary capital and technology transfers to sustain long-term growth. On many occasions, however, labor markets have not performed well enough to absorb all the new entrants, also because workers have often not been provided with the type of skills looked for in the market. Failure to invest in young workers at this critical stage of the lifecycle can have long-term adverse consequences. Whether a sizeable young labor force is a blessing or a burden to a country depends to a large extent on the opportunities young people have, both to obtain good education or training before they join the labor force and actually to be integrated into employment.

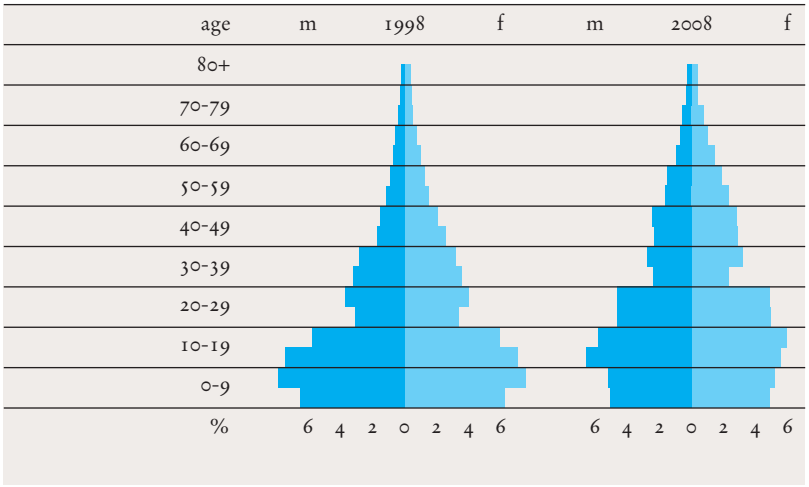


Figure 1.1

Population pyramid, 1998 and 2008

Source: Census 1998 (NIS, 1998); Cambodia Socio-Economic Survey (CSES) 2008 (NIS, 2008) – Census-adjusted population.

Poorly trained workers will face problems of under- and unemployment all their active economic life. A poorly trained young worker who enters the labor market nowadays is more likely to have problems finding employment all through her or his professional career. She or he will also find it more difficult to adapt to new production technologies that require higher cognitive and analytical skills, and will face the

risk of being trapped in a vicious cycle of under- and unemployment.

At the macroeconomic level, a poorly trained labor force also affects productivity and economic growth. The more a country grows, the more sophisticated production technologies must become to permit further growth, hence the need to provide the labor force with the skills required for sustained adaptation. A country with a poorly trained labor force will face problems attracting foreign direct investment to upgrade production technologies, and may then remain trapped in a vicious cycle of low productivity and growth.

Since today's youth will remain in the labor force for the next 40 to 50 years, it should be a government priority to ease their access into employment by providing them with the quality and type of skills that contribute to their long-term employability. Failure to do so may generate pockets of poor and unskilled workers who will need government assistance all through their active economic life, and may obstruct the adoption of new and more productive technologies that are the source of sustained economic growth.

This report provides suggestions on how to improve the employability of new entrants into the labor market – with particular attention to out-of-school youth. It shows that the main challenge to labor markets in Cambodia is not unemployment, nor is it regulations. Rather, it lies in providing skills that will permit the country to sustain the rapid productivity gains that have been achieved until now, in particular to the majority of workers who have dropped out of school at a young age and missed the first chance for education.

It is not about the number of jobs…

Sustained economic growth has created enough jobs to keep up with the rapid expansion in the working-age population.[1] Over the past 10 years, Cambodia has sustained rapid growth and doubled its per capita gross domestic product (GDP), from $285 in 1997 to $593 in 2007. More recently, between 2001 and 2007, GDP growth averaged close to 10 percent per annum, although the financial crisis has temporarily slowed this period of sustained growth (GDP growth in 2008 was 6.7 percent). Economic growth has generated new jobs, most of which lie outside of agriculture, and has managed to keep job creation up close to the increase in the working-age population (Figure 1.2).

[1] The official definition of the working-age population includes all individuals over 10 years old. In this report, however, we use a more traditional definition of the working-age population, comprising people between 15 and 64 years old.

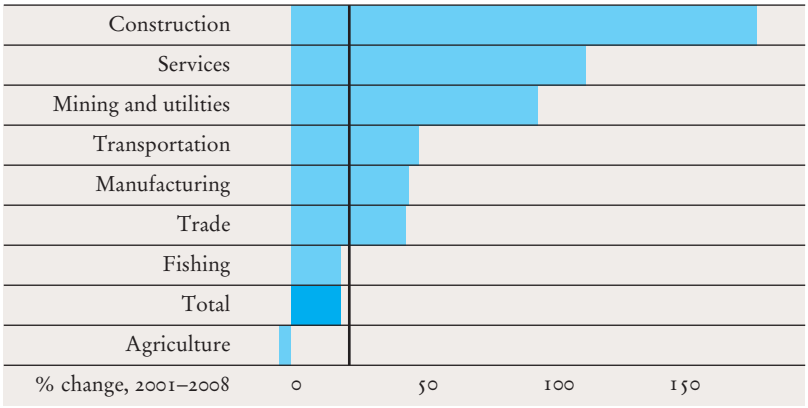


Figure 1.2

Employment generation across sectors, 2001-2008

Note: The black line represents growth in working-age population.

Source: Labor Force Survey 2001 (NIS, 2001); CSES 2008 (NIS, 2008).

New jobs have been created mostly outside of agriculture. Over the past seven years, most sectors have been quite dynamic at creating jobs, except for agriculture, where the number of jobs has slightly decreased. Since 2001, construction has shown the best job-creating performance in the labor market, almost tripling the number of jobs. The industry and services sectors have also created jobs well above the increase in working-age population (represented by the black line in Figure 1.2). While the financial crisis has temporarily put a halt to job creation in these new booming sectors, it is likely that the trend of sustained job creation outside of agriculture will continue in the medium to long term.

The creation of new jobs outside agriculture stems from a structural change in Cambodia's growth paradigm and is likely to persist in the near to medium term. Although agriculture remains the largest sector of employment, its relevance both for employment and for GDP growth is decreasing. In 2001, nearly 64 percent of workers relied on agriculture for employment. Labor then moved out of agriculture into industry and services, so that by 2008 the share of the agriculture sector in total employment had shrunk to 51 percent (Figure 1.3 and Figure 1.4). Similarly, agriculture lost relevance in terms of its contribution to GDP growth, whereas growth in manufacturing and services alone contributed to almost half of Cambodia's growth between 2001 and 2008 (Figure 1.4). The decline in agricultural employment was driven largely by productivity increases in the agriculture sector of around 2 percent per annum (World Bank, 2008), releasing surplus labor to find employment outside the sector. This is a pattern observed in all industrializing countries over time, as growth brings about structural changes with the movement of labor from rural to urban areas and from agriculture to non-agricultural employment.

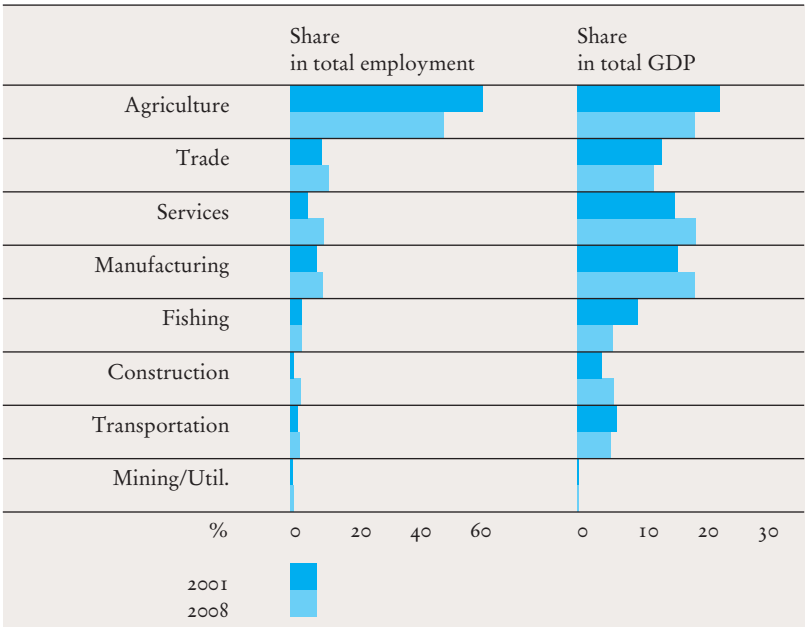


Figure 1.3

Share of employment and GDP by sector, 2001-2008

Note: The services sector includes activities classified as finance, real estate, renting, business activities, public services and other personal and community services. The trade sector includes hotel and restaurant activities. It was not possible to further disaggregate by sector of activity, since in some categories there were too few observations for proper inference.

Source: Labor Force Survey 2001 (NIS, 2001) and CSES 2008 (NIS, 2008).

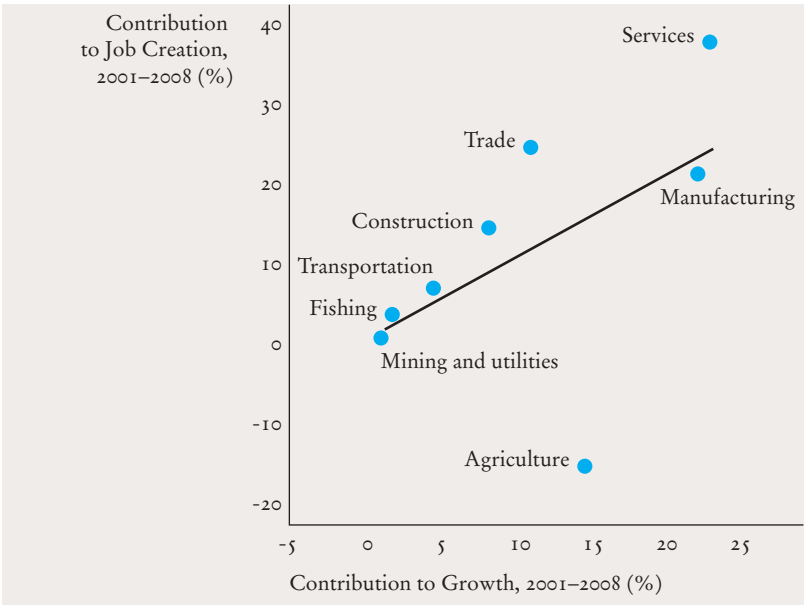


Figure 1.4

Contribution to growth and employment generation, 2001-2008

Note: It was not possible to further disaggregate by sector of activity, since in some categories there were too few observations for proper inference.

Source: Labor Force Survey 2001 (NIS, 2001); CSES 2008 (NIS, 2008).

GDP growth was for the most part generated by increases in workers' productivity growth. GDP per capita growth can be separated into changes in three basic factors: productivity (output per worker); employment (share of working-age population employed); and population structure (working-age population as a proportion of total population). Over the past seven years, real GDP per capita has increased 59 percent, of which 98 percent can be attributed to productivity gains. Increases in the working-age population, in contrast, are responsible for only 8

percent of per capita output growth, and employment remained fairly stable over the same period (Figure 1.5).

Half of the productivity gains can be attributed to workers' migration towards more productive sectors, and the other half consists of productivity gains within sectors (Figure 1.5). The significant gains from workers' migration towards more productive sectors corroborate the view of the declining importance of agriculture as a source of employment. However, this migration pattern has also been fuelled by significant productivity gains in the booming sectors (such as trade, services and manufacturing), which make up around half of overall productivity gains.

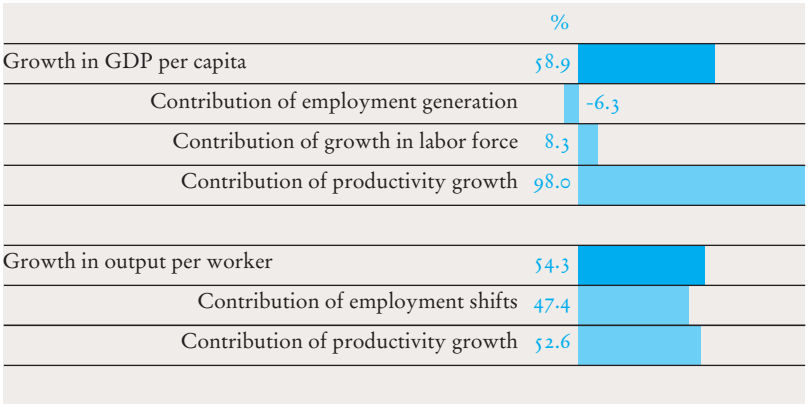


Figure 1.5

Decomposition of GDP growth, 2001-2008

Source: Labor Force Survey 2001 (NIS, 2001); CSES 2008 (NIS, 2008).

Economic growth has translated into gains in real wages but also has increased inequality. Between 2004 and 2007, overall economic growth translated into rising real wages: average wage growth was 35 percent and the median wage grew around 24.5 percent (Table 1.1). In 2007, the average monthly wage was 351,000 Riel ($82.43), up from 260,000 Riel ($61.06) in 2004. Average annual household earnings derived from self-employed activities also showed an increase, of 43 percent; at the same time, median earnings for the self-employed declined by 10 percent. The higher growth of average vs. median wages (and declining median entrepreneurial income) points strongly towards the better-off benefiting disproportionately from economic growth, leading to increased inequality. Such a view is corroborated by an increase in the Gini inequality coefficient from 0.4 to 0.43 during the same period (Knowles, 2007). Observe that, although the recent global economic crisis has negatively affected wage growth (on average, real wages tumbled by almost 6 percent between 2007 and 2008), wages remain well above 2004 levels. Observe also that household annual entrepreneurial income increased sharply in 2008 as a result of soaring food prices that benefited rice producers.

Table 1.1

Average and median labor income, 2004, 2007 and 2008

Note: 2008 Riel.

Source: Labor Force Survey 2001 (NIS, 2001); CSES 2008 (NIS, 2008).

	2004 (Riel)	2007 (Riel)	2008 (Riel)	% change 2004-2007
Wage (monthly)				
Average	260,000	351,000	327,000	35.2
Median	192,000	239,000	250,000	24.5
Average (including only full-time workers)	276,000	366,000	344,000	32.8
Median (including only full-time workers)	210,000	251,000	260,000	19.4
Household entrepreneurial income (annual)				
Average	3,311,000	4,750,000	6,246,000	43.5
Median	1,411,000	1,274,000	1,565,000	-9.8

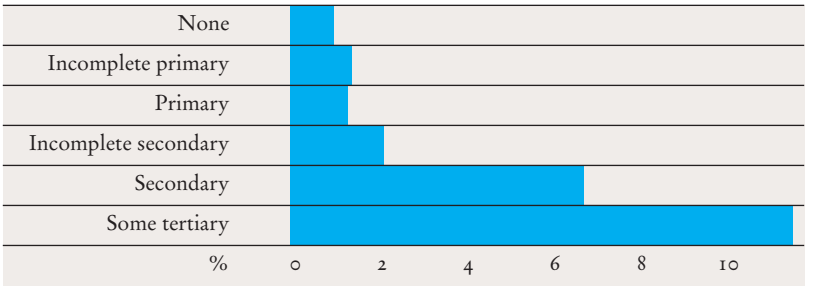
...or about unemployment...

Labor markets in Cambodia and the low unemployment rate reflect the country's low-income but fast-growing status. Labor force participation is high, and unemployment rates, below 1 percent, remain low by any standard (Figure 1.7 below). Even when a "relaxed" rate of unemployment is used, it stands at 5.6 percent of the labor force, which is still lower than in most middle- and high-income countries.[2] Low rates of unemployment are not unusual in fast-growing, low-income countries. They reflect both the need to remain employed (even in poor jobs) in the absence of effective safety nets, and the low enforcement of labor market regulation that allows people to earn some living in the informal sector.

Figure 1.6

Youth unemployment by level of education, 2004

Source: CSES 2004 (NIS, 2004).



Cambodia's youth unemployment is concentrated among a minority of better educated people living in urban areas. Unemployment rates for youth with primary education or less remain extremely low (around 1 percent). In contrast, the unemployment rate for youth with secondary education rises to more than 6 percent, and for youth with tertiary education to more than 11 percent (and up to 20 percent if the relaxed definition of unemployment is adopted – CSES 2004). Youth unem-

[2] The "relaxed" definition of unemployment means the population within the working-age population that is not working but is available for work (although not necessarily looking for a job). This definition has been used in several reports by the International Labour Organization (ILO) about Cambodia (see, for instance, Morris, 2007).

ployment is also concentrated in Phnom Penh (where more than 8 percent of youth are unemployed) and urban areas; in rural areas, youth unemployment remains lower than 1 percent. Youth unemployment seems therefore to be more of a challenge for better-off urban youth, who may afford to remain unemployed while seeking good employment opportunities, but not for the large majority of uneducated youth (CSES 2004).

Table 1.2

Main labor market indicators, 2001-2008

Source: Labor Force Survey 2001 (NIS, 2001); CSES 2004, 2007 and 2008 (NIS, 2004; 2007; 2008).

Age group	2001	2004	2007	2008	% change 2001-2008
Total (15-64)					
Ratio of working-age population to population (%)	60.3	59.7	62.2	62.6	2.3
Labor force participation rate (%)	85.3	83.2	83.8	81.8	-3.5
Unemployment rate (strict definition) (%)	1.8	1.0	0.9	0.4	-1.4
Unemployment rate (relaxed definition) (%)	N.A.	5.5	3.1	5.6	
Employment rate (employed to working-age population) (%)	83.8	82.4	83.0	81.4	-2.4
Working age-population (millions)	6.8	7.7	8.2	8.4	0.2
Employment (millions)	5.7	6.4	6.8	6.8	0.2
Youth (15-24)					
Labor force participation rate (%)	76.0	78.6	77.2	73.9	-2.1
Unemployment rate (strict definition) (%)	3.0	1.6	1.5	0.7	-2.3
Unemployment rate (relaxed definition) (%)	N.A.	7.2	4.3	9.0	
Employment rate (employed to working-age population) (%)	73.7	77.4	76.0	73.3	-0.3
Non-youth (25-64)					
Labor force participation rate (%)	91.5	86.1	87.5	85.9	-5.6
Unemployment rate (strict definition) (%)	1.1	0.7	0.6	0.3	-0.8
Unemployment rate (relaxed definition) (%)	N.A.	4.6	2.5	4.1	
Employment rate (employed to working-age population) (%)	90.5	85.5	86.9	85.7	-4.9

After years of remarkable progress, the global economic crisis has hampered employment growth. Although it is too early to estimate accurately the full impact of the global economic crisis on Cambodia's labor markets, recent results based on the 2008 CSES (NIS, 2008) point to some adverse effects on employment. Between 2007 and 2008, the unemployment rate rose by 2.54 percentage points (using the relaxed definition) and the ratio of employment to working-age population fell by 1.6 percentage points (Table 1.2). Young workers have been especially hard hit by the economic downturn. The increase in the unemployment rate was greater for youth (i.e. 15-24 year olds) than for non-youth (i.e.

25-64 year olds): 4.7 against 1.6 percentage points, respectively. The fall in the employment rate was more pronounced for youth as well (2.7 against 1.2 percentage points).

Overall, youth unemployment nevertheless remains low by most standards. In 2004, Cambodia's youth unemployment rate was 1.5 percent, against 4.5 percent and 4.6 percent in Thailand and Vietnam, respectively (Figure 1.7). Even when the relaxed definition of unemployment is used, which includes youth who are available for work but do not actively seek it, Cambodia's youth unemployment rates remain surprisingly low by international standards. Asian countries like India and the Philippines display youth unemployment rates which are one order of magnitude higher than Cambodia's, and which remain way higher even when the relaxed definition is taken into consideration. Low youth unemployment rates stand out as even more surprising, given high youth participation rates in the labor market. Roughly 150,000 new individuals joined the labor market every year between 2001 and 2008,[3] and in 2008 73 percent of people aged 15-24 were in the labor market. Such a proportion remains higher than in most East Asian countries, except for Vietnam.

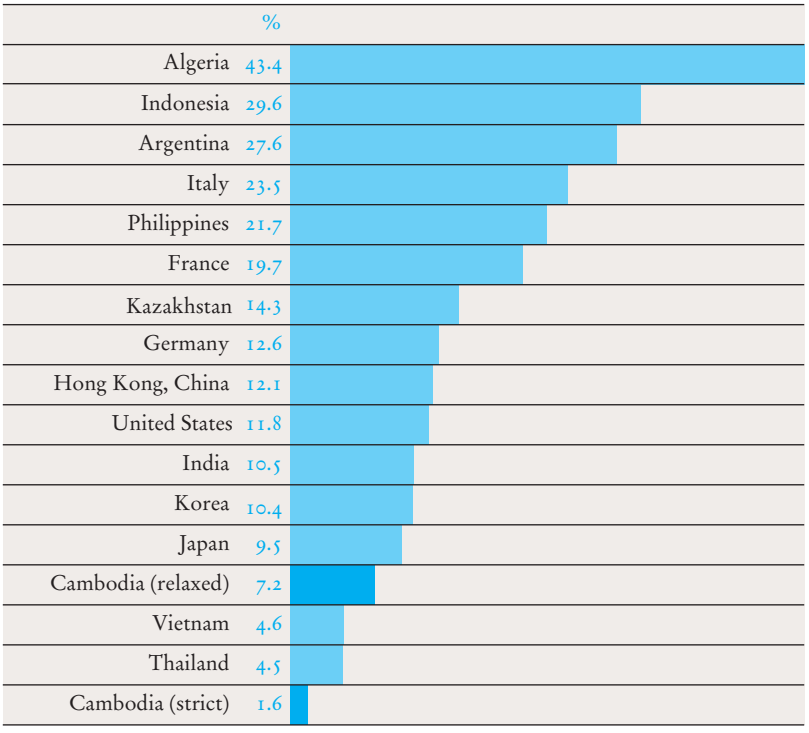


Figure 1.7

Youth unemployment rates, 2004

Source: World Development Indicators 2009: http://data.worldbank.org/data-catalog/world-development-indicators/wdi-2009.

The quality of jobs offered to youth, and the associated remuneration, may provide a better picture of Cambodia's youth labor markets. In

3 Taking into account the national definition of the working-age population (aged 10 years and over), the number of individuals joining the labor force would be 200,000 per annum.

low-income countries, unemployment is often a poor indicator of the health of labor markets. Often, unemployment remains low because it is concentrated among a minority of better-off who seem able to afford to spend time looking for good employment opportunities. Meanwhile, unskilled workers (the majority) are under strong pressure to find a job and are more likely to accept precarious and poorly remunerated jobs. How well labor markets perform in providing workers with "good" jobs that generate adequate remuneration and secure work may therefore represent a better picture of the health of youth and non-youth labor markets.

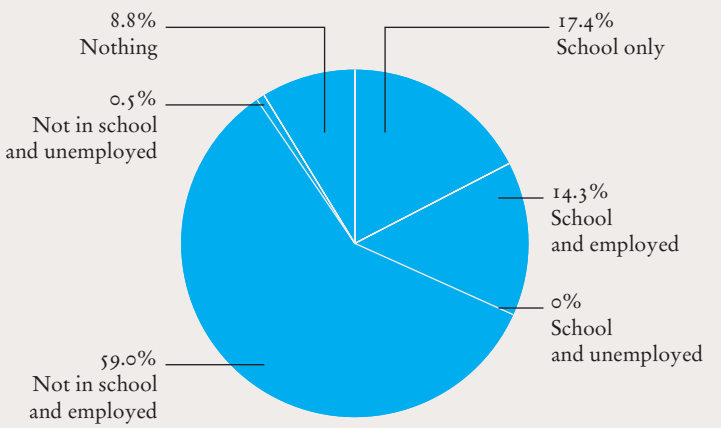


Figure 1.8

Distribution of youth by economic status, 2008

Source: CSES 2008 (NIS, 2008).

This appears to be the case for Cambodia, where the majority of youth have left school to work. Almost 60 percent of Cambodia's youth have left school to work; among the one-third who still go to school, 14 percent work in parallel (Figure 1.8). Among people aged 15-24, therefore, only 17 percent declare that they only study. This is a serious concern, as many youth are not acquiring the education they need to share in the benefits of economic growth. Instead, they are being drawn into a labor market that is providing marginal jobs and income.

...but about poor skills and the quality of jobs

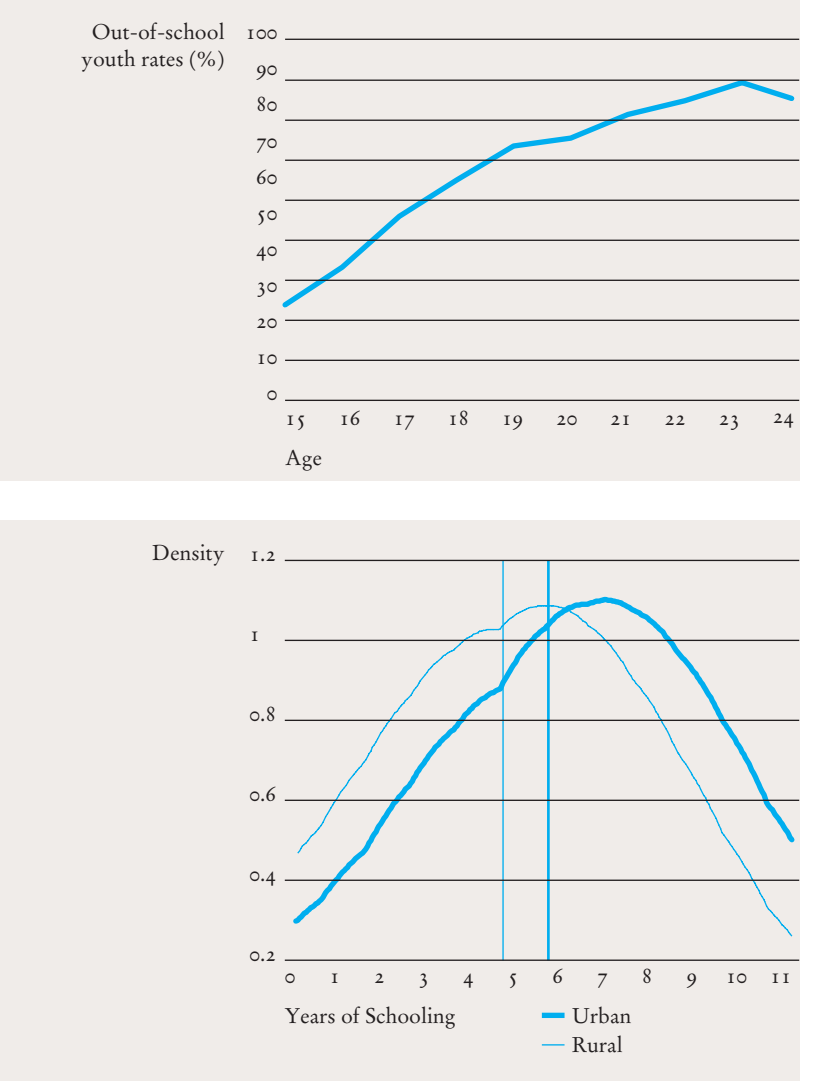
In Cambodia, 63 percent of youth either never attended school or left school before completing basic education. Of the 63 percent out of school, 12 percent have never been in school. The percentage of youth out of school is high to begin with (among young people aged 15, more than a quarter are already out of school), and this increases dramatically

with age: among people aged 19, more than two-thirds are already out of school (Figure 1.9). Moreover, although out-of-school youth do stay in school longer than five years, given high repetition rates they *de facto* barely complete primary school: in rural areas, the average number of years of completed education among out-of-school youth is below five, and urban areas perform only slightly better (Figure 1.9).

Figure 1.9

Youth out-of-school status and education, 2007

Source: CSES 2007 (NIS, 2007).



Accordingly, despite significant progresses, educational attainments remain quite low. Only 3.8 percent of adults have completed secondary education, and fewer than 2 percent have reached some tertiary education (Figure 1.10). And, despite significant progress, educational attainments among the new cohorts remain low: although enrollment rates are as high as 81 percent in primary school, they decrease sharply to 24

percent in lower secondary and to 15 percent in upper secondary school (Figure 1.11). As many students drop out of school, they fail to acquire the education they need to share the benefits from economic growth.

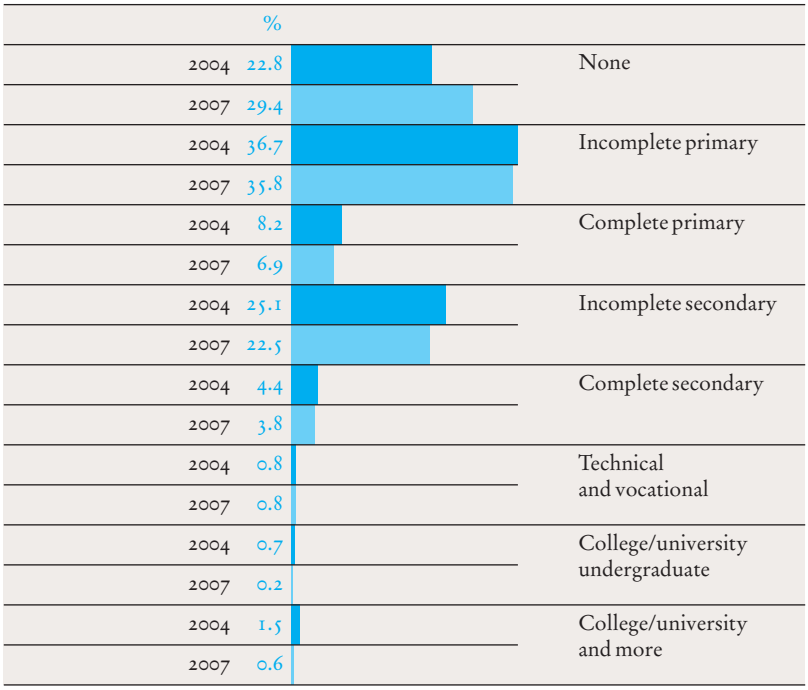


Figure 1.10

Educational attainment of the adult population (18 and older), 2004 and 2007

Source: CSES 2004, 2007 (NIS, 2004; 2007).

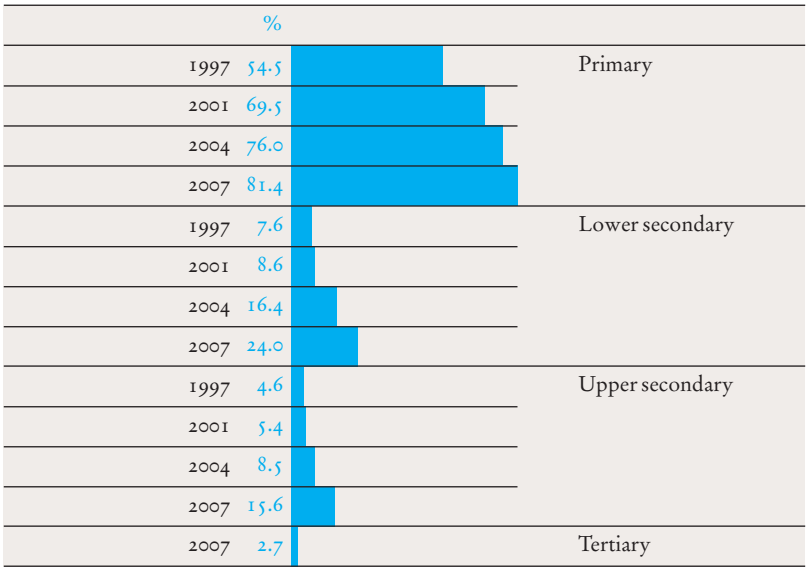


Figure 1.11

Net enrollment rates, 1997, 2001, 2004 and 2007

Source: CSES 2004 and 2007 (NIS, 2004; 2007).

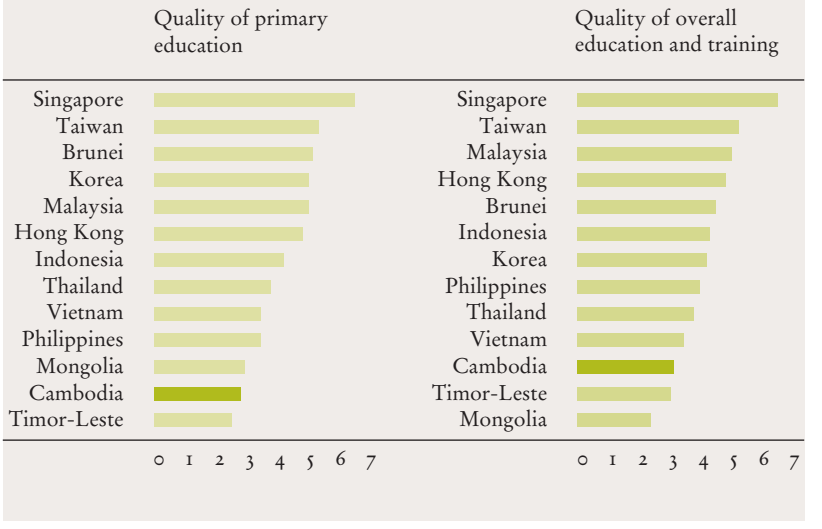
Poor school enrollment is an outcome of a combination of factors, which include poor quality of education and demand constraints. Limited availability of basic facilities, shortage of textbooks and inadequate supply of (trained) teachers have made it difficult to provide quality public educa-

tion. Cambodia suffers in particular from a severe shortage of teachers for primary and secondary education. In 2007, the number of students per teacher averaged 51 in primary and 29 in secondary, among the highest in the Asia-Pacific region (UNESCO, 2009).. In part as a result, Cambodia shows low educational outcomes, with particular deficiencies in writing and mathematics (MoEYS, 2006a; 2006b). On the demand side, high educational expenses and the opportunity costs of sending children to school instead of getting them to work or using them in domestic chores strongly impact households' decision making in this regard. Some programs that address demand-side constraints have been highly effective in improving attendance in school by children from poor households. For instance, a scholarship program targeting girls in Grade 7 (the first year of lower secondary) has had a large effect on school enrollment and attendance: an evaluation of the program impact indicates that enrollment and attendance of beneficiaries increased by approximately 30 to 43 percentage points, with effectiveness appearing to be greater among girls from poorer households (Filmer and Schady, 2006).

Box 1.1

Cambodia's quality of education in international perspective

Since Cambodia has not participated in an international student assessment, there is limited knowledge on the quality of education provided in public schools. The Executive Opinion Survey (EOS) provides some insights into the quality of education, although findings are based not on students' performance but rather on interviews with business leaders to capture their perceptions of the environment in which they operate. According to the EOS 2009-2010 (WEF, 2009), Cambodia scores 114 out of 133 countries on the perceived quality of the education system, and 101 out of 133 for overall education and training.



Note: Scores range from 0 to 7, with higher scores indicating a better performance.

Source: Based on EOS results, Global Competitiveness Report 2009-2010 (WEF, 2009).

Low returns to age (i.e. experience) and education may also be in part responsible for poor school enrollment. Cambodia's wage structure remains surprisingly flat: returns to age and education are among the lowest in the region. Figure 1.12 shows wage premiums according to three levels of education (compared with those with none). The estimates from the regressions show that returns to primary education are comparable with those in the Philippines but much lower than those in Indonesia and Thailand. The only difference is that, in these other countries, only a relative few (some of whom may have lower cognitive abilities) remain at that level of education, whereas for Cambodia primary education remains the level achieved by the majority. The picture for returns to secondary and tertiary education looks as grim. Secondary education is somewhat comparable with returns in the Philippines, but much lower than those in Indonesia and Thailand. The wage premium for individuals with some tertiary education is especially low compared with neighboring countries: wage earners with tertiary education in Cambodia earn 67 percent more than workers with no education, whereas in the Philippines the ratio is 115 percent, in Indonesia 112 percent and in Thailand 138 percent.

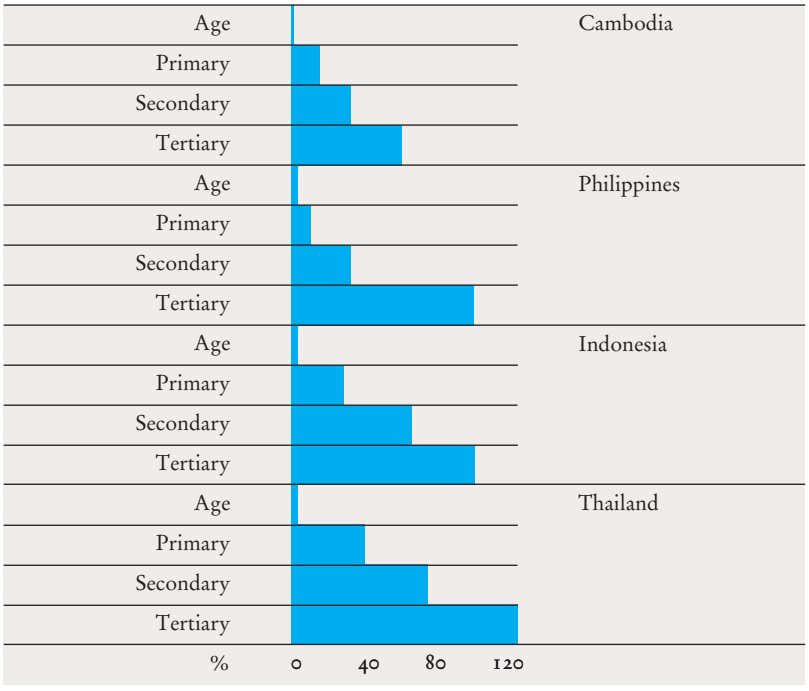


Figure 1.12

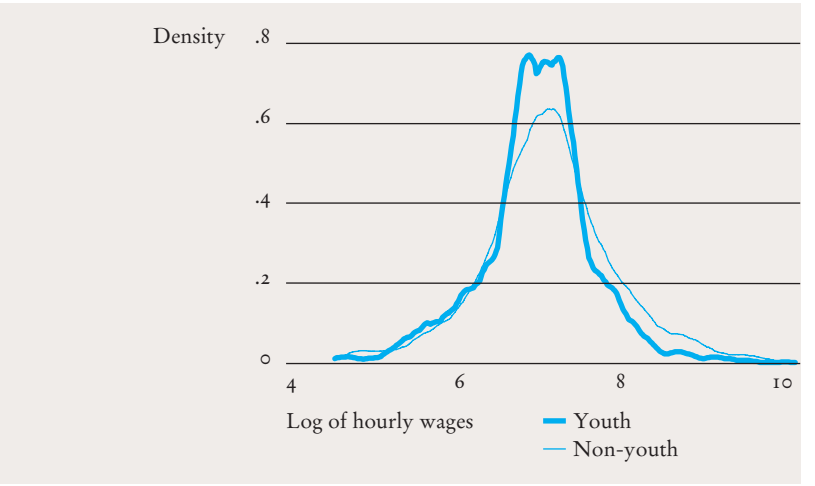
Returns to age and education in East Asia, 2004

Source: Cambodia: CSES 2004 (NIS, 2004); Philippines: Labor Force Survey October 2004 (National Statistics Office, 2004); Thailand: Labor Force Survey Quarter 3 2004 (National Statistical Office, 2004); Indonesia: National Work Force Survey 2004 (Ministry of Manpower and Transmigration, 2004).

Returns to age (a good measure of experience) are also very low by any standard. Accordingly, the wage distribution for youth does not differ much from that for non-youth (Figure 1.13): despite non-youth

having accumulated more years of experience, the two distributions are remarkably similarly, peaking at approximately the same wage rate, and with the higher (right) tail of the non-youth wage distribution only slightly fatter. The economic structure of the country continues to be based on activities with a low skills base. One hypothesis to explain low returns is that there is not much skills content in production processes, so lack of or low quality skills are not perceived by firms as a major constraint to their operation and growth (Araujo, 2008).

Figure 1.13
Wage distribution, 2008
Source: CSES 2008 (NIS, 2008).



Profile of out-of-school youth

About one in three out-of-school youths is poor, with 55 percent female and 85 percent residing in rural areas. Contributing to family income and helping with household chores are the main reasons reported for being out of school – which is why almost 90 percent of out-of-school youth declare that they work. More than half of employed out-of-school youth are engaged in agriculture, with 15 percent in manufacturing, 9 percent in trade, hotels and restaurants and 6 percent in construction. More than half are unpaid family workers, with 32 percent wage workers and 15 percent self-employed (Table 1.3).

Most youth begin their professional career in low-paid informal jobs, at a later age moving towards self-employment. In both urban and rural areas, most youth begin their professional career as unpaid family workers, one of the least-paid activities and one which does not tend to require sophisticated skills (Figure 1.14). When they grow older, cohorts of unpaid family workers appear to pursue careers as self-employed workers, remaining therefore in low-paid and low-skilled informal sector jobs: in

	Out-of-school rate (%)	% of out-of-school youth
Total		
	63.3	100.0
Sex		
Male	57.8	44.9
Female	68.6	55.1
Area of residence		
Phnom Penh	35.6	6.4
Other urban	51.2	8.1
Rural	68.8	85.6
Quintile		
1	77.0	24.7
2	72.4	25.1
3	64.9	20.2
4	59.9	18.8
5	38.8	11.1
Poverty		
Not poor	58.5	66.7
Poor	75.6	33.3
Economic status		
Employed	73.1	87.8
Unemployed	68.8	1.0
Inactive	30.6	11.2
Sector		
Agriculture	71.1	53.7
Fishing	73.5	5.2
Mining and utilities	69.4	0.4
Manufacturing	86.3	15.7
Construction	96.7	6.1
Trade	61.3	9.7
Transportation	91.8	3.6
Services	60.6	5.6
Category of employment		
Wage worker	86.8	32.6
Self-employed	81.4	15.6
Unpaid family worker	64.9	51.7

Table 1.3

Characteristics of out-of-school youth

Note: Out-of-school rate refers to the percentage of youth out of school for each socioeconomic status. % of out-of school youth corresponds to the distribution of out-of-school youth by socioeconomic status.

Source: CSES 2007 (NIS, 2007). The 2007 instead of the 2008 CSES is used because of the availability of quintiles of aggregate consumption and of a poverty line.

both urban and rural areas, the share of wage workers among the working population remains in fact quite stable across youth and non-youth, suggesting a somewhat segmented labor market between wage workers and the self-employed. To be sure, wage workers are not necessarily better remunerated than the self-employed.[4] But a steady proportion

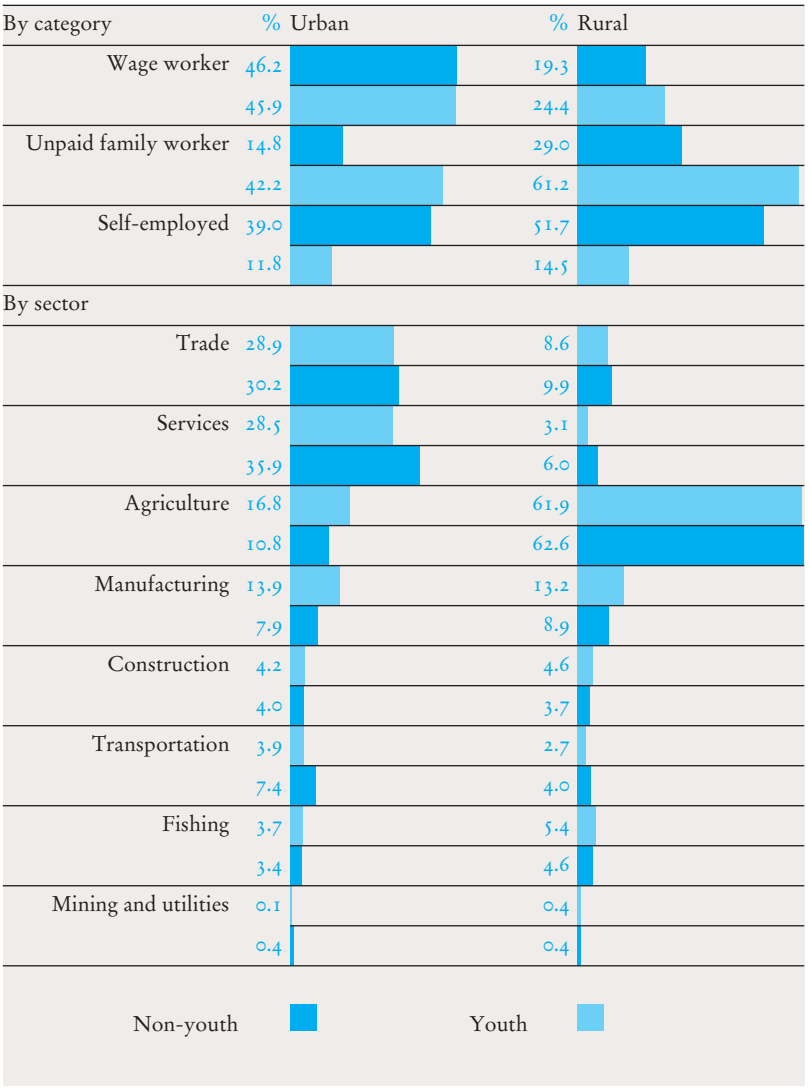
4 Unfortunately, the CSES is not a panel, and income data at the individual level are available only for wage workers, which makes analyses of labor market dynamics difficult.

of wage workers across youth and non-youth remains symptomatic of a static labor market that does not offer to the many unskilled the possibility to move towards better remunerated jobs. This is confirmed by the fact that, in particular in rural areas, people do not appear to switch sector as they grow older to take advantage of better employment opportunities: distribution of workers across sectors does not vary much between youth and non-youth (Figure 1.14).

Figure 1.14

Distribution of youth workers by employment, 2008

Sources: CSES 2008 (NIS, 2008).



Summary

In sum, Cambodia's workers seem to be trapped in a vicious cycle of poor education providing poor skills, which in turn may lead to the adoption of technologies that do not foster a demand for skills. A plau-

sible explanation for the considerably low returns to education despite the very limited supply of skilled workers is the fact that *employers may not need a skilled workforce* because they employ simple but low-productivity technologies. Such a view would be consistent with the fact that employers do not claim that skills are a constraint to the growth of their business but at the same time complain about the lack of soft skills of their workforce, such as in terms of communication, teamwork, problem solving, work attitude, showing up on time and conflict resolution (see Chapter 2).

Such a vicious cycle may hinder economic growth in the medium term. Cambodia has managed to sustain economic growth in the past decade thanks to migration out of agriculture towards more productive sectors (Figure 1.3). But these sectors, which are bound to become increasingly dominant, require a different set of soft and technical skills. While poor skills have not yet impacted productivity, it is important to improve workers' education (in terms of both soft and technical skills) so that growth will not be impacted in the future. And, given the significant challenges the general education and technical and vocational education and training (TVET) systems are currently facing, it is important to continue improving the quality of education so as to better prepare the next generation of workers for the labor market.

The scope of this report is twofold: to document skills gaps and mismatches in the formal sector and attempt to understand the reasons behind them; and to provide a framework for thinking about skills development, drawing on international best practices. Given the breadth of the task, we narrow the focus onto a particular segment of the labor force: unskilled youth. There are several reasons sustaining this choice. First, as we have discussed, unskilled youth represent a significant share of the labor force that will remain active for the next 30 or 40 years. If nothing is done, out-of-school youth will benefit at best only marginally from growth, and may even become an obstacle to sustaining growth in the long term. Second, the current educational system still faces strong challenges in retaining students, and unskilled youth are likely to remain high on the agenda in the next decade or even for longer. Finally, in the past decade, training programs designed specifically for out-of-school youth have begun to emerge around the developing world, in particular in Latin America, and recent evaluations suggest that they can be effective in increasing productivity and chances of finding employment.

However, many findings of the report extend to overall skills development in Cambodia. In particular, the report suggests the presence of significant market failures preventing both firms and training providers from offering quality training at all levels, and the need to develop certification and accreditation systems that are valued and recognized by employers and span all levels of education.

2. Skills Gaps and Mismatches

Despite sustained productivity growth, the work-related skills of the workforce do not respond to the needs of employers, in particular in the new, booming sectors (manufacturing, tourism and construction), where there is strong, unmet demand for workers with a mix of technical skills and good soft skills all along the education ladder. In these sectors, only 13 percent of employers affirm that graduates have all or most of the skills they need for work. Unskilled youth, the focus of this report, appear to be the group of workers most affected by the lack of soft skills. The majority of employers affirm having difficulties working with out-of-school youth as a result of poor workplace attitudes.

This chapter suggests that the skills mismatch is caused in part by a poor match between what employers seek and curricula offered by education providers, in particular (although not only) among low-skilled workers. Current teaching methods, in particular at basic secondary level, also limit the development of soft skills.

Box 2.1

Main data sources for the skills mismatch analysis

Most of the results in this chapter are derived from a commissioned survey by HR Inc Cambodia, conducted to better understand skills gaps and mismatches in three key sector of the economy (tourism, garments and construction). Fieldwork was conducted from December 2008 through March 2009 and covered 48 employers (18 in tourism, 15 in garments and 15 in construction) operating in Phnom Penh and Siem Reap, as well as 21 training providers (9 vocational training institutes and 12 higher education ones).

The survey gathered information on: employers' perceptions on skills gaps and mismatches; challenges faced by training providers; jobs that are difficult to fill; cooperation between employers and training providers; and information about type of training delivered by enterprises. In the sample, 31 percent of firms had more than 400 employees; 29 percent had between 100 and 400; and the remaining 40 percent employed fewer than 100. The sample of firms was distributed almost evenly between foreign and domestic firms (i.e. 54 percent were foreign and 46 percent local). Among others, the survey of training providers collected information on: training facilities and infrastructure available; courses offered; curriculum development; teachers; and links with employers.

Although the survey is hardly representative of all firms (in particular of small firms in the informal sector), it was designed to capture a variety of enterprises. The consistency of the findings across firms suggests

that they are symptomatic of the challenges facing formal sector firms which are trying to operate and develop in Cambodia and which are becoming a preponderant source of growth.

Cambodia's production technologies remain adapted to a poorly skilled labor force. Over the past 10 years, the economy has diversified from agriculture into garment manufacturing, services, construction and tourism, which have driven economic growth in recent times. Although the relevance of these sectors has led to an increase in demand for skilled workers (Figure 2.1), production technologies remain adapted to a labor market where only 7 percent of employed workers in 2008 had completed secondary school (up from 3.6 percent in 2001). Such a macroeconomic effect may explain why, for the most part, employers do not identify lack of skills as the main binding constraint to growth: in the last Investment Climate Assessment (ICA), only 15 percent of employers identified a shortage of a skilled and educated supply of workers as a major or severe obstacle to the operation and growth of their business (World Bank 2008). If no action is taken to address the poor quality of general and technical education, however, skills are likely to become a constraint in future, when the sophistication of production technologies will need to increase to foster productivity growth. And, given the time it takes to improve the quality of education, it is important to start acting now.

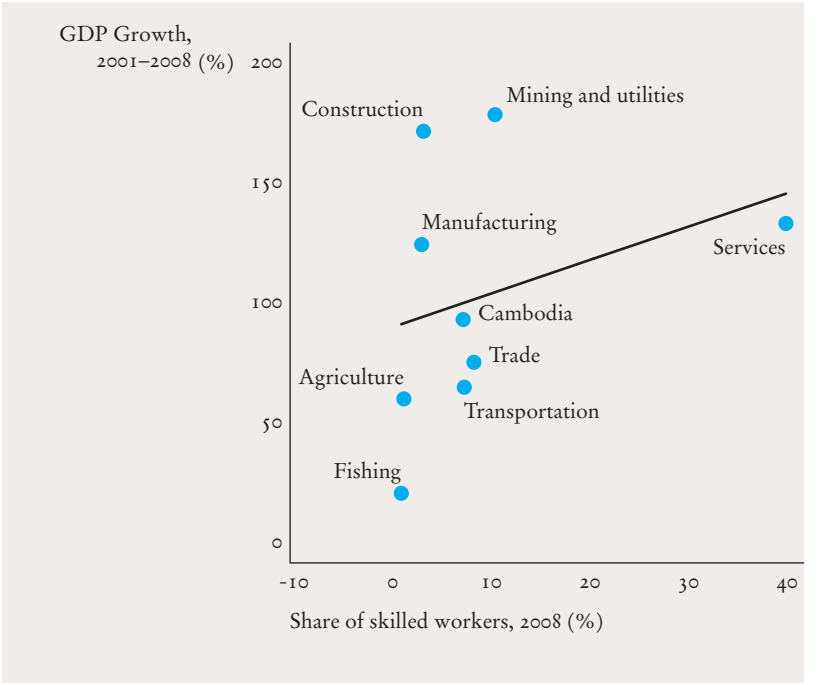


Figure 2.1

Share of skilled workers and GDP growth by sector of activity, 2008

Source: CSES 2008 (NIS, 2008); National Accounts.

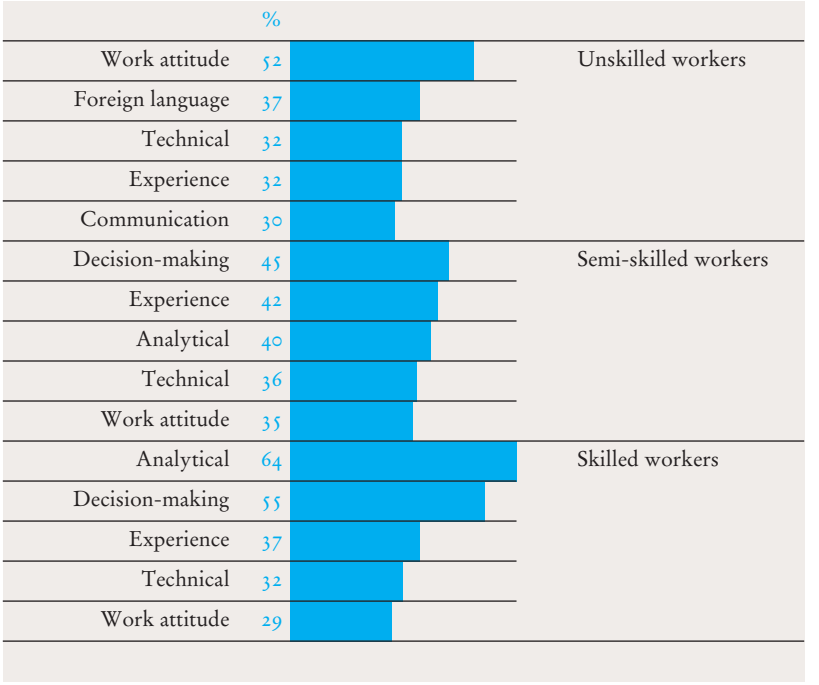
Employers identify soft skills as the most important skills lacking in most employees. In a recent survey by the Cambodian Federation of Employers and Business Associations among formal sector employers (CAMFEBA, 2008), only 13 percent of employers affirm that students graduating from vocational and higher education have all or most of the skills they need for work. Instead, most employers (76 percent) deem that graduates are not equipped with the set of skills they need to perform their jobs. More than technical competencies, employers state that soft skills are the ones that are more difficult to find among employees: 52 percent of employers identify work attitude as the top skill lacking in most unskilled workers; 45 percent cite decision-making skills as the most difficult to find in semi-skilled workers; and 64 percent mention analytical skills for skilled workers (Figure 2.2). For the purpose of this report, a more detailed analysis of skills mismatches has been performed for tourism, the garment industry and construction.

Figure 2.2

Skills identified as the most difficult to find among workers, 2008

Note: Unskilled worker – laborer or non-technical person whose work is mostly manual and repetitive; semi-skilled or specialized worker – work is mostly repetitive, requires some level of skill or understanding; skilled or professional staff worker – works independently, performs a variety of tasks, requires a high level of skills or understanding.

Source: CAMFEBA (2008).



Box 2.2

Skills definitions

Source: Nam (2009); World Bank (2006).

This report analyzes soft and hard skills sought by employers. "Soft" (or "life") skills generally refer to competencies and personal attributes that enable individuals to deal effectively with the demands and challenges of everyday life, such as problem solving, creativity, communication and teamwork. According to the 2007 World Development Report (World Bank, 2006), soft skills can be classified into two groups:

- *Thinking skills* such as critical and creative thinking and
- *Behavioral skills*, which include perseverance, self-discipline, teamwork, the ability to negotiate conflict and manage risks

In line with the above definitions, the analysis in this report covers the following soft skills: commitment, communication, creativity, decision making/leadership, problem solving, self-motivation and teamwork. The more recent literature on human capital emphasizes the importance of soft skills, both in the process of human capital development and as a determinant of schooling and employment outcomes (see Bowles et al., 2001; Heckman and Rubenstein, 2001; Thiel and Thomsen, 2009). Some of these soft skills, such as punctuality and teamwork, are doubtless learned best "on the job." But other skills are probably best learned in institutional settings like schools and training centers, whose curricula need to be revised.

Generally, "soft" skills complement "hard" skills, which are technical abilities and tend to be specific to a certain type of task or activity. Examples of hard or technical skills include machine operation and computer literacy. These skills are usually easier to observe and quantify, and are relatively easier to impart in schools or at the workplace.

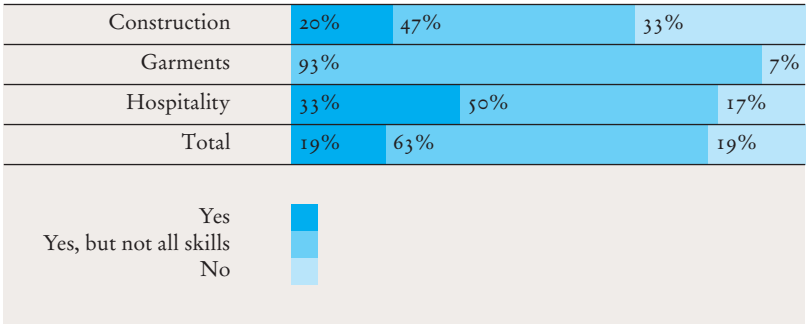


Figure 2.3

Skills gaps in vocational training, 2009

Note: Percentage of formal sector firms reporting that vocational training graduates have the skills necessary to perform their jobs.

Source: HR Inc Cambodia (2009).

Three growing sectors of the economy (garments, hospitality and construction) also report significant skills gaps among new graduates. In these three sectors, only 20 percent of firms affirm that vocational training graduates are equipped with the necessary skills to perform their jobs, and 80 percent claim that workers have skill deficiencies (Figure 2.3). There are, however, important variations by sector in how severe firms deem the skills gaps to be. In the garment sector, for instance, firms do not appear to deem gaps as excessively severe; in contrast, in the construction sector, one out of three firms considers the gaps severe. These differences are likely to stem from differences in technologies

and tasks that workers are expected to perform. In the garment sector, for instance, it remains relatively easy to train a worker to use a specific machine. Skills required in the hospitality sector are much broader in scope. But, as highlighted by the fact that employers cite soft skills, as opposed to technical ones, as most often being the main constraint, technology is only partly responsible for skills gaps and mismatches. In fact, skills mismatches appear to be a generalized feature of the Cambodian labor market, affecting both skilled and unskilled workers, including university graduates (Box 2.3).

Box 2.3

Skills gaps and mismatches for university graduates

Source: HR Inc Cambodia (2009).

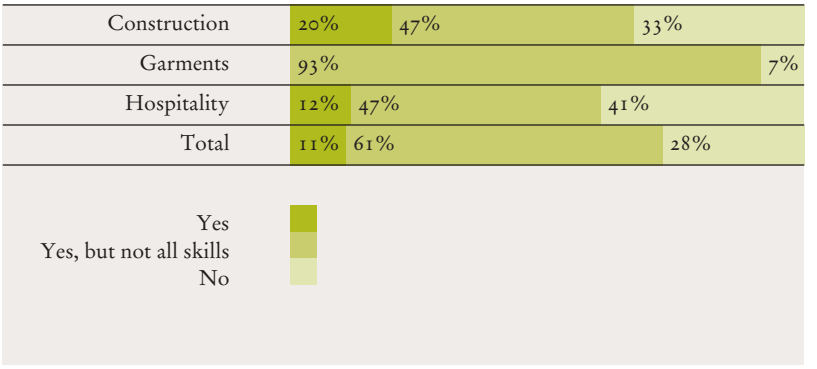
Employers express as much concern about the skills possessed by higher education graduates as about those of their vocational training counterparts. The training that higher education institutions offer is considered excessively theoretical, so that graduates often lack practical skills. Accordingly, only 11 percent of employers claim that university graduates are equipped with the skills necessary to perform their jobs (upper figure below), compared with 19 percent for vocational training (see Figure 2.3 above on vocational training).

In the construction sector, only 20 percent of employers consider that graduates are fully equipped with the required skills. There appears to be, in particular, a severe shortage of architects and engineers: 53 percent of employers claim that vacancies for engineers are the most difficult positions to fill, followed by architects at 47 percent (see Figure 2.8 below). Firms resort to foreign architects and engineers for important projects and positions. In the garment sector, there is a shortage of university graduates, with strong demand for qualified salesmen (Figure 2.8). In addition, 60 percent of employers complain about the lack of language proficiency of professional workers, in particular English and Chinese (see Figure 2.5 below). Foreign languages are indeed key skills to manage connections with workers, buyers, clients and company owners. In the hospitality sector, only 12 percent of employers claim that university graduates have the necessary skills required to perform their jobs. Most employers complain about the difficulty in finding people with strong decision-making and problem-solving skills, which are required for managerial positions (see Figure 2.4 below).

Large skills mismatches appear to be at the root of these gaps: 67 percent of employers consider that the skills offered by universities are not the skills demanded by firms (lower figure below). About 46 percent of employers do not know of any universities that can supply employees

for their company, and only 15 percent have a relationship with a specific university to hire graduates.

Skills gap in higher education



Skills mismatch in higher education

Hospitality sector

In the hospitality sector, employers identify foreign language proficiency as the most difficult skill to find, although they complain also about the lack of soft skills at all levels of qualification. In the hospitality sector, there is strong demand for knowledge of foreign languages, even for unskilled workers, as foreign languages are important to serve tourists, offer quality customer service and remain competitive in an increasingly active sector. Nevertheless, only 12 percent of the labor force is able to speak a language other than Khmer (CSES 2008: NIS, 2008), and the proportion is even lower for unskilled workers. Accordingly, 61 percent of employers complain about the difficulty in finding unskilled workers with knowledge of foreign languages. Employers also complain about the lack of technical and soft skills among unskilled workers: on technical skills, it appears to be particularly difficult to find workers with service, housekeeping and room grooming skills. The lack of behavioral skills such as team spirit, self-motivation and commitment is also mentioned as a constraint (28 percent) (Figure 2.4).

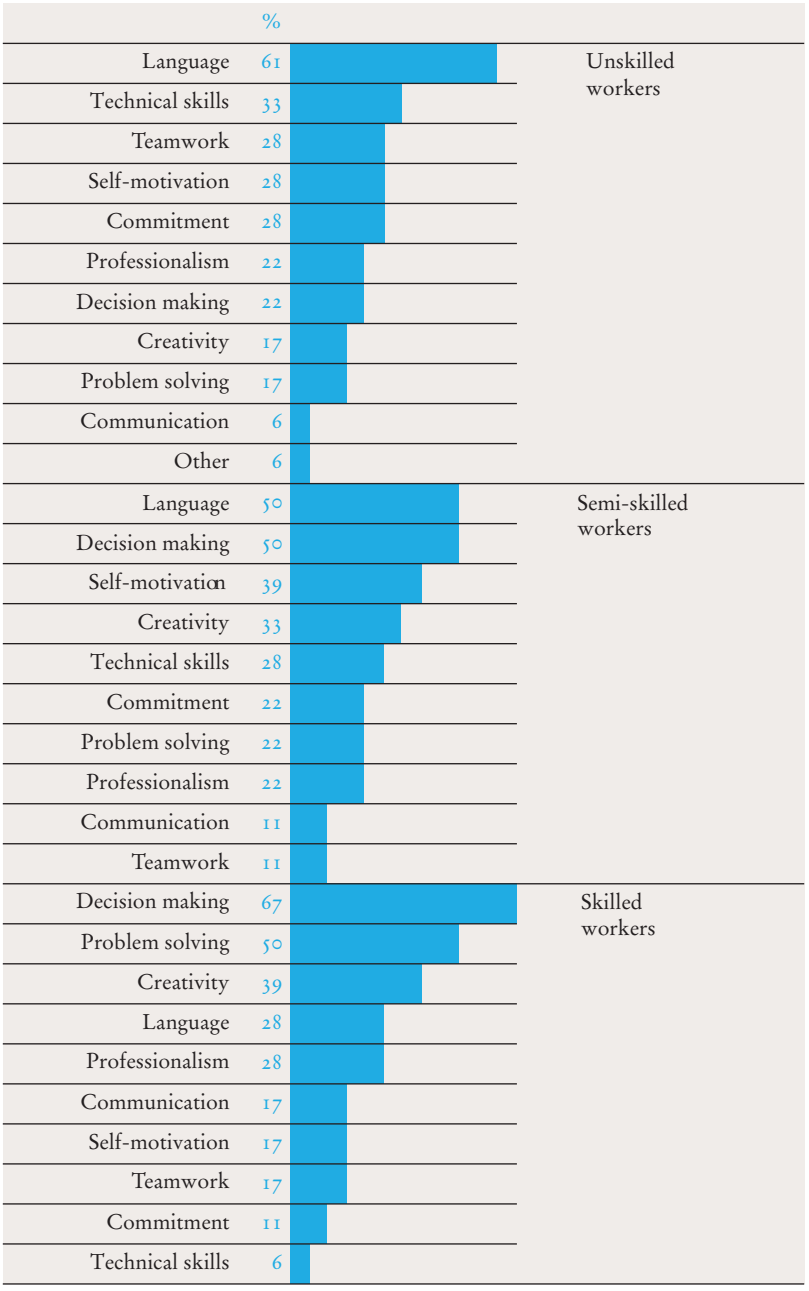
Poor language and behavioral skills seem to be a constraint extending to all levels of qualification (Figure 2.4). Lack of decision-making skills

among semi-skilled and skilled workers is cited as a constraint by more than 50 percent of employers, and poor problem solving and creativity are cited as a constraint by a third or more of employers. Interestingly, in the hospitality sector, formal education requirements do not appear to be as strong as in other sectors: for professional and managerial positions (skilled workers), only 44 percent of employers require a university degree, with 39 percent of employers finding a vocational training curriculum sufficient and 17 percent wanting at least high school.

Figure 2.4

Skills gaps in the hospitality sector, 2009
Note: The figures represent the percentage of employers identifying a skill as a constraint.

Source: HR Inc Cambodia (2009).



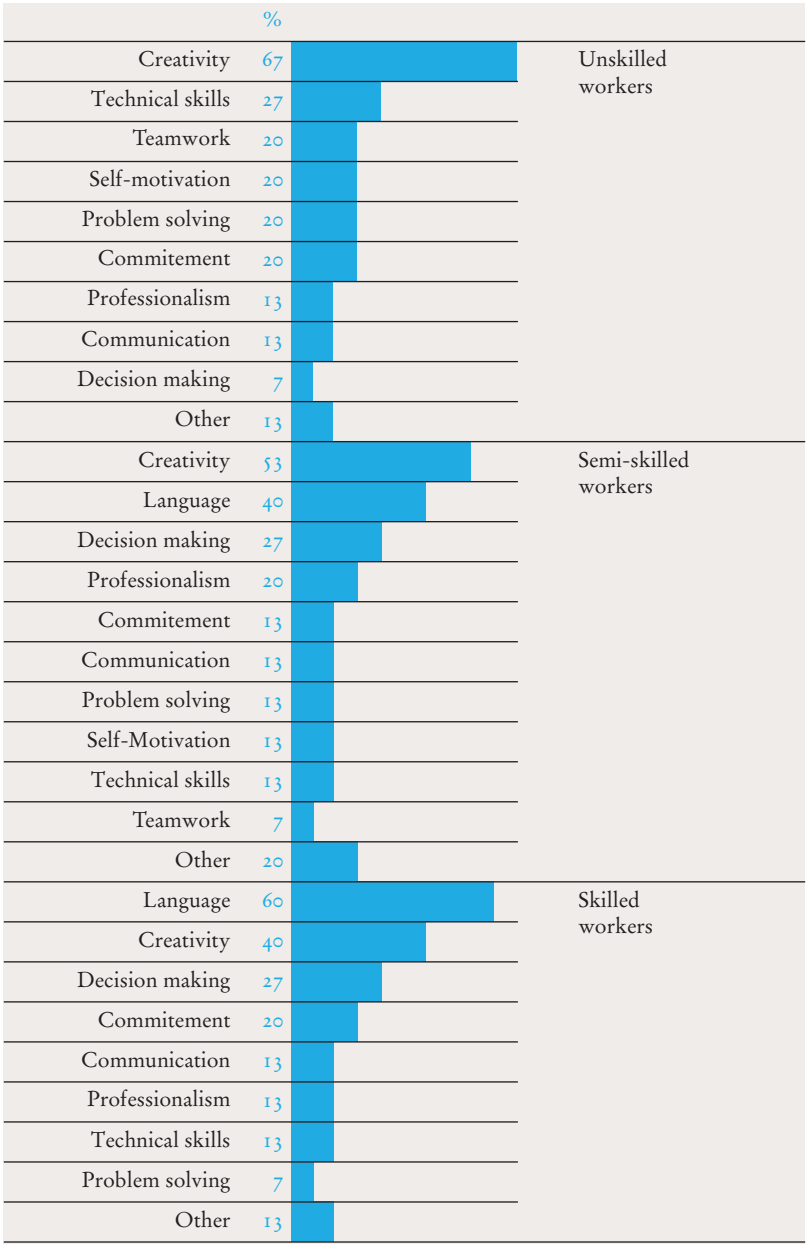


Figure 2.5

Skills gaps in the garment sector, 2009

Source: HR Inc Cambodia (2009).

Garment sector

Creativity is a critical skill in the garment sector, but also the one that seems to be lacking the most (Figure 2.5). Creative thinking is the most difficult skill to find in most employees and across all skill levels. Lack of creative thinking is particularly marked among unskilled workers (67 percent of employers see it as a gap), although it appears to remain

a serious gap for semi-skilled and skilled workers as well (53 and 40 percent, respectively).

Poor language and decision-making skills are also a constraint for semi-skilled and skilled workers. Poor language skills stand out as a particularly relevant constraint for skilled workers, who, as highlighted in Box 2.3, need to manage relationships with workers, buyers, clients and company owners. Social compliance, merchandising and human resources are also hard to find among semi-skilled workers. For a skilled position, about 93 percent of employers demand a university degree, whereas 7 percent of employers find vocational training to be sufficient.

Unskilled workers also appear at times to have poor technical skills. There were complaints from 27 percent of employers about the lack of technical skills among unskilled workers, in particular sewing, buttoning and mechanic abilities. One out of five employers also emphasizes poor soft skills as a constraint among unskilled workers, in particular team spirit, motivation, problem-solving ability and commitment to the job (Figure 2.5).

Construction sector

In the construction sector, more than technical competencies, employers stress the importance (and lack) of a broad set of soft skills across all skill levels (Figure 2.6). There were complaints from 47 percent of employers that teamwork, self-motivation and commitment are the most difficult skills to find among unskilled workers. One-third of employers also see lack of technical skills as a constraint: in particular, it appears that workers do not know how to use modern equipment, and it is hard to find construction workers with experience in brick laying, plumbing, plastering and blacksmithing. In contrast with the hospitality and garment sectors, however, knowledge of foreign languages does not seem to be as important (33 percent).

Poor soft skills also seem to be a constraint for semi-skilled and skilled workers. Employers affirm that many workers do not appear to be committed enough, but also team spirit, self-motivation and decision-making ability seem to be difficult to find, even among skilled workers. For semi-skilled workers, 40 percent of employers complain about the difficulty in finding people with good technical skills: roofing and flooring, building high-rise structures and understanding architectural

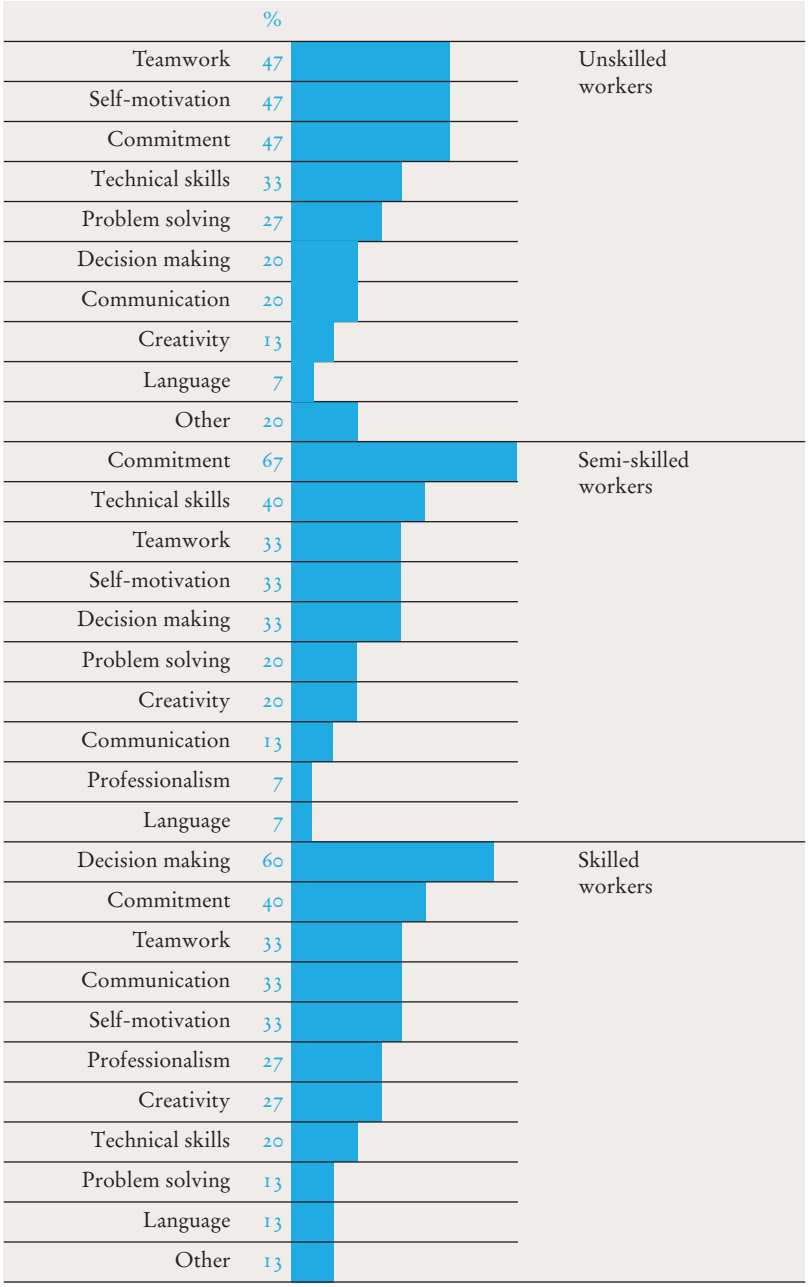


Figure 2.6

Skills gaps in the construction sector, 2009

Source: HR Inc Cambodia (2009).

Out-of-school youth

Out-of-school youth, despite being the largest group entering the workforce every year, appear to face significant challenges in working in the new and booming sectors, as reflected by the high percentage of employers claiming to face some difficulties in working with them. Firms in the construction and garment sectors, and to a lesser extent in the

hospitality sector, regularly employ out-of-school youth. Nevertheless, between eight and nine out of ten employers in the construction and hospitality sectors, and all employers in the garment sector, claim to be facing challenges in employing this group. Qualitative interviews with employers showed that these challenges relate strongly to the lack of soft skills. Frequently cited skills lacking in out-of-school youth are communication, commitment, loyalty, discipline, punctuality, integrity, conflict resolution, morality, responsibility, self-motivation, adaptability, general knowledge and the ability to learn and absorb new knowledge.

Figure 2.7

Employers who face challenges with out-of-school youth, 2009

Source: HR Inc Cambodia (2009).

Filling jobs

Workers' lack of specific technical and soft skills also translates into difficulties filling certain positions at all skill levels. In the garment sector, the positions that stand out as the most difficult to fill are in sales and sewing (Figure 2.8). A serious shortage of professional staff also exists in the construction sector, where it is hard to recruit engineers and architects. It is also quite difficult to hire semi-skilled or unskilled carpenters, plumbers, blacksmiths and electricians. The hospitality sector seems to suffer particularly from a shortage of skilled staff: employers identify chefs (61 percent), receptionists (56 percent), food and beverage managers (56 percent) and bar managers (44 percent) as the most difficult positions to fill. Such a shortage reflects the link between the skills gaps and difficulties in filling positions, since these managerial positions require a high level of leadership as well as problem-solving and decision-making abilities. More generally, employers in all sectors tend to agree that is difficult to find professional staff or managers to work in finance and administration.

Training

Firms increasingly resort to training to cope, in part, with existing skills gaps. On-the-job training is the most popular method, used by all employers in the hospitality and construction sectors and by 87 percent

of firms in the garment industry (Figure 2.9). Other forms of training are also used, although to a lesser extent. Between 40 and 60 percent of firms rely, in addition to on-the-job training, on externally provided training. Some firms, in particular in the hospitality sector, have also set up internal training units (Figure 2.9). The hospitality sector provides the most training to its workers, as skills needed are difficult to find in the labor market.

While training should be an integral component of human resource management, the variety of training employers provide also reflects the need to cover some of the skills gaps that are present in formal training curricula. For instance, in addition to technical skills, employers stress the importance of continuing to develop soft skills, such as problem solving, leadership and team spirit among their workforce (Figure 2.10).

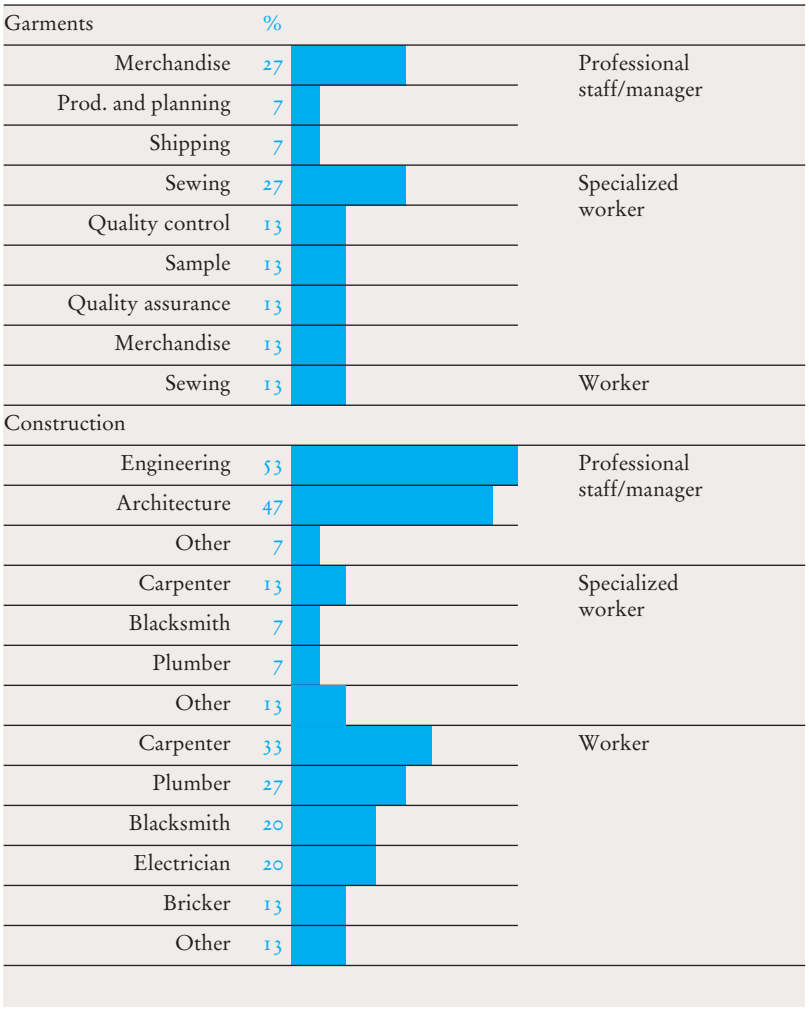


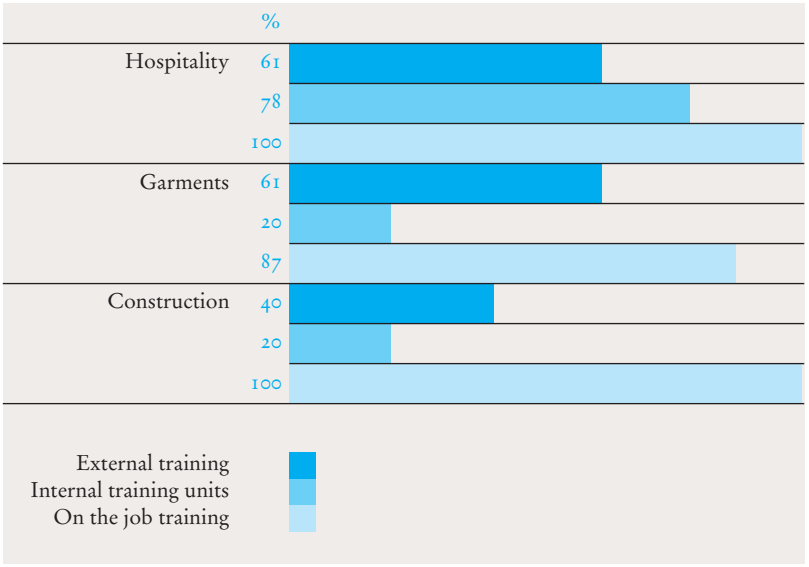
Figure 2.8

Jobs most difficult to fill, 2009

Source: HR Inc Cambodia (2009).

Figure 2.9

Methods of training, 2009
Source: HR Inc Cambodia (2009).

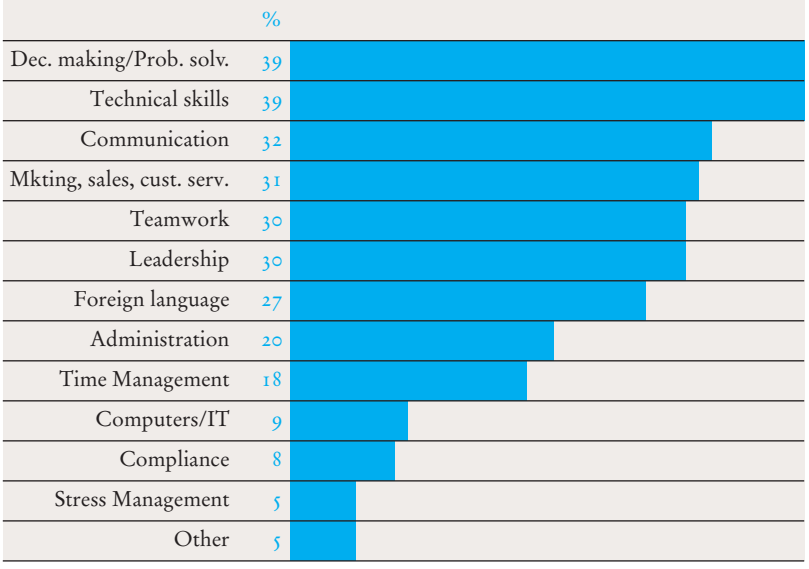


However, high worker turnover may impact firms' incentives to invest in the training of their workforce. ICAs suggest significant labor turnover among formal sector firms. In 2007, 17 percent of workers were new employees and 11 percent left the company by the end of the year (World Bank, 2008). Such a high worker turnover may affect firms' incentives to invest in training their workforce, and justifies further the need to improve the quality of training and general education so as to better prepare youth for the labor market.

Figure 2.10

Type of training required, 2009

Source: CAMFEBA (2008).



3. Non-Formal Training Programs for Out-of School Youth

A variety of providers in Cambodia deliver non-formal training to out-of-school youth, ranging from public provincial training centers, to private providers, to non-governmental organizations (NGOs). However, major challenges persist with regard to enhancing the quality of non-formal programs. Overall, in particular among public institutions and private providers, there exists a large skills mismatch between employers' needs and the curricula offered by training providers. Only a few providers (mostly NGOs) teach much-needed soft skills. Public institutions tend to be poorly managed, have insufficient funding, face a shortage of qualified teachers with industrial experience and lack adequate training facilities. Furthermore, the system remains unregulated and fragmented, in part because the oversight responsibility for provision of non-formal training is split between the Ministry of Labor and Vocational Training (MoLVT) and the Ministry of Education, Youth and Sports (MoEYS). Partly as a consequence, there are no accreditation and certification standards for either public or private training providers, and the system lacks linkages between formal and non-formal TVET and articulation with the general education system.

Background to non-formal training in Cambodia

The Royal Government of Cambodia (RGC) has placed a strong emphasis on the need to expand its skilled labor force to alleviate poverty and promote industrialization. The National Strategic Development Plan (NSDP) 2006-2010 prioritizes four pillars: improvements to productivity and diversification of agriculture; private sector development and employment generation; further rehabilitation and construction of physical infrastructure; and capacity building and human resource development. TVET and skills development more generally are important in all four pillars and are accordingly given a strong emphasis in MoLVT's Development Plan 2006-2010 (see Box 3.1). This prioritization responds well to the main challenges faced by the TVET system, but the reform agenda remains ambitious, and limited financial and human resources pose a serious challenge in bringing reforms forward.

Box 3.1

National TVET policy

Source: HR Inc Cambodia (2009).

The RGC's NSDP Update 2009-2013 aims to tackle the new challenges that the crisis has brought with regard to Cambodia's development. It puts a strong focus on the development of a vocational training policy linked with the labor market and proposes to: (i) provide basic skills training to people in rural areas to increase income; (ii) provide training or skills improvement to factory workers in cooperation with employ-

ers; (iii) continue to expand technical and vocational training to provinces/municipalities, including entrepreneurship training programs; and (iv) establish a National Agency for Professions and Employment as well as employment centers in provinces/municipalities as a mechanism for the dissemination of labor market information.

At the same time, the RGC will continue to strengthen its partnership with the private sector and with the national and international community in order to enhance and improve quality of education services, putting increased emphasis on information and foreign language training at all levels of general education, in technical and vocational training and in higher education, consistent with international standards and the country's development needs. Equally importantly, the RGC will expand training for technicians and engineers through technical and vocational training schools and higher education.

Under the NSDP 2006-2010, MoLVT created the first five-year Development Plan (2006-2010), approved by the National Training Board (NTB). This consists of four strategies: employment creation; ensuring better working conditions; promoting enforcement of the law on social security; and development of capacity building on technical and vocational skills. The Directorate-General of Technical Vocational Education Training (DGTVET) will be mainly responsible for the implementation of the last strategy. In particular, the Strategic Development Plan for TVET consists of: (i) improving TVET linkages with market needs; (ii) developing a national quality framework, national competency standards and accreditation of TVET courses, programs and institutions; (iii) expanding provision of TVET; and (iv) developing a labor market information system.

Formal TVET is currently offered mostly by public institutions. Formal TVET consists of programs for school-aged youth that are offered as an alternative to the standard education curriculum but provide equivalent certificates. The formal TVET system, managed by MoLVT, starts at upper secondary level and offers certificate programs from one to three years. A National Vocational Certificate, equivalent to completion of upper secondary education, is provided to those who complete the three-year program successfully. Students holding a certificate can then participate in a two-year program to obtain a diploma or a four-year program to obtain a Bachelors or Masters degree in technology or business. They can also opt to go to university if they obtain approval

from the Accreditation Committee of Cambodia (ACC). However, currently only 14 public institutions (polytechnics, centers and schools) offer technical and vocational training at certificate, diploma and degree levels.

Table 3.1

TVET and the education system in Cambodia

Source: HR Inc Cambodia (2009).

General education system	TVET system	Higher education system
Lower Secondary School Certificate	Vocational Training Certificate	
	Technical Vocational Diploma Level I	
	Technical Vocational Diploma Level II	
	Technical Vocational Diploma Level III	
	Higher Diploma of Business	
Upper Secondary School Certificate	Higher Diploma of Technology	
	Bachelors Degree in Technology/Business	Bachelors Degree (Specialization)
	Masters Degree in Technology Business	Masters Degree (Specialization)
	PhD in Technology/Business	PhD (Specialization)

The TVET system is governed under the NTB and is administered through DGTVET in MoLVT. At present, the TVET system operates beneath a Directorate-General in MoLVT and under the guidance of the NTB.[5] DGTVET is divided into three departments: (i) the Department of Technical Vocational Education and Training Management, responsible for institutional management monitoring; (ii) the Department of National Competency Standards, responsible for regulating competency standards and the National TVET Qualification Framework (NTQF); and (iii) the Department of Labor Market Information, which is also responsible for managing apprenticeships.

The NTB is the apex body of the TVET system, constituted in 1996 and re-established in 2005 under new guidelines. It is chaired by the HE Deputy Prime Minister Sok An and has 35 representatives on its Governing Board, from most ministries, from other organizations and from private sector enterprises. DGTVET supports the NTB and acts as Secretariat for it. The NTB is responsible for developing policies and implementing government regulations and vocational training programs through DGTVET. It has the mandate to respond to the NSDP with a

5 TVET was managed by MoEYS until October 2004, when the responsibility was transferred to the newly constituted MoLVT. DGTVET was created in 2007.

long-term plan for TVET, with the first such plan articulated in 2006. The specific functions of the NTB, as established in Sub-Decree 790, are to: (i) prepare policy and a national training plan for TVET; (ii) coordinate and orient the work of TVET to meet the demand-driven needs of the national economy in the present and future; and (iii) propose initiatives to renew and further develop the TVET system to be quality driven and effective, linked to national development priorities, responsive to the needs of trade, industry, agriculture and service sectors and based on continuing close relationships between workplaces and institutions.

While non-formal (or "second chance") training programs do fall under the responsibility of DGTVET and the NTB, they remain poorly regulated. In this report, we refer to non-formal or "second chance" training programs as training provided to those who are out of the schooling system and have achieved less than Grade 9 qualifications. Non-formal training is provided by public provincial training centers, NGOs, private (formal/informal) providers and employers as part of on-the-job training (skills upgrading, specialist training and apprenticeships). Some long-course public institutions are also involved in the provision of non-formal training, receiving funding from the RGC to offer short programs of up to six months in length. Non-formal training programs fall under the purview of DGTVET, which was designated the responsible entity for coordinating and regulating the provision of training.

Public training providers

The formal TVET system is managed by MoLVT and remains fairly modest, enrolling 15 percent of students at upper secondary level and 4 percent of students at certificate and higher levels. In 2008, approximately 2,400 students graduated from the formal TVET system: 1,700 students graduated at diploma and Masters levels and 700 students at certificate level – low even compared with the estimated 8,000 or more college and university graduates. Although MoLVT remains the main implementer of formal vocational training, some programs in agriculture and health fall under the supervision of the sector ministries.

Public provision of non-formal training is shared across various ministries. MoLVT manages 22 Provincial Training Centers (PTCs) that provide non-formal training, mostly in rural areas. Smaller in scale, MoEYS and the Ministry of Women's Affairs (MoWA) also operate non-formal programs for out-of-school youth. Many of the non-formal training

programs are supported by development partners (DPs), whose involvement is described below.

Public non-formal vocational and training programs are financed mostly by the RGC's National Training Fund (NTF). The Asian Development Bank (ADB) in 1997 supported the establishment of the NTF under its Basic Skills Project. At present, the fund is administered by MoLVT and is envisaged as a mechanism to support short-course programs of up to six months in length in basic "entry-level" technical skills to school dropouts, delivered by either government or private providers. The NTF is financed under MoLVT's annual recurrent budget: in 2009, its budget was $624,000. All PTCs, a significant number of NGOs and some polytechnics and technical institutes receive funds from the NTF to provide short-course programs. In 2008/09, 392 courses in the fields of industry, technical skills, handicrafts, services and agriculture were funded by the NTF, covering almost 12,500 trainees. Although regulations allow private training providers to participate, the use of low unit costs in the competition for contracts tends to penalize private training providers, as they cannot afford to compete with government institutions and NGOs, which have other financing sources to pay teachers' salaries. Therefore, in 2008, under 5 percent of successful tenders were submitted by private institutions (ADB, 2009a).

In response to the crisis, the RGC allocated additional resources to scale up non-formal training programs. The Samdech Techo Prime Minister's Special Fund added $8 million to MoLVT´s budget to provide an allowance and training to workers and youth who lost their jobs during the crisis. This provided a monthly allowance of $40 to trainees for food and accommodation. It also provided skills training programs in agriculture (one month), technical areas (four months), entrepreneurship (one week) and microcredit to start a business. In total, 39 public institutions, 18 NGOs and 20 communities received funds to carry out 1,495 courses and train 40,140 participants between May 2009 and November 2009. Most of the funds were quickly disbursed by MoLVT through the PTCs.

Currently, both formal and non-formal TVET systems lack skill standards for programs and providers. As a large number of youth are acquiring vocational and technical skills through formal and non-formal training, there is an urgent need to articulate standards and establish a qualification hierarchy to which all providers can adhere. A National

Qualification Framework (NQF) should establish skill standards as well as procedures for testing and certifying trainees, for accrediting training providers and to provide flexible pathways between different levels of education.

Skill standards should provide a guideline for the development of appropriate training curricula and training procedures in order to suit industry requirements. MoLVT, with ADB support, has developed some initiatives for the TVET band of an NQF. The draft NTQF, based on existing international competency standards, was prepared in 2006 and revised in 2008, but it has had limited involvement from industry and has not yet been adopted. Part of the reason for this lies in the fact that employers oppose regulation of skill standards on the grounds of possible effects on labor costs (ADB, 2009a). Another concern about the implementation of skill standards is that the system would be too complex to administer.

Formal TVET: Polytechnics and technical institutes

Formal secondary programs are delivered mostly in polytechnics and technical institutes to a predominantly urban population. There exist 14 polytechnics and technical institutes delivering formal TVET courses at certificate (basic skills level), diploma and degree levels to a predominantly urban-based population. Accordingly, the majority of these institutes are located in Phnom Penh (eight of the institutions).

Provision of formal programs remains supply driven and reflects employers' needs only poorly. Most of the courses that public institutions offer do not match employers' needs. Employers demand technical graduates with skills in tourism and hospitality, foreign languages, IT, sewing, plumbing, carpentry and blacksmithing (see Chapter 2), but courses offered in these areas are few or non-existent. Formal courses focus on technical/trade areas (66 percent, with very few on plumbing, carpentry, masonry, welding and metal fabrication) and, to a lesser extent, business (20 percent). Only 5.3 percent of formal courses are in computing, 1.8 percent in tourism and hospitality and 1.8 percent in language. Training on textiles/garments and handicrafts is currently not offered (Table 3.2). Moreover, enrollment reflects the restricted supply of courses in fields demanded by employers: most technical and vocational graduates enroll in mechanical, electrical and electronics courses (61 percent) and business programs (23 percent). Enrollment also presents marked gender

differences: almost all students enrolled in technical and trade courses are male; even in business fewer than 50 percent are women.

Table 3.2

Graduates from formal training programs, 2008

Note: Technical and trade fields of training include courses in mechanics, electricity, electronics, air conditioning, plumbing, welding and metal fabrication, construction, masonry and carpentry. Other includes teacher training, arts and design courses.

Source: ADB (2009a).

Training program	No. of graduates					% share in	
	Certificate Level 123	Diploma Level 4	Bachelors Level 5	Masters Level 6	Total	Courses	Graduates
Agriculture							
Technical and trades	432	636	368	20	1,456	66.7	60.9
Textiles, garments and handicrafts							
Hairdressing and beauty							
Computing		41	30		71	5.3	3.0
Tourism and hospitality		5			5	1.8	0.2
Business		82	366	109	557	19.3	23.3
Languages		31			31	1.8	1.3
Other	271				271	5.3	11.3
Total	703	795	764	129	2,391	100.0	100.0
% of total	29.4	33.2	32.0	5.4	100		

Non-formal TVET: Provincial Training Centers

Non-formal training delivered in PTCs aims at supplementing and supporting family income through enhancement of agricultural, craft and basic technical skills. PTCs were established in the early 1990s with assistance from the United Nations Development Programme (UNDP) and the ILO to provide non-formal vocational training primarily for rural youth, who had lower levels of education. On average, 10,000 trainees graduated per year from 2006 to 2008.[6] The vast majority of the students (almost 7,100) enrolled in courses on basic agricultural skills, which lasted an average of two weeks. A few (840) students per year enrolled in courses on construction, welding, plumbing, electronics, motor electrical and mechanical, which lasted around three to four months. Over the years, courses on beauty care, textiles/garments, computers and hospitality have been added.

Size and quality of instruction tends to vary across PTCs. PTCs operate at a variance with each other in terms of: number of teachers and students; courses; length of training; and delivery modality. The number of teaching staff across centers ranges from 10 to 38 for permanent staff

[6] This figure excludes the number trained under the pilot Voucher Skills Training Program (VSTP).

and from 11 to 46 for contractual teachers. Some centers offer as few as three programs for 60 students per year; other centers offer 20 programs for 9,000 students. Curricula are not harmonized across centers: teachers have to design their own. Similar programs last for one or two weeks in some centers but one or two months in others. The delivery modality in some PTCs is school based and in others community based.

The ADB is supporting upgrades to the capacity and teaching quality of PTCs. Under the ADB-supported Strengthening Technical and Vocational Education and Training project, which runs from 2010 to 2015, existing PTCs will be upgraded and new ones will be developed. Five of the 22 PTCs will be transformed into Regional Training Centers (RTCs), offering formal courses in addition to non-formal programs. Two new PTCs in the unserved provinces of Preah Vihear and Mondulkiri will be established to guarantee delivery of non-formal training across the country.

Table 3.3

Provincial Training Center graduates in non-formal short-courses, 2008

Note: Courses are school based and exclude VSTP-funded programs.

Source: DGTVET data March 2009, adapted from ADB (2009a).

	Courses		Graduates	
	No.	% share of all courses	No.	% share of all graduates
Agriculture	103	52.6	7125	74.2
Technical	34	17.3	843	8.8
Textiles, garments and handicrafts	24	12.2	575	6
Hairdressing and beauty	4	2	104	1.1
Computing	22	11.2	667	6.9
Tourism and hospitality	1	0.5	20	0.2
Business	3	1.5	60	0.6
Languages	2	1	111	1.2
Other	3	1.5	100	1
Total	196	100	9,605	100

Box 3.2

The Siem Reap Provincial Training Center

The Siem Reap PTC was established in 1993 with UNDP/ILO technical and financial support for 213 students in sewing, welding, motorbike and small engine repair, electrical engineering, restaurant table service and silk screen printing. During the 1990s, steady annual funding allowed for an expansion of training, to offer construction and agriculture commune-based programs (i.e. food production, mushroom raising and animal husbandry) and a small microcredit component for business start-up. The main target groups were civil war refugees,

widows, army veterans and people with little or no income. In 2004, MoLVT assumed responsibility for TVET in Cambodia and for the management and funding of all the PTCs. Government funding to Siem Reap PTC has been variable and somewhat unpredictable over the past five years, which makes course and budget planning more challenging. Student intake has varied from 200 to 400 per year depending on the funding available.

The basic operating budget for 2009 was $22,100. However, in view of the global economic slowdown and its impact on the Cambodian garment sector, the Prime Minister injected an additional amount of $42,600 into Siem Reap PTC for retraining laid-off garment workers, most of whom were young women from poor backgrounds with little formal education. In 2009, Siem Reap PTC provided center-based training for 295 students, community-based training to 8,226 students and enterprise-based training to an additional 137 students.[7] It also expanded the course base to include: community-based training on chicken and pig raising, land management, rice/vegetable/watermelon production; center-based training on air conditioning, computers, electricity, hospitality and sewing; and enterprise-based training on hairdressing, motorbike repair, radio/TV repair and sewing/tailoring. However, 95 percent of courses remain community based and agriculture focused. Awareness of PTC courses is generally raised through radio announcements, commune notices and NGO referrals. Applicants for the school-based training program must go through a skills competency test, an interview and a home visit.

There are currently 25 public school teachers and four contract teachers. Most permanent teachers are sent by the National Technical Training Institute (NTTI) in Phnom Penh. Professional development of instructors mostly comprises on-the-job training, which is in fact part-time work for teachers to supplement income. Some professionals are hired to teach specific skills for up to three days. Teachers are required to develop their own curriculum for short courses (less than six months), but few have managed to obtain feedback from their employers on this. There are currently no life skills teachers at the Siem Reap PTC. Training on entrepreneurship is offered for one week at the end of each center-based course, with teacher training provided by the ILO.

Local businesses often contact the PTC when looking for job candidates, as the center maintains a catalog of students. The PTC follows up

[7] These figures include students trained under the VSTP.

on graduates for up to six months to assess the job search and to provide information about start-up requirements. The PTC also aims to obtain feedback from employers on the curriculum and on skills needs.

PTCs also experience severe difficulties in finding qualified teachers. Lack of qualified teachers with an adequate mix of academic and industrial expertise is a recurrent difficulty faced by PTCs. Public teachers are recruited from graduates with a diploma or a higher-level degree in the necessary disciplines, but low salaries make it difficult to attract good candidates with enterprise experience. Applicants are first required to undertake one-year pedagogical training at the NTTI. At the end of the training, instructors are ranked according to an overall performance assessment, with better teachers assigned to polytechnics and formal institutes and lower achievers placed in PTCs. Currently, 74 percent of permanent staff in PTCs have teaching qualifications whereas, in general, contract teachers (hired from the private sector) do not have pedagogical training. Most PTC staff lack the necessary practical skills, as they have little or out-of-date experience in enterprises and in other relevant subjects, such as small business and community development.

Other key problems faced by PTCs include a lack of adequate training facilities, little interaction with employers and instability in the allocation of the annual budget. Programs also lack recognized certification. Facilities and infrastructure in most PTCs are inadequate, with obsolete equipment and teaching materials. PTCs also have little interaction with employers, hence curricula and needs programming do not include inputs from employers. Centers also report considerable variability in the annual budget from one year to another, making it difficult to properly plan and invest resources efficiently. Another concern is that non-formal (public) programs do not carry a recognized certificate of competence.

Women's Development Centers

MoWA also provides vocational training to out-of-school girls in 11 WDCs. Since the late 1990s, MoWA has operated WDCs in 11 provinces to support disadvantaged women and their families through provision of vocational skills training. Of these, eight are supported directly by MoWA, two by the ADB[8] and one by UNDP. Trainees – mostly women – are usually from the communes or are referred to the WDC

[8] ADB support to the WDCs in Siem Reap and Kampong Chhnang was through a Japan Fund for Poverty Reduction (JFPR) grant that closed in March 2010. No further support is envisioned.

by a local NGO. They tend to be out-of-school girls. WDCs are located in provincial towns and provide accommodation to participants. Mobile teams operate in some of the more remote areas, when budgets permit.

WDCs also provide training on life skills and traditional vocational skills. In 2006, some of these centers transformed to provide market-oriented skills training, services and business information to support and empower women as entrepreneurs and create new jobs for women. In an effort to meet the needs of local women and girls and to offer market-oriented skills training, local commune councils, in collaboration with WDCs, develop vocational training plans based on the feedback of village gender focal persons. WDCs then provide traditional vocational training (handicrafts, sewing, weaving, food processing), enhanced in some cases by basic entrepreneurship training. WDCs have also conducted garment industry pre-job training and business counseling, where requested. Courses range from a few days to six months. The centers also aim to provide life skills training. About 2,500 women are trained each year, 10 percent directly in the communities.

Insufficient funding, poor management, shortage of qualified teachers and lack of coordination between MoWA and MoLVT are the main constraints facing WDCs. Many of the vocational trainers have poor education themselves, and instructor training is usually carried out by local NGOs with expertise in a restricted set of skills. MoWA and MoLVT appear to have quarterly meetings to discuss gender in TVET programs, but there is little *de facto* collaboration and information sharing. WDCs also face limited budget and staffing resources. Although budget amounts for WDC activities are currently not available, it is understood that the UNDP-supported center received approximately $20,000 for six months.

Community Learning Centers

MoEYS also delivers non-formal programs, through CLCs spread out across the country. Although vocational training is no longer the responsibility of MoEYS, non-formal education remains within its jurisdiction. The Department of Non-Formal Education administers five programs for adults and out-of-school youth, including one vocational training program and four literacy and equivalency programs.[9] CLCs are non-formal training centers offering literacy and vocational cours-

9 Other non-formal education programs offered in CLCs and local schools are: functional literacy – a six-month, three-level program to achieve self-learning and a certificate of literacy; post-literacy – a support program to maintain operational literacy through reading rooms and poster visuals; equivalency, which includes a two-month program for early school leavers from Grades 3-6 to enable them to re-enter public school and a two-year study and work program at primary, lower and upper secondary levels; and mobile learning centers – library vans servicing remote areas depending on seasonal access.

es for individuals aged 15 and above who have left the formal school system. CLCs were first established in 2000 with assistance from the United Nations Educational, Scientific and Cultural Organization (UNESCO) in Kampong Speu, Kampong Thom and Takeo provinces, and since 2003 have been supported directly by MoEYS. CLCs are established with an initial grant of $1,000, supplemented by community support in the form of buildings, materials, labor and cash. At the moment, there exist 157 CLCs.

CLCs offer vocational training on seven specialties. The main activities of CLCs are advanced literacy programs and basic vocational training for income generation, consisting of three- to six-month courses in hairdressing, sewing, motorbike repair, computers, Khmer music, pottery and fish farming. Courses are supplemented by life skills classes on health care, HIV and AIDS, human trafficking and drug abuse. In 2009, 4,379 students attended 270 classes, 60 percent women.

There appears to be some overlap on training offered by MoEYS and MoLVT, and on respective responsibilities. The responsibility of each ministry in terms of the provision of non-formal education remains poorly defined. In particular, discussions with MoEYS and MoLVT suggest that responsibilities are not yet clear on who should provide non-formal training to out-of-school youth, and who should supervise and coordinate it.

Support from development partners

DPs are the largest funders of non-formal training. DPs, in particular the ADB, have promoted the development of the TVET system through building public sector capacity, support to program implementation (teacher training, curriculum, facilities and resources) and funding. DPs have also supported evaluations of the system and ongoing dialogue among stakeholders.

Interest in supporting vocational training seems to be waning, however, and efforts should be made to improve dialogue and coordination between the NTB and DPs. A recent ADB assessment of the TVET panorama finds that support has waned somewhat, with various projects coming to an end (ADB, 2009a). Resources and motivation required to maintain the original impetus are in short supply. Many DPs are also not very involved in the policy dialogue: the NTB counts only two DPs

as members and there are no ongoing strategic discussions at the highest levels to ensure appropriate funding and coordinated investments in TVET.

The Voucher Skills Training Program

The largest provision of non-formal training courses has been supported by the VSTP, an ADB-financed component of the Second Education Sector Development Program (ESDP II). The VSTP, implemented by MoLVT, piloted a model for delivering large-scale non-formal programs to communes and villages on skills that they had identified and requested. Communities, with the assistance of a specialist from the PTC, assessed local skill needs and determined specific training needs. Thereafter, each community received a voucher of up to $5,000 to fund training of about 200 people from the target group (i.e. youth aged 15-25 and women) in three different delivery modalities: commune, enterprise and center based. PTCs were to be responsible for delivering the training in the center- and commune-based modalities. In the case of enterprise-based training, the PTC was responsible for identifying the trainees and the small enterprises that would train the new workers. PTCs were also to provide training support to the enterprises and to be responsible for monitoring the training.

From June 2006 to December 2009, the VSTP pilot trained nearly 161,400 participants in 210 communes from seven economically challenged provinces (Battambang, Kampot, Kampong Chhnang, Siem Reap, Stung Treng, Svay Rieng and Takeo). Of the training, 96.5 percent was community based (five to seven days in duration), 2.1 percent was delivered as short courses in PTCs (four months in duration) and 1.4 percent was enterprise based (four months in duration). The majority of VSTP courses have been in agriculture-related areas, and women made up almost 57 percent of trainees (ADB, 2009a). Although the great majority of trainees participated in agriculture- and livestock-related courses, the VSTP supported 64 different skill courses, of which 40 were not on agriculture.

The program has proven to be effective: more than 50 percent of beneficiaries increased their income by 15 percent. Although a rigorous evaluation of the program has not yet been carried out (in particular, we do not have information about whether youth who did not go through the program had progressed similarly over the period of the program),

in a preliminary assessment conducted by the ADB (2009a) of trainee income six months after VSTP training completion, more than 50 percent of program graduates reported that their income had increased by at least 15 percent. In view of the success of the pilot, the VSTP will be a major element of the proposed ADB grant for 2010-2015 on Strengthening Technical and Vocational Education and Training.

	No. of graduates	% share of all graduates
Agriculture	39,579	74.5
Technical	1,757	3.3
Textiles, garments and handicrafts	763	1.4
Hairdressing and beauty	386	0.7
Computing	732	1.4
Tourism and hospitality	1,008	1.9
Business	32	0.1
Languages	143	0.3
Other	8,736	16.4
Total	53,136	100

Table 3.4

VSTP graduates in non-formal short courses, 2008

Note: Other includes teacher training, arts, design courses and miscellaneous.

Source: ADB (2009a).

Post-Harvest Technology and the TVET Skills Bridging Program

A pilot program supported by the ADB will provide training in post-harvest skills for agricultural producers and skills training to jobless and out-of-school youth to allow them to be integrated into the formal TVET system. The PHT and Skills Bridging Program has a two-pronged objective: (i) improving post-harvest food handling, storage and processing techniques of agricultural producers; and (ii) improving the knowledge and technical skills of out-of-school youth from the poorest communes to allow them to be integrated into the formal TVET system. The $2 million pilot program will target 44 of the 100 poorest communes covered under the VSTP. Around 3,000 agriculture producers will be trained in PHT skills and 700 out-of-school youth will receive training in TVET skills bridging.

Training providers such as community-based groups, NGOs and private institutions will be contracted to produce, with small grants, training materials and instruction for PHT (harvesting, storage, processing and packaging) and basic education courses. A microcredit element for business start-up will be included through the Self-Employment Gen-

Table 3.5

Project name	Budget and timeframe	Focus of support
Vocational Training for Employment Generation UNDP/ILO	$3.76 million (1992-1995) $2.46 million (1996-1998)	Promoted and provided direct employment skills for rural and urban poor through short VT programs for identified employment opportunities. Developed skills and capacity.
Vocational Training for Poverty Alleviation UNDP/ILO	$12 million 1994-1998	Further development of systems and support mechanisms for skills training and implementation through development of a national training framework and training of MoEYS staff. Assistance to MoEYS in planning an integrated national TVET system.
National Strategy Plan for TVET UNDP/ILO/German Agency for Technical Cooperation (GTZ)	1994-1996	Assessment of: (i) existing TVET system; (ii) involvement of other ministries and stakeholders; (iii) training needs for industry; (iv) self-employment and income generation; (v) training technologies and system structures.
Basic Skills Project ADB	$20 million 1996-2002	Established the NTB, NTF and National Vocational Training Centre (now NTTI). Upgraded PTCs and WDCs (MoWA).
ESDP I ADB	$38 million 2002-2004	Established and continued upgrading PTCs. Provided technical assistance to TVET staff and for the development of skill standards.
ESDP II ADB	$45.5 million 2005-2008	Development of the VSTP as a community-based, demand-driven training scheme in trial provinces. PTC upgrading, staff development and management support.
Japanese Vocational Centre Workshop and Technical School Japan International Cooperation Agency (JICA)	1990-2000	Establishment and support of an automotive training and commercial auto repair center, including senior staffing, equipment and in-Japan staff training. Initially under Ministry of Public Works and Transport; now MoLVT.
Japanese Overseas Cooperation Volunteers JICA	Ongoing	Assistance through volunteers for training and development in DGTVET institutions in air conditioning, automotives, dressmaking, computer graphics, engineering, systems engineering, plus supporting training supplies and equipment.
Korean Research Institute for Vocational Training (KRIVET)	$1.2 million 2005-2009	Technical assistance with establishing an NQF and testing centers.
Establishment of the Cambodia–India Entrepreneurship Development Center	2004-2007	Provision of technical assistance, fellowships and in-country staff development for management and programming in entrepreneurship, small and medium enterprise (SME) development, accounting and business.
PHT and Skills Bridging Pilot ADB	$2 million 2009	TVET skills bridging for out-of-school rural poor youth; training on PHT.
Strengthening Technical and Vocational Education and Training ADB	$27.52 million 2010-2015	Increase access to formal mid-level TVET programs in rural areas by transforming five PTCs into RTCs. Upgrade PTCs. Scale up the VSTP. Provide support to DGTVET to improve capacity building for policy development, planning and management.
National Garment Training Institute. French Development Agency (AFD), Garment Manufacturers Association in Cambodia (GMAC), MoLVT	€3.8 million (under discussion)	Establishment of an independent (public–private partnership) garment training center for skills training, professional development and technical assistance.

eration Fund, established in 1995. It is expected that, in 2012, 50 percent of trainees from the Skills Bridging Program will be enrolled in TVET institutions for further skills training and 50 percent will be employed. The project also envisages an evaluation of the pilot impact on income enhancement. A baseline survey will be completed before the start of the project and the evaluation will start three months before program completion.

Table 3.5
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Development partner support in TVET since the early 1990s, as of 2010

Note: Other agencies that have provided support are: UNESCO – analysis of the TVET sub-sector through research and stakeholder discussions; the United Nations Children's Fund (UNICEF) – financial and technical support for youth organizations focused on education and labor market issues; and the United Nations Country Team (UNCT) – situational analysis of youth in Cambodia.

Source: ADB (2009a).

NGOs

Several NGOs provide classroom-based non-formal training. NGOs remain funded largely from abroad and by religious bodies. An ADB (2009a) study suggests that between 30 and 50 NGOs offer programs lasting from one week to one month. In 2008, around 3,000 people graduated from these programs. The most important NGOs in the field receive funding from abroad, mostly from Europe (Don Bosco, Friends International/Mith Samlanh and Pour un Sourire d'Enfant (PSE)). They usually provide vocational programs (TVET, literacy/numeracy, life skills, health care, personal counseling) for youth from rural and poor backgrounds with various levels of formal education.

NGOs tend to be better funded, to have stronger links with enterprises and to be able to hire better qualified teachers than the public sector. Overall, external financing allows some NGOs to hire better qualified teachers and to train them on the job. Infrastructure, teaching materials and student-teacher ratios are also often better than in public institutions. The largest NGOs in the field tend to have better links with industry partners through curriculum development, staff training, equipment procurement, student work experience, assessment of students and certification standards.

NGOs – at least some of them – are among the few attempting to teach soft skills. Some NGOs, such as PSE and Mith Samlanh, focus their programs on disadvantaged youth, and have developed expertise in imparting soft skills. Because many students live on campus, methods that have been developed may not adapt to pure classroom-based teaching, but experiences can provide valuable information on how best to teach soft skills in the Cambodian context.

On the other hand, there is little harmonization of NGO training, making it difficult to create accreditation and certification standards.

Accreditation and certification standards are a crucial step towards a training system that boosts productivity by allowing employers to assess the quality of training received by workers and workers to evaluate the return to training. Without such a system, too much emphasis rests on informal channels and the reputation of the various training providers, making it difficult to "scale up" training and facilitate the entry of new providers. Acknowledging the challenge, most NGOs have developed their own certificates, often certified and stamped by a ministry. However, these are *ad hoc*, are not centrally managed and verified and bring value only for the few employers that know of and value them.

The overall cost effectiveness and long-term financial sustainability of NGO training – in particular if it were to be scaled up – has not been assessed. Although NGOs tend to be better financed and to provide better quality training, they depend on fixed external resources that may be strained if training activities were to be scaled up. Moreover, expenditures per student appear to vary greatly across institutions.[10] Some providers – in particular public ones – are definitely in need of more generous funding, but an analysis of the optimal compromise between quality of teaching and number of students would allow for an understanding of how much more room NGOs may have to train more students.

Next, we review in greater detail selected NGOs providing non-formal training. The review is far from comprehensive, but it covers the largest non-formal training providers as well as some smaller ones, and provides an overview of the variety and costs of training that NGOs offer.

Don Bosco

The major NGO provider of formal and non-formal TVET is Don Bosco. The Don Bosco Foundation of Cambodia (DBFC) is the best-known NGO offering training in basic employability skills to youth from poor and rural families. In academic year 2009/10, 1,200 students were enrolled in Don Bosco programs. At present, the foundation runs six technical schools and training centers in Phnom Penh (three), Sihanoukville (one), Battambang (one) and Poipet (one), three of which are exclusively for women. DBFC is registered with MoLVT and, in most cases, follows guidelines regarding formal TVET entrance requirements from Grade 12 graduation. However, two training centers (i.e. the Skills Training Center in Battambang and the Vocational School for girls in

[10] Unfortunately, financial data were lacking to carry out a comprehensive comparison of the cost effectiveness of public vs. NGO training. However, high variability in class size, training materials and other factors among NGOs visited suggest strong heterogeneity in expenditures per student.

Teuk Thla in Phnom Penh) admit youth with lower levels of education.

Non-formal training programs for out-of-school youth are provided in only two training centers and cover only girls. The Don Bosco Skills Training Center in Battambang has operated since 2002. It offers a two-year program in sewing and embroidery, complemented by literacy classes where necessary, to young women between 16 and 24 who are orphans, come from poor families or have been involved in hazardous child labor. In the 2009/10 school year, 67 girls were enrolled. To facilitate teaching, at the beginning of each academic year students are divided into two groups according to their formal education background. The first group comprises students who achieved lower than Grade 5 and the second group is made up of students from Grade 6 to 8. Meanwhile, the Don Bosco Vocational School in Teuk Thla in Phnom Penh offers a two-year program in home and food management to girls who have achieved higher than Grade 9. It is estimated that the cost for a trainee is about $300 per year – $500 when accommodation is included.

These training programs do not lead to a recognized certificate because participants are not Grade 12 graduates and teachers do not have teacher training qualifications. The annual budget is $45,000 to $50,000 per year, with funding mainly from European donors. In most Don Bosco facilities, students contribute to their monthly costs, but in centers delivering non-formal training, most students receive training at no cost. The demand for Don Bosco graduates is quite high, and almost all trainees find employment easily.

Pour un Sourire d'Enfant

PSE is a French NGO providing care and education to street children, as well as vocational training to poor youth. PSE (For a Child's Smile) is a French NGO founded in 1993 that helps school leavers and underprivileged children of Phnom Penh who work scavenging in the city dump. PSE offers the following services: nutrition, medical care, protection and accommodation, general education (Grades 1-12 at local schools and catch-up education programs), vocational training and community health. Overall, 2,800 children live in PSE centers and attend various programs, of whom 1,400 are enrolled in the vocational training program (50 percent girls). Including non-residents, PSE supports more than 6,500 children and youth through its on-site programs, public school and university enrollments and community outreach services.

PSE offers nine vocational training curricula for students aged 17 and older. In 2000, PSE established eight training schools offering 19 general and vocational skills. Students must undertake a one-year preparatory course, which includes training orientation, Khmer, English, mathematics, French, basic computer skills, history, geography, sports and professional life skills. On completion of the basic year, students enroll in one of the nine training programs, lasting from one to four years: agriculture; home and food management; auto mechanics; information technology; business; hotels; construction; hairdressing; and beauty care and spa. PSE runs another two smaller vocational centers in Siem Reap and Sihanoukville, which have adapted their curricula to the requirements of the tourism sector.

PSE has developed strategic alliances with private enterprises, which have provided qualified trainers, resources and inputs into the curricula. Vocational training teachers tend to be practitioners who receive pedagogical training on site or short-term instructors provided by corporate and business partners. These private sector partners, many of which are Europe based, also provide support to ongoing curriculum development, professional trainer development, financial and hardware resources and annual audits that contribute to program improvements. An Advisory Committee of local businesses and supporters assists with strategic planning to ensure alignment with industry needs and promotion of PSE in the private sector.

PSE's operating budget is derived mostly from child sponsors in Europe. The current annual vocational training budget is approximately $1.8 million, which is derived primarily from child sponsorships (€72 per month per student), corporate sponsorships and some local fundraising (although 95 percent of the total operating budget is sourced from Europe). The estimated cost per student ranges from $500 to $600 per year, including a start-up grant.

Hagar Cambodia

Hagar works with children, youth and women victims of violence. Hagar, founded in 1994 and located in Phnom Penh, is committed to the recovery and community reintegration of children, youth and women referred by government agencies and NGOs as victims of human rights abuses, such as domestic violence, human trafficking and sexual exploitation. During their stay in Hagar, members receive shelter, medical at-

tention, counseling and therapy, child care, legal advice, basic education and skills training.

Part of its support consists of a course on Education for Empowerment, which has a strong emphasis on life skills and personal development. The course content includes: non-formal education (literacy and numeracy); life skills (women's rights, child rights, health and relationships); soft skills (goal setting, good attitude, communication, conflict resolution, personal grooming and customer service); and creative arts and job-hunting skills (interview training and resume writing). Local on-site business visits are incorporated into the course.

Hagar also offers young women a training program – Career Pathways – delivering vocational training lasting from three months to one year. The program incorporates local private sector partnerships for work experience and job placements. Students are interviewed by a career services officer to identify their vocation and are then placed either in Hagar's own businesses or in a private enterprise (of 11), where they can train in any of nine curricula: industrial sewing, cooking, office skills, beauty care, electronic repair, vehicle mechanics, counseling, child care and housekeeping. In 2008, 71 students were enrolled in the courses offered. A course on Small Business Training has also been created for women who wish to establish their own business on graduation.

The annual budget for the Career Pathways program ranges from $150,000 to $220,000, depending on the number of participants. Trainers are generally private sector practitioners who receive professional development through Hagar, including ACE English courses, advanced training of trainers, ILO entrepreneurship workshops, job application skills (resumes/interviews) and sign language training. Training curricula are developed by teaching staff with input from business partners and alumni. Follow-up of students is conducted for a maximum of two years to assist them with job seeking, to encourage them, to monitor their progress and to receive feedback.

Friends International/Mith Samlanh

Friends International works with marginalized urban children and youth, their families and their communities. Friends International launched its first project for street children in 1994 in Cambodia under the name Mith Samlanh (Friends), in response to the needs of street children,

their families and their communities. Mith Samlanh was registered as a Cambodian NGO in 1999. Overall, it currently supports 1,800 children, providing an educational program for street children, outreach (identifies children for the educational program), medical services, drug counseling, residential care and case management.

In its Phnom Penh center, it offers 11 skills training programs of one year in length to 350 students in agriculture, beauty care, hairdressing, cooking, electricity, electronics, hospitality/service, laundry, mechanics (car/motorbikes), sewing/tailoring and welding. Early leavers generally go into employment (regarded as a success) or through the "swinging door" – i.e. back into the outreach program, where they can re-enter the education program when appropriate. Final examinations assess both theoretical knowledge (evaluated by teachers) and practical skills (evaluated by business partners in the private sector).

Vocational training certificates are approved by MoLVT and non-formal education achievements by MoEYS, although both ministries remain minimally involved in training and certification activities. Of graduates, 33 percent become self-employed and 67 percent become wage earners, moving into the follow-up phase with job placement officers. Cases are closed after graduates can cover their living expenses for a minimum of six months. The success rate is about 60 percent. Mith Samlanh also has a relationship with Don Bosco, whereby graduates can receive follow-up training and higher levels of education.

Teachers are hired based on qualifications and skills level. Mith Samlanh is most interested in teachers' practical experience and provides pedagogical training on site initially, with weekly professional development (skills upgrading, case management discussions and staff meetings). The curriculum is teacher designed and receives regular feedback from business partners and graduates through job placement officers. Some textbooks are used, with very hands-on teaching and learning strategies. Teaching resources (hardware and funds) come through DPs, private donations and profits from the business services provided by training workshops.

Youth with Disabilities Foundation for Education and Employment

Yodifee provides education and training to young people with disabilities. Yodifee, based in Takhmao town south of Phnom Penh, is a Cambodian NGO that grew out of La Valla Primary School for children

with physical disabilities. It is an accelerated learning school created and run by the Marist Brothers. Yodifee came about because a need arose to help youth who had graduated from La Valla School, many of whom were struggling to become self-sufficient even though they had received a basic education. Yodifee started operations in 2002 through funds received by the Marist Mission Centre in Australia. Yodifee provides accommodation, food, transport, schooling costs (public school students), vocational training and microfinance options for self-employment.

Yodifee delivers non-formal training through three programs: Vocational Training, Yodifarms and Yodicraft. The training center offers eight vocational training courses lasting for one year, in electronic repair, farming, hairdressing, hospitality, motorbike repair, retail, sewing and wood sculpting. Yodifarms provides agricultural and husbandry training and on-site work experience in Battambang and Kampot. Yodicraft is the business branch of Yodifee, which has three main goals: to provide vocational training and employment opportunities for youth with disabilities in electronic repair, hairdressing, hospitality, motorbike repair, retail, handicrafts production and tailoring; to showcase the talents of these youth; and to provide an income for Yodifee, thus ensuring the sustainability of the organization's work. It is estimated that the cost for a trainee per year is about $200. Given the difficulties disabled persons encounter in finding employment, almost 90 percent of graduates become self-employed. Yodifee therefore also offers microfinance options: low-interest or interest-free loans, and in some cases a grant of $500 to help set up an individual business.

Artisans d'Angkor

Artisans d'Angkor, based in Siem Reap, is a trade development company that provides training to youth in traditional arts and crafts. Artisans d'Angkor provides training to young Cambodians in key ornamental sculpture, lacquer ware, silk weaving and silk painting. This training enables students to make a living from their skills while working in their home villages. It has created over 1,000 jobs, of which 624 involve craft workers. In Siem Reap province, 12 workshops are currently operating.

Artisans d'Angkor became a limited liability company in 2003 with a minor public share and is now fully self-financed and independent. Since its establishment, Artisans d'Angkor has pioneered a new social

policy in Cambodia, with guaranteed levels of pay along with social and medical benefits. The craft workers have formed an association known as Artisanat Khmer, which holds a 20 percent share in the company. Artisans d'Angkor also supports local handicraft producers selected for the quality of their work by helping them to market their products.

Ecole d'Hôtellerie et de Tourisme Paul Dubrule

The Ecole d'Hôtellerie et de Tourisme Paul Dubrule, based in Siem Reap, offers training programs in the hospitality industry. It was established in 2002 and provides practical one- to two-year training and qualifications in tourism, food and beverage services, cooking and baking and hotel reception and housekeeping. Courses are supplemented by language training (French and English) and general knowledge and IT classes. Scholarships are provided for students from disadvantaged backgrounds and, through collaboration with PSE, accommodation and living support is provided for students nearby the training facility. An alumni association assists students with job searches, which have shown a 91 percent success rate since 2002.

Sala Bai Hotel and Restaurant School

Sala Bai Hotel and Restaurant School, based in Siem Reap, provides vocational training in the hospitality sector to poor youth. Sala Bai Hotel and Restaurant School was created by the NGO Agir Pour Le Cambodge (Act for Cambodia), to provide vocational training for poor young students between 17 and 23 with less than a Grade 6 education. The school enrolled 100 students in 2009: 82 percent from Siem Reap province and over 40 percent orphans or from single parent families.

The school offers training in eight different skills required in the hospitality sector. Courses are 11 months in length and include restaurant service, cooking, front office (requires a minimum education level of Grade 10) and housekeeping. Courses are supplemented by basic education (Khmer and mathematics), English and French language training, tourism and life skills (personal discipline, hygiene and grooming, road safety, HIV prevention, sex tourism, labor law, etc). The courses also comprise a seven-week internship with partner hotels, and social workers assist students with job search training (resumes and interviews). Most students find a job within three months of graduation, and diplomas are recognized by MoLVT and the Ministry of Tourism

– although, as with other NGOs, ministries are involved only minimally in the certification process. Sala Bai scholarships cover school tuition, supplies, room and board, a bicycle, a uniform and insurance. The annual training cost for each student is $3,000, and funds are raised through restaurant guesthouse clients (generating around 16 percent of revenues), individual and corporate donations and DPs.

Private TVET provision[11]

The ADB has identified about 750 private businesses in Cambodia offering fee-for-training services, half of which are located in Phnom Penh. Most of these institutions offer training courses to low-skilled students in basic marketable skills such as language, computers, beauty care, cosmetology, tailoring, motor repair, carpentry, welding and electronics. Some of these institutions have many years of service in the training sector and are well-known. These institutions tend to enroll a large number of students, offer a wide variety of courses and advertise their programs. The tuition fee varies with the course and the provider, and ranges from $120 to $300 for courses of a few months in length. Generally, courses last from three weeks to one year. Some programs also carry a certificate of successful completion that bears a stamp from MoLVT or MoEYS, although ministries tend not to be involved in the certification process.

Private training providers are engaged primarily in providing students with simple marketable skills such as hairdressing, tailoring, motor repair, carpentry, welding and electricity. Most students who receive training in these schools want to acquire a set of marketable and practical skills in the shortest time possible to become self-employed workers. A considerable number of students come from the provinces, and most of them expect to return to start up their own business. Training in these centers or in small shops is quite popular because it is affordable, and also because educational requirements are lower than for the formal TVET channel: some of these programs even admit illiterate students.

Training also takes place in numerous medium and large enterprises through formal apprenticeships and upgrade training. It is estimated that enterprise-based training is provided by 200 medium to large enterprises and by some ministries, to upgrade the skills of their own workforce. In fact, all establishments employing 60 or more workers

[11] The overview in this section draws substantially on ADB (2009a)

are obligated by law to hire 10 percent of their workforce as apprentices. In 2008, there were 12,500 formal apprentices, the majority in textiles and garments (46 percent).

In addition, a considerable amount of training is provided through informal apprenticeships in small shops in skills such as motor repair, electricity and beauty care. Little is known about these businesses, although they are usually small shops offering short non-formal courses, taking on a few students and focusing on a limited number of skills, typically associated with motor repair, electricity, dressmaking and beauty care and cosmetology. Some shops offer on-the-job training at no cost but others charge rates ranging from around $200 to $350. The length of the training varies depending on the area, the provider, the difficulty level and the student's pace of learning, but generally ranges from two months to one year. As most students come from the provinces, it is quite usual for these shops to include accommodation at no extra cost or very cheaply. Informal apprenticeships in small shops are in fact among the easiest training options, given the marketable skills, the affordable fees and the flexible payment arrangements. These shops usually focus on practical skills that are easy to learn and are in great demand in the informal sector (e.g. motor repair, hairdressing). Generally, tuition fees are lower than comparable training fees charged by private training providers.

The quality of private training can vary considerably, however, reflecting a great need for quality assurance. Little is known about the quality of the training that private institutions provide. However, factual evidence and field visits suggest that it varies considerably, and that small teaching centers and informal apprenticeship schemes often suffer from narrow theoretical knowledge, outdated technologies and an absence of formal recognition of the skills they impart. Some centers provide certificates recognized by MoLVT or MoEYS, but these carry little value – they remain *ad hoc* and ministries are not involved in the certification process.

The very poor are often excluded from non-formal training, even in small shops or as informal apprentices. Private TVET institutions are profit-driven businesses. They cater to young people who are able to pay the tuition fees – usually a few hundred dollars for a three-month course – and related training costs. In most cases, the student's family pays for the tuition and living costs with savings or by borrowing

money. Without external support, private TVET institutions are not in a position to be able to offer training to very poor youth who do not have the necessary financial resources to pay for these courses.

The following case studies are by no means representative but aim to provide an idea of the large variety of private and informal training providers and the challenges they are facing. The case studies try to show the whole palette of providers, from the larger and more established training schools to the more informal small shops that hire apprentices. Perhaps not surprisingly, some of the challenges related to certification and the use of outdated learning technologies can be found across typologies of providers.

Multi-Skill Repair Center

Multi-Skill Repair Center is a well-known training center established in 1964 that provides training through interactive classroom instruction in motorcycle and small engine repair courses. The center offers eight repair courses, varying in length from two to seven months: modern motorbikes (three to four months); gas engines with multi-piston kits (three to four months); diesel engines with multi-piston kits (three to four months); all kinds of diesel engines and gas engines (six to seven months); light systems (three to four months); light systems of luxury cars (two months); all kinds of air conditioners (three to four months); and general electrical devices (three to four months). Training costs range from $120 to $300, which covers tuition fees and accommodation.

The school has more than 100 students, mainly from the provinces. After graduation, students can receive an average monthly salary of $80 to $90 with a local company. Teachers are locals with many years of work experience. The center also issues certificates recognized by the Phnom Penh Municipal Department of MoEYS to any trainee who passes the tests.

Cristina Beauty School

Cristina Beauty School offers classroom instruction and hands-on training programs ranging from three to twelve weeks to out-of-school youth (although literacy is required). The school offers 10 different courses: haircutting; shampoo and blow drying (two courses); makeup; hairstyling (on doll heads); wedding costume arrangement; body treat-

ment; facial massage; eyelash extension; and nail art and extension (two courses). The school also offers students basic training on customer service and beauty salon business.

The tuition fee (including studying materials) varies from $120 to $300 depending on the course and duration of the program. Accommodation is available for an additional $25 for female students only. At present, the school has 100 students, and it has trained more than 3,000 youth over the past eight years. A certificate stating the approval of the director of the Phnom Penh Municipal Department of MoEYS is awarded to students after successful completion of the program. The school advertises in newspapers and from time to time on the radio and TV, which generates more applications. Most of the trainees find employment easily after graduating; only in a few cases does the school need to provide assistance to its students in finding a job.

Vimentap Electricity and Motor Repair

Vimentap is a recognized school training many youth from the provinces. Founded in 1985, it provides training in motor repair and electricity through hands-on experience combined with classroom instruction. All students are male and are either illiterate or have low educational attainment. The center trains students in repair of motorbikes, cars and appliances (e.g. radios, TVs, cassette players, mobile telephones, washing machines, etc) and the installation of electricity systems. The school is registered with the Phnom Penh Municipal Department of MoEYS. Training programs vary in length from three or four months to one year, depending on the number of hours spent on the program weekly and the student's pace of learning. The school trains about 300 students a month, of whom more than 200 are enrolled in motorbike repair and maintenance. The tuition fee is $120; accommodation for students from the provinces is provided for an extra $10 a month. The school advertises its programs on the radio.

As demand for motor repair services has been increasing, many shops are taking on students from this center as apprentices. Usually within a few months, trainees engage in part-time apprenticeships in small repair shops close to the school to support themselves during the time of study. Vimentap awards a certificate of satisfactory completion of the program to high-performing students only. After completing the training program, a few students find employment in repair shops but most

return to their province to establish their own shop. Average monthly post-completion earnings appear to vary between $200 and $300.

Pov Style Hairdressing Shop

Pov Style offers informal apprenticeships in hairstyling to young women and men from Phnom Penh and the provinces for three to six months. Students must pay a differentiated fee for the training ($200 for males and $250 for females) prior to enrollment. For students who are unable to pay the tuition upfront, installments over the course of the program are also accepted. Accommodation is included in the price. The salon currently has three trainees and two hairstylists who provide the training. There is no need for advertising: students are referred by satisfied past students and clients. The salary of a hairstylist varies between $50 and $100 per month, excluding tips. On completion of the program, however, most students expect to open their own salon.

Shokun Tailor Shop

Shokun Tailor Shop offers training to youth between 18 and 30 years of age. The program length ranges from six months to one year, depending on the pace of the student. The training cost is $350 and includes accommodation for students from the provinces. The shop has two instructors and regularly takes on two or three students. On completion of the program, most students open their own business or find employment in small shops, although a few students decide to stay working in the shop. Salaries for tailors range between $100 and $250 per month.

Sawasdee Massage and Spa Center

Sawasdee Massage and Spa Center offers informal apprenticeships for two months to young women over 16 years of age in different massage techniques and body treatments: Thai traditional massage; herb and oil massage; foot reflexology; aromatherapy; head, back and shoulder therapy; facial treatment; and body treatment. Training is free of charge but students are expected to work. The center has 12 senior therapists who have worked with 30-40 students over the past five years. The average salary for a massage therapist is around $200 per month including tips, which can be up to $150. The center does not advertise its apprenticeships: many of the applicants hear by word-of-mouth or are relatives of the therapists. Graduates find jobs in other spas in Phnom

Penh or Siem Reap through networking. In some cases, they remain with Sawasdee.

Challenges of TVET and non-formal training

The above review of training providers highlights several challenges. These include: poor harmonization and coordination; poor cooperation with employers in defining curricula and seeking internships; and poor and heterogeneous quality of training.

Harmonization and coordination

Provision of TVET and non-formal training remains largely uncoordinated and unregulated. In 2009, 316 technical and vocational training institutions were registered with MoLVT: 38 public institutions and 278 NGOs and private providers. This represents only a small fraction of all providers (it does not include small shops providing informal apprenticeships). Moreover, even some of the larger providers remain unregistered with MoLVT, including private sector and NGO providers, programs operated by other ministries (MoEYS, MoWA, Health, Agriculture, etc) and private institutions registered with a municipal department of MoEYS. These institutions remain largely unregulated and develop their own curricula and certification standards. A myriad of programs has emerged, all of variable quality, all seeking formal approval by different ministries (not necessarily MoLVT) which remain minimally involved in the certification process.

Part of the challenge stems from the fact that, although MoLVT is officially mandated to regulate formal and non-formal TVET, various ministries remain involved, each independently developing its own programs with its own standards. The public TVET system is under the authority of MoLVT but other ministries also operate non-formal programs for out-of-school youth, in particular MoEYS and MoWA. In addition, some specialized vocational training programs (in agriculture, health and transport) fall under the supervision of their sector ministries. Although there is a rationale for ministries other than MoLVT to develop programs tailored to their own mandates, this should be done in close collaboration with MoLVT, which should ultimately be responsible for certifying the quality of the training provided. Similarly, in the absence of a recognized ministry in charge of coordination and certification, private providers and NGOs develop their own relation-

ships with one of the ministries or with Phnom Penh Municipality, in order to obtain a semblance of "official" program certification.

The mandate of the NTB to ensure good coordination and quality of formal and non-formal TVET needs to be reinforced. The NTB is currently an institution with an important but weakly enforced mandate. Members and observers suggest that the infrequent and *ad hoc* nature of the meetings (biannually) impact on its effectiveness, and that MoLVT (in charge of executing its directives) is not always clear about planning and coordination for the sub-sector. It is also necessary to ensure higher and better involvement of employers and DPs in the decision-making process. Industry does not appear to be actively involved in the planning and development of TVET at the national level, explained in part by its relatively low representation on the NTB. Another concern is the apparent poor dialogue and coordination between the NTB and DPs.

Skills gaps and mismatches

Formal and non-formal TVET programs do not always address the needs of the labor market. Cambodia's workforce must have skills that are aligned with its transforming economy and that can support the country's continued economic growth. However, public TVET courses do not seem to address the requirements of the economy. About 54 percent of employers interviewed in the study conducted by HR Inc Cambodia (2009) claim that there is a mismatch between the skills offered by vocational training institutions and the requirements of their firms (Figure 3.1). Employers demand technical graduates with skills in tourism and hospitality, foreign languages, IT, plumbing, carpentry and blacksmithing, but courses offered in these areas are few or non-existent. Both public and private providers offer a narrow range of courses, often tailored to self-employment, and courses do not encompass the broader needs of employers with regard to soft skills (see Chapter 2). Some NGOs perform better in terms of matching training to employers' needs.

The public training system must be more flexible and demand driven, and better respond to the needs of local industry, trainees and the community. Only 5.3 percent of formal TVET graduates from public providers are in computing, 1.8 percent in tourism and hospitality and 1.8 percent in language (Table 3.2). Formal courses instead focus on

technical areas (66 percent, but with very few on plumbing, carpentry, masonry, welding and metal fabrication) and to a lesser extent business (20 percent). Non-formal public programs are mostly community based, with the specific aim of enhancing productivity in agriculture and supplementing the family income of rural households. While such community-based programs are much needed, they at times overshadow the need for programs for unskilled youth aimed at easing entry into the new booming sectors. NGOs and private providers tend to be more demand driven, offering training programs in marketable skills. In particular, NGOs have stronger links with industry partners, who are more involved in curriculum development, staff training, equipment procurement, student work experience, assessment of students and certification standards.

Figure 3.1

Skills mismatches between employers' demands and training, according to employers, 2009

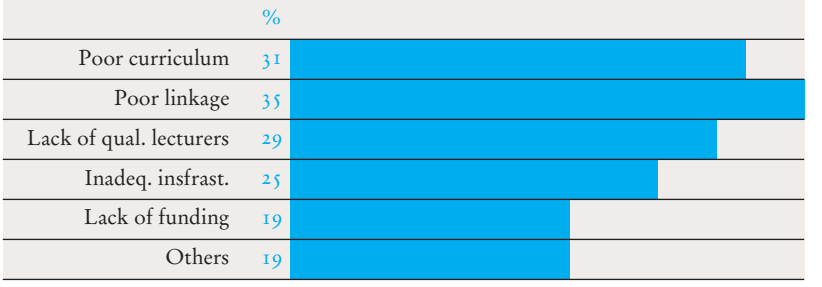
Source: HR Inc Cambodia (2009).

In the new booming sectors, the high skills mismatch stems from a disconnection between employers' needs and training provided. Employers in the new booming sectors point out that providers' main challenges lie in designing curricula that better fit their demands, building links with employers and finding qualified lecturers (Figure 3.2). Lack of interaction is also reflected in the process of updating curricula, which is mostly led by internal committees without input from employers. Although a few TVET providers have received some inputs from employers, in general there is a clear need to bridge the gap between education providers and industry.

Figure 3.2

Challenges faced by training institutes, according to employers, 2009

Source: HR Inc Cambodia (2009).



Greater involvement of employers in the design of the curricula may lead to a better match between skills supplied and market needs. In this

respect, almost 77 percent of employers expressed their willingness to contribute technically to the development of curricula, although most of them are reluctant to make financial contributions (86 percent). Employers widely recognized lack of dialogue (45 percent) and perceived low benefits of cooperating (21 percent) as the main reasons for not collaborating with the TVET providers (HR Inc Cambodia, 2009).

Access and quality

Most rural out-of-school youth have limited access to formal and non-formal TVET programs. The majority of public institutes delivering formal TVET programs are located in Phnom Penh (eight out of the fourteen institutions) and in a few provinces. Supply of technical and vocational programs in rural provinces is mostly non-formal. The 22 PTCs are located one in each province, currently with the exception of two rural provinces (Preah Vihear and Mondulkiri). However, they face strong budget and capacity constraints and cannot cover all the training needs of the population. Most of the non-formal programs delivered by private providers and NGOs are also located in Phnom Penh and in a few other urban centers. Rural students who want to enroll in formal training programs or in non-formal private programs must move to Phnom Penh.

Part of this problem will be addressed in the coming years by the ADB-supported Strengthening Technical and Vocational Education and Training project (2010-2015): five of the PTCs will be transformed into RTCs, to offer formal courses in addition to non-formal programs; and a PTC will be established in each of the two provinces that are currently without one.

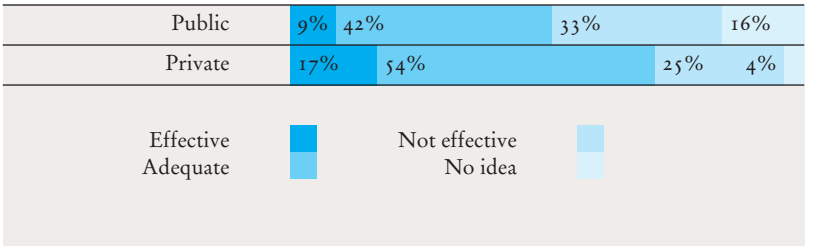
NGOs are among the few training providers maintaining a close relationship with employers and teaching soft skills. Because of their focus on disadvantaged youth, NGOs such as PSE and Mith Samlanh have made strong efforts to incorporate the teaching of soft skills into their curricula. This, and their strong collaboration with employers in designing curricula and providing internship opportunities, is reflected in fairly high success rates in terms of providing trainees with employment despite their disadvantaged backgrounds. In designing curricula that are relevant for employers and that incorporate the teaching of soft skills, drawing on the experience of Cambodian NGOs could bring strong value added.

Employers do not have a good perception of the quality of technical institutions. Only 9 percent of employers consider that public vocational training education is effective, with this rising to 17 percent for private training (Figure 3.3). In particular, the national TVET system is perceived as lacking relevance and effectiveness and as having weak links with industry.

Figure 3.3

Perception of employers of the quality of vocational training education, 2009

Source: HR Inc Cambodia (2009).



Poor infrastructure and lack of (qualified) instructors and teaching materials are also part of the system's problems. Both public and private providers face difficulties recruiting qualified teachers. About seven out of nine institutions interviewed by HR Inc Cambodia (2009) complained about the difficulty finding qualified teachers. Training providers seem to have particular difficulty recruiting teachers with an adequate level of instruction and at the same time some practical experience. Finding teachers to train people in more sophisticated tasks also seem to be a challenge: TVET providers, for instance, allege that it has been even more difficult to find teachers in the garment sector who can train people to become supervisors or managers. Moreover, the one-year technical and vocational teacher training program offered by the NTTI is not preparing instructors adequately, who lack practical skills in new technologies, among other things. Teachers' low salaries also make it difficult to attract candidates with the required enterprise experience (ADB, 2009a). Many institutions (six of nine) also complained about the difficulty in providing sufficient teaching materials, specialized equipment for teachers and better and bigger teaching facilities to enable higher intakes of students (HR Inc Cambodia, 2009). Of the nine surveyed institutions, six complained of a lack of housing facilities for students and four providers reported a lack of experimental materials and equipment. According to training providers, the main challenges are funding for study materials and facilities (100 percent), finding qualified teachers (75 percent) and upgrading the curriculum (50 percent).

As large numbers of Cambodians acquire skills through a variety of public and private providers and NGOs, a national system of qualifi-

cations and standards is necessary to guarantee greater consistency in quality and cohesion among providers. The Cambodia TVET system lacks, at both formal and non-formal level, skill standards and procedures for testing and certifying trainees, for accrediting training providers and to provide flexible pathways between different levels of education. As accreditation gives training providers benefits which they can use to market the quality of their training, most of the institutions surveyed (eight of nine) stressed the importance of getting accredited.

As we have seen, a draft Cambodian NTQF was prepared in 2006, and was revised and published in 2008 with support from the ADB. These skill standards were drafted based on existing international competency standards. While they represent a good basis for discussion, prior to endorsement they should be revised based on consultation with industry and training providers. In addition, this should be seen as only a first step towards establishing an NTQF. For instance, employers oppose such regulation of skill standards on the grounds of possible effects on labor costs (ADB, 2009a) and doubt that the system can be properly administered (see next section).

Evaluation and monitoring of training programs have also been weak. So far, there is no evidence on the potential impacts of training interventions on earnings and employment. There is a need to conduct rigorous evaluations of the main training programs to assess the quality of training and to better understand which designs have been the most successful in improving employment and wages of unskilled youth in the medium to long term. A system to monitor institutions and trainees is also absent in the country, and little is known about the quality and performance of institutions. Moreover, only few training institutions, mostly NGOs, track the employment paths of their graduates and obtain valuable information and feedback from past trainees. Improving monitoring and conducting evaluations and tracer studies would allow for evaluating the performance of the system and applying corrective measures accordingly.

4. Towards an Integrated Skills Development Framework

This chapter focuses on policy options to improve youth readiness to enter the labor market. The proposed strategy consists of a three-pronged approach, addressing three main bottlenecks to skills development: high dropout rates; poor quality education; and the need for training for out-of-school youth who have little chance to reintegrate themselves into the formal system. Given the focus of the report, the chapter develops policy options mainly for this last pillar which, if implemented, could potentially have a much wider impact.

Three options – certification, accreditation and financial support to high-performing institutions and poor students – are suggested to improve the relevance and quality of non-formal training programs. The first priority consists of the development of a competency-based certification system that recognizes learning achievements regardless of the way the training has been imparted. The second priority is developing outcome-focused curricula and accreditation of training providers. Accreditation criteria should be based not only on inputs but also on outcomes, including alignment of curricula with market needs, incorporation of life skills into teaching methods and provision of internships and intermediation services. The third priority lies in solving financial bottlenecks by funding institutions according to agreed performance indicators. On the demand side, poor students could also receive financial support. Across these three pillars, but also in the general education curriculum, particular attention should be devoted to promoting the teaching of soft skills.

The process should be run in a tripartite manner, by the RGC, employers and training providers. Given the policy challenges that lie ahead, it will be important to start small by piloting and evaluating certification and accreditation in a few selected sectors prior to engaging in large-scale reforms.

This report points to market failures in the provision of general and technical education which underline the need for public regulation of the education and technical training systems. Failures include: poor recognition of training, which impedes improvements in quality; high worker turnover, which prevents firms from investing in proper on-the-job training; and credit constraints for both students and training providers, which leads to suboptimal quality teaching. However, because the public sector faces challenges and capacity constraints, the role of the state in regulating technical training and education should be

piloted gradually. The public education system itself faces severe challenges, many of which relate to strong financial, governance and capacity constraints. In addition, public training centers often perform worse than private ones and are particularly outperformed by some NGOs. To avoid counterproductive effects, it is therefore important to gradually build the capacity of MoLVT and MoEYS to regulate education and technical training systems before empowering them to do so. In the short to medium term, it should also be envisaged to delegate some of the supervisory activities to third parties that have good implementation capacity and governance track records.

To address poor youth preparation for the labor market, it is vital to adopt an integrated approach that addresses poor quality of education, high dropout rates and the need for training for out-of-school youth. Such an approach would allow students who are still in school to improve their skills while at the same time increasing the productivity of out-of-school youth, who currently represent a large share of the labor force. These efforts should consist of a three-pronged approach to address the three main bottlenecks to skills development: poor quality of education that does not provide students with the skills that are sought after in the labor market; high dropout rates at both primary and secondary levels; and the need to improve the productivity of unskilled youth who have dropped out of school and who have little chance of reintegrating themselves into formal education:

a) Improve the relevance and quality of education. In the Cambodian context, improving the quality of education is as important as keeping children in school, since early school dropout may be a rational choice if the labor market provides greater skills accumulation opportunities than schools. MoEYS is implementing several interventions to address the issue of quality of and retention in basic education. In primary schools, multi-grade teaching methods are to be adopted and 3,500 additional classrooms are to be built by 2012. A National Assessment System to test Khmer language and mathematics competencies of students from Grades 3, 6 and 9 has recently been established. An early grade reading program will be piloted in school year 2010/11. In addition, a basic education teacher training program has been introduced to train more than 6,000 primary school teachers to allow them to teach from Grades 1 to 9.

At higher levels, little attention is currently given to the needs of the

labor market and to equipping students with the right set of soft skills. Both the standard educational curriculum and the vocational curriculum currently do not provide students with technical and soft skills that are relevant to the labor market. Curricula should be designed to be more relevant, so as to provide students with skills that are in high demand. Teaching methods should also be more interactive and less teacher centered, in order to promote creativity, critical thinking and teamwork, which are soft skills that are in high demand but currently lacking in recent graduates. The connection between school and employers should also be strengthened to facilitate the transition from school to work.

b) Increase access to and completion of basic education. Two factors are believed to have a strong influence on poor households' schooling decisions: quality of education and financial constraints. Recent research shows that, in the Cambodian context, financial constraints severely affect poor households' schooling decisions (in particular during agricultural peak seasons, when child labor can contribute significantly to the household income), and programs aimed at easing these constraints have had a great impact on enrollment. An evaluation of the Scholarship for the Poor Program, for instance, shows that this contributed to increasing enrollment by 20 percent (Filmer and Schady, 2009). Building on this success, a pilot is currently underway to extend the program to primary schools.[12]

c) Offer training opportunities to out-of-school youth**.** Given the large share of out-of-school youth in the labor force and their low productivity, training programs for unskilled youth should be expanded to improve their technical and soft skills, along the lines of programs currently offered by NGOs. Job training programs such as the *Jóvenes* programs in Latin America can offer useful insights, as they have demonstrated some degree of success in reaching vulnerable youth and in improving their employment opportunities and earnings (see Box 4.1). Integral adoption of these kinds of programs is not recommended, however, since they are relatively costly and complex to implement (in particular in limited capacity settings). However, some of their features could be adopted in Cambodia, such as: provision of a mix of technical and life skills; use of recognized certifications; promotion of competition among training providers; internship options; and private sector involvement.

[12] Flexible school calendars could also be introduced in rural schools to accommodate the needs of agricultural production cycles. In Ethiopia, school attendance increased in rural schools after a calendar was introduced that considered the agricultural cycle (Garcia and Fares, 2008).

Box 4.1

The Latin American Jóvenes programs

The *Jóvenes* programs offer poor young people training in both professional and soft skills, followed by workplace internships. Based on a pilot in Chile in the early 1990s, this comprehensive approach to training has spread throughout Latin America, with countries tailoring the program to their needs. Usually, disadvantaged young people are identified using out-of-work statistics, socioeconomic data and poverty mapping. Qualified private firms, NGOs, public institutions and non-formal training agencies then provide training on a competitive basis. Before they can receive any funds for training, providers are required to arrange internships for their trainees and to ascertain what kinds of skills local employers need. The objective of internships is both to facilitate school-to-work transition and to reveal information on which skills are in demand. Soft skills training focuses mainly on problem-solving skills, correct workplace behavior, conflict management, job search techniques and building self-esteem.

Overall, the *Jóvenes* programs have had a significant impact in Latin America on (formal) employment and wages for beneficiaries (see below table). There are some differences in impact among countries, possibly because of diverse initial conditions (such as labor market regulations or macroeconomic growth), implementation processes or types of trainees.

Impact of the Jóvenes programs in Latin America

Country	Impact on employment	Formality	Impact on wages
Argentina Proyecto Joven	0-10% 10-30% for <21	0-3% 6-9% for youngest in one cohort	No significant pattern
Chile Chile Joven	18-22% Larger for younger groups	15-23% Larger for younger groups	22-25% (imprecisely estimated)
Colombia Jóvenes en Acción	5% for women	6-7% for women 5-9% for men	22% for women 10% for men
Dominican Republic Juventud y Empleo	Not significant	Health insurance: 34% for women 43% for men	17% (marginally significant)
Peru ProJoven	13% (much higher for women)	14% for women 5% for men	12-30%
Panama ProcaJoven	Overall not significant 10-12% (women and Panama city residents)	Overall not significant	Overall negligible

Notes: Employment figures show differences in percentage points vis-à-vis the comparison group, whereas wages refer to percentage differences.

Source: Ibarraran and Rosas (2008).

Given the focus of this report on unskilled youth, we next review interventions aiming to improve the teaching of technical and soft skills. The chapter focuses attention on reforms which could be achievable in the medium term and which, given current capacity and financial constraints, stand a chance of being successful. Nevertheless, it is difficult to assess *ex ante* all the challenges that implementation of these reforms could face. Careful piloting and evaluation in a few selected sectors or regions is necessary prior to engaging in large-scale reforms.

Although a variety of training providers delivering technical training exist, several challenges to the provision of effective training lie ahead. Technical training providers range from public provincial training centers, to private providers, to NGOs, to small businesses and enterprises (through informal apprenticeships). Such a heterogeneous set of providers generates significant coordination and harmonization challenges. Meanwhile, in most cases, students acquire poor technical and soft skills that are often in disconnect with the industry's needs. Public institutions also face insufficient funding and a shortage of qualified teachers with industrial experience, as well as lacking adequate training facilities. The system also lacks skill certification for both public and private training providers; the few certificates that are currently being issued have little value for employers, in particular formal ones.

In going forward, options should introduce elements that improve the performance and relevance of both formal and non-formal technical training programs. There is a need to build good institutions to improve the performance of the training market by, among others, creating incentives for formal and informal providers to perform well. A strategy to improve training effectiveness should include the following elements: improve programs by increasing the relevance of training; align training with common and recognized competency skill standards developed in collaboration with industry; provide recognized and highly valued certificates; recognize prior learning; include internship and intermediation service options; support high-performing providers, regardless of whether these are NGOs, private sector or public sector; and subsidize training (for instance by means of vouchers) for economically disadvantaged youth.

A strategy for improving the quality of training could consist of three pillars, covering certification, accreditation and financial support to high-performing institutions and poor students. The first pillar should

promote the development of a certification system based on competency-based assessments. The entire process (from curriculum design to program implementation) should be run in a tripartite manner, involving the RGC, employers and training providers, so as to guarantee ownership, relevance, transparency and good governance. The second pillar should aim at developing outcome-focused curricula and accreditation of training providers. Accreditation is particularly important for providers that will be authorized to certify internal and external candidates, and in selecting institutions to support financially. Accreditation criteria should be based not only on inputs (e.g. teacher-student ratio, learning materials and physical facilities) but also on outcomes, which include the alignment of curricula with market needs, incorporation of life skills into teaching methods and provision of internships and intermediation services. The last pillar should solve financial bottlenecks by funding institutions according to agreed performance indicators. On the demand side, poor students could also receive financial support.

Competency-based testing and certification

Achieving valuable certification in key sectors of the economy would have high returns in terms of improving workers' productivity. Garments, construction and tourism pay wages that are above self-employment rates, but employers consistently complain about the difficulty in hiring qualified workers at all skill levels. Developing certification standards that are valuable to employers would allow workers to have their skills recognized and possibly to receive a better salary. At the same time, employers could save on lengthy screening and training processes that impede hiring and have an impact on productivity. However, attention should be paid to ensuring a participatory system that obeys good governance procedures: if the system is perceived as being flawed it will lose most of its value.

Given a constrained capacity and fiscal environment, it is necessary to adapt international certification best practices to the Cambodian context along several lines. Next, we review some key features in the implementation of competency-based testing and certification that should be considered in developing such a system:

a) Start small with a few key sectors. A standard-setting process is lengthy, costly, complex and particularly difficult in low-income settings. Such a process might take between 12 and 18 months and cost about $400,000

per standard (each of which comprises about a dozen units; see Valerio and Prawda, 2005). Estimates from middle-income countries such as Romania and Turkey indicate that this process can even take between three and five years and require investments of up to $2 million for developing about 250 to 300 standards and related assessments (Fretwell et al., 2001). It would therefore be advisable to start with sectors and occupations that are relevant to the needs of employers and industry. Several countries have taken this path. Chile, for instance, started developing occupational standards in three important sectors (construction, mining and tourism) and then gradually advanced to cover more sectors. Likewise, the Malaysian National Vocational Training Council began by identifying critical occupations for which skill standards were needed.

b) Involve all stakeholders. The success of standard setting depends on the active involvement of all key stakeholders, including industry representatives, government, training providers, unions and professional/technical associations. Unilateral standard setting, developed independently by government or by training institutions, carries the risk of not being relevant and therefore not being recognized by employers. The Philippines' Technical Education and Skills Development Authority, for instance, failed to involve employers, and standards therefore had relatively little impact on employers' hiring decisions and training programs (Fretwell et al., 2001). Similarly, the Mexican System of Occupational Standards and Certification invested a large amount of resources in the process of setting standards ($72 million) and approved 613 qualifications in 12 economic sectors, but employers used only half of the qualifications. Although the early stages of the process included entrepreneurs, experts and (in some cases) workers' representatives, standards remained excessively supply driven, as key employers did not participate (Valerio and Prawda, 2005). On the other hand, if employers develop standards unilaterally, there is a risk that they will become too job specific and that training institutions will be reluctant to adopt them in designing their programs. To ensure interest and participation, it is necessary to demonstrate the benefits for all stakeholders of putting in place a certification system: employers increase labor productivity, workers improve job entry and mobility and government and training institutions benefit from improved quality of training programs (Fretwell et al., 2001).

c) Adopt a competency-based modular approach to define qualification standards. Qualification standards should be expressed as employment outcomes that describe the required abilities that a competent person

needs to successfully do the job (Fretwell et al., 2001). When designing curricula, institutions should consider adopting a modular structure to help students progressively attain learning outcomes and introducing new activities that lead to better communication skills, creativity and innovation. Competency standards should consist of units of competency, which are specifications of performance that set out the skills, knowledge and attributes required to operate effectively in employment. To be of value for training providers, each competency standard needs to include performance criteria that explicitly state how well a person should perform the outcome. Performance criteria should also set the basis to evaluate what an individual can do as a result of formal or informal training. Such an approach has been used widely in many countries (Box 4.2).

Box 4.2

Competency-based standards: bartender

Source: National Training Agency (2006).

In Trinidad and Tobago, where tourism is an important sector, one competency standard is that of bartender. The standard consists of three competency units: setting up and shutting down a bar; maintaining and dealing with payments; and providing beverage services. For each of the competency units there is a series of competency elements. For example, the competency unit of providing beverage services includes two competency elements: preparing and serving alcoholic/non-alcoholic drinks and maintaining customer and service areas during service.

For the competency element preparing and serving alcoholic/non-alcoholic drinks, the performance criteria are defined as follows:

- Serve alcoholic drinks in line with operational procedures
- Provide customers with accurate information about drinks and identify their requirements correctly
- Dispense and serve drinks in the correct measurement, using the correct service equipment and garnishes, checking that they are at the correct temperature
- Promote additional products as appropriate
- Serve drinks in line with the appropriate service style
- Deal with unexpected situations effectively and inform management if necessary
- Adhere to legal/age requirements when serving alcoholic drinks

d) Establish standards at all levels of qualification. In each occupation, there are typically multiple levels of qualification, such as entry level, mid level and fully qualified level. This can mean multiple entry and

exit points during vocational training, and leaves open the possibility that workers can advance progressively up their vocational career ladder (Box 4.3).

Box 4.3

Qualification levels in Sri Lanka

Source: Piyasiri (2009); www.tvec.gov.lk/nvq/about_nvq.htm.

In Sri Lanka, technical competency standards are classified into seven levels:

- Levels 1 to 4 comprise craftsmanship competencies
- Levels 5 and 6 comprise supervisory and/or process management competencies
- Level 7 is equivalent to a degree qualification and involves high-level competencies such as design and innovation

For a hair stylist, there are 12 units of competency, classified into four different levels: maintain a safe and pleasant hairdressing salon environment (Level 2); receive and prepare clients for hairdressing salon services (Level 2); treat hair and scalp (Level 3); set hair (Level 3); use and maintain wigs (Level 3); cut and style hair (Level 4); style long hair (Level 4); perform permanent wave (Level 4); provide hair relaxation services (Level 4); color hair (Level 4); provide advice and promote sale of hair care products (Level 4); manage a hair dressing salon (Level 5).

e) Establish sector committees for setting standards and for the assessment and certification processes. Sector committees should be established for setting standards, comprising stakeholder representatives, professional experts and qualified consultants, to provide guidance for the definition, validation and registration of standards. The function of each committee would be to prepare a framework that includes the standards, to obtain feedback from related industries and to register the final standards. One good example of a well-organized structure for setting standards is South Africa. Standards are generated by the Standard Generating Bodies, which include representatives from all stakeholders and are responsible for developing, updating and reviewing standards or qualifications and recommending them to the consultative panels. The consultative panels comprise all interested stakeholders, including state departments, organized business, organized labor, providers of education and training, critical interest groups and community/learner organizations (Botha, 2007).

f) Recognize prior learning. Recognition of Prior Learning (RPL) recognizes a learner's competencies regardless of when and how they were acquired. Such a feature is of utmost importance in Cambodia, given the high number of people who acquire training through non-formal channels. Under RPL, to receive a certificate, workers are required to take a competency-based assessment that runs independently from the training provider (although some of the latter may be accredited to certify people). Certificates should be the same for both formal and informal channel graduates.

g) Evaluate and accredit existing institutions and use the best ones as assessment centers. To certify students, it is necessary to establish assessment centers for each vocational/technical occupation. Assessment centers can be individuals, enterprises or public, private or non-governmental training providers. Both assessors and assessment centers should be accredited by a third party organization to ensure the transparency and validity of the certification process. Moreover, ideally, evaluators should be trainees or supervisors in enterprises (ILO, 1998). Finding such centers of excellences will be a challenge in some sectors. But in others, such as the garment industry, efforts are ongoing to establish high quality training centers recognized by the industry. One possible solution would be to use these centers as certification institutes, which should agree to certify students in addition to their own. Another possibility, drawn from the Chilean experience, would see universities engaged to take the role of assessor.

h) Establish independent third parties that award accreditation to assessors and assessment centers. One or more third party organizations that have a strong good governance track record should be established or designated to accredit assessors, assessment centers and training providers and award occupation-based certification to individuals who successfully pass the test. In addition to experts, the body should comprise representatives of employers, workers and training institutions. In countries such as South Africa, which started this process several years ago, sustainable and independent groups fulfill these functions – so far there are 25 Education and Training Quality Assurance bodies (Botha, 2007). Countries with lower institutional capacity, such as Sri Lanka, have created panels of assessors comprising trade experts and representatives of the Technical Educational Vocational Commission to provide accreditation to courses and training institutions.

Develop outcome-focused curricula and accreditation

Effective certification represents the basis for enhancing links between training and productivity, but curriculum development and accreditation of training institutions could further add to the quality of training. Better curriculum development and accreditation of training institutions could help promote stronger links between training providers and employers, as well as the teaching of soft skills that are difficult to assess through competency-based certification.

Accreditation should strike a balance between outcomes and inputs. Training providers should be accredited based not only on quality of inputs (i.e. teacher-student ratio, learning materials, physical facilities or intermediation services), but also on outcomes, such as percentage of students obtaining a certificate, dropouts, ability to provide internships to students and job placement rates (although it would be necessary to set up criteria and procedures to avoid schools being incentivized to excessively select good students). Outcome-based processes present several advantages. First, they permit better reflection of industry needs in the accreditation, since evaluation is performed on learning achievements and job placements. Second, they do not dictate to training providers how to achieve objectives – and therefore allow for tailoring training to specific groups with different needs and learning potential (such as disadvantaged youth vs. better qualified workers). Finally, they allow for full recognition of prior learning experience.

Accreditation and curriculum development should place particular emphasis on internships and partnerships with employers. Establishing partnerships between training providers and the private sector is the best way to achieve relevance of training and to facilitate the transition of youth from school to the workplace. In particular, training institutions can benefit from greater involvement of employers in curriculum development and options of internships and job vacancies. For students, internships are particularly effective ways to gain valuable work experience and to increase job search opportunities.

The teaching of soft skills should also be considered in accrediting training institutions. Most employers complain about the lack of soft skills. Although it is difficult to evaluate soft skills under competency-based certification, accreditation of institutions should also consider the ex-

tent to which teaching methods permit their teaching. Evaluations of the returns to soft skills remain rare, but existing ones hint that they could be significant – in particular in settings such as Cambodia. An impact evaluation of Canada's Employability Training Program, which combines job with soft skills training, found an increase in the number of hours beneficiaries work, as well an increase in wages. An evaluation of the United Kingdom's New Deal for Young People Program found that participants were 20 percent more likely to find jobs than their peers who did not participate (Cunningham et. al., 2008).

In Cambodia, soft skills could be included in training programs either through teaching methods or as a separate subject. Teaching methods should be interactive, applying knowledge to real life learning and promoting teamwork. However, teachers may face difficulties changing their teaching methods. One option would be to start including separate soft skills courses, while at the same time moving towards student-centered methodologies that would be recognized through proper accreditation (World Bank, 2006).

The establishment of an accreditation system should be accompanied by outreach campaigns and capacity building of public and private training institutions. The success of an accreditation program will depend on how many institutions participate and manage to become accredited. The technical implementation of the program should therefore be accompanied by a strong outreach strategy to induce both public and private training institutions to apply. Moreover, given the limited capacity of most institutions, the establishment of an accreditation process should go in parallel with capacity development of training institutions to provide proper training on new technologies and on teaching methods that help impart soft skills. One way to achieve these objectives is to train teachers on these new methods and technologies. Such a training role could be played, for instance, by the most reputable institutions in each sector.

Solving financial bottlenecks

Achieving successful certification and accreditation could be hindered by the severe financial constraints that face both training providers and poor and unskilled students. Public providers, NGOs and other externally funded training institutions take up an important but not predominant share of all training providers. Most remaining training institutions need to cover their costs from students' tuition fees and,

given limited capacity to pay, are likely to face challenges in attracting good teachers and in upgrading their curricula. Similarly, poor and unskilled students have only limited ability to pay for training – although it seems that most of them appreciate training and are willing to make enormous sacrifices to access it. To the extent that certification and accreditation will require some upgrading that will raise tuition fees, it would be good to think about developing financial support targeted at institutions and poor students.

Financial support to training providers could be allocated on a competitive basis. Competition for public funding would promote and favor good performance and provide incentives for greater alignment of curricula with market needs, incorporation of life skills into teaching methodologies and provision of internships and intermediation services. For instance, public funding could be allocated only to institutions that pass the accreditation process – although, as previously discussed, some handholding in getting accredited is likely to be necessary. Funding could also be allocated, at least to some extent, based on outcomes such as the success of institutes in certifying students and the percentage of students who find a permanent (or at least non-precarious) job. However, if such an avenue is chosen, it will be important to introduce safeguards that guarantee that poor and unqualified students are still admitted into subsidized institutions.

Financial support to students should target mostly poverty status but to a certain extent also performance. Given the limited fiscal resources that are likely to be available to support poor students financially, targeting will be important. Because students will come from poor backgrounds and have different cognitive abilities, targeting criteria should focus mostly on poverty status. However, some basic performance criteria should also be introduced – mostly as an incentive device.

Teaching soft skills

Particular attention should be devoted to promoting the teaching of soft skills across the three pillars. Teaching soft skills is not an easy task, and this report does not have any magic recipe. In theory, teaching methods should be tailored to soft skills by moving away from teacher-centered methods towards student-centered methods that promote team spirit and creative thinking. This is a complex and lengthy task and will require a change in teaching mentality and significant teacher training. It

will best be handled while developing proper accreditation criteria for training institutes.

In the short term, some soft skills could be taught with traditional methods. Soft skills such as team spirit, analytical thinking and creativity could – to a certain extent – be taught using traditional methods. Modules for teaching a subset of soft skills could therefore be developed and adapted to the needs of each sector, since some soft skills requirements (such as creativity) change as much with the sector as do technical skill requirements. The teaching of soft skills remains an under-investigated field, however, in particular in low-income settings, so significant investments in piloting, monitoring and evaluating such interventions should be made before envisaging large-scale expansions.

Methods used by some NGOs to impart soft skills could be further investigated and adopted. Through their focus on disadvantaged youth, some Cambodia NGOs have developed methods to impart soft skills. These NGOs often benefit from the students residing on campus, which means that their approach can be more holistic and go beyond classroom hours. Nevertheless, they remain a valuable source of expertise. Moreover, since some of them are active internationally, they can also help in drawing experience from other countries.

In the medium term, the extent to which training institutions focus on teaching soft skills in their curricula could be an integral part of the accreditation process. Changing teaching methods is a lengthy process, however, and great attention should be devoted to developing and piloting criteria and methods that are effective in imparting soft skills in the Cambodian context. In parallel, there would also be a need to build capacity of training institutions to teach soft skills. Until such a system has been piloted and evaluated successfully, focusing on "soft skills modules" may remain a better alternative.

Issues of relevance in program implementation

The proposed three pillars approach, which is fairly comprehensive, should be implemented gradually. Implementing the three proposed pillars at once could very well be a recipe for failure. We therefore conclude by reviewing the elements of program implementation that should be addressed both in program design and in going forward with overall development of the training system.

Start small. It is important to start small, for instance by developing certification in a few sectors where good training providers already exist and where the formal sector industry is well organized. Subsequently, pending successful evaluation of these pilots, certification could be expanded and some elements of accreditation could be developed. Finally, also depending on the available fiscal envelope, financial support for both training providers and poor students could be provided.

Engage both industry and training providers. If industry and training providers are not engaged at all levels, the system will be prone to failure. All relevant stakeholders, including the RGC, employers, workers and training providers, should be involved in developing skill standards, certification, accreditation, curriculum design and internship options. Broad involvement may initially lead to the exclusion of sectors where employers or other stakeholders are poorly organized or face challenges in speaking as a single voice, but will increase the likelihood of success in the medium term.

Evaluate and improve interventions. There have been very few evaluations of training programs in Cambodia, and so far there is no rigorous evidence about the impact of training on employment and wages. In going forward, there is a need to rigorously evaluate the proposed pilots to better understand which designs have been most successful in improving employment and wages of unskilled youth in the medium to long term. It is particularly important to develop the evaluation strategy before program implementation and in parallel with other design elements, so as to ensure the applicability of sound methodologies and the robustness of the estimations.

Guarantee good governance all through the system. Certification and accreditation generate significant rent-seeking opportunities. Ensuring good governance is particularly important in this context: if certification and accreditation systems are perceived to be flawed, they lose all their value for both employers and employees. There is no silver bullet to address the governance challenge, which remains very much context specific, and various models will have to be piloted and evaluated. Nevertheless, international best practices suggest some options worth considering. A solution for certification may lie in developing independent certification institutes. These could consist of the best recognized training institutes in each sector, which would need to agree to certify students in addition to their own ones. For accreditation, the process

could be led and supervised by employers' associations that have strong incentives to guarantee that only the best institutes are accredited, or by third parties and organizations in the region. In all cases, it will be of utmost importance to motivate firms (which demand these skills) to participate in both the design but also the oversight of certification and accreditation.

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