THE CHALLENGES OF IMPLEMENTING ACTIVE LABOUR MARKET POLICIES IN CAMBODIA: TECHNICAL VOCATIONAL EDUCATION AND TRAINING, AND PUBLIC EMPLOYMENT SERVICE

By

BRONH, Sopheana

THESIS

Submitted to

KDI School of Public Policy and Management
in partial fulfillment of the requirements
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ABSTRACT

THE CHALLENGES OF IMPLEMENTING ACTIVE LABOUR MARKET POLICIES IN CAMBODIA: TECHNICAL VOCATIONAL EDUCATION AND TRAINING, AND PUBLIC EMPLOYMENT SERVICE

By

SOPHEANA BRONH

In the current economic transition, Cambodia's labour forces are moving from the subsistent agricultural sector to the modern sectors, in which skilled workers are required. However, this country is abundant in low skill, and low productivity labour forces resulting in skill shortages and skill gaps. Development experiences show that these problems can be solved with well-designed Active Labour Market Policies (ALMPs), especially with the Technical Vocational Education and Training (TVET), and the Public Employment Service (PES). However, the two systems are currently not working well in the Kingdom. By using qualitative approaches, this study is trying to identify current situation and the key challenges of TVET and PES.

The research finds some improvements, thanks to the efforts of the Cambodian government, and the critical challenges in the current systems. Among others, the challenges of geographical setting, human resources, financial resources, research and development (R&D), and public-private partnership (PPP) are discussed.

To solve the above-mentioned issues, the study makes an attempt to present the policy recommendations for the Cambodian government as a means to improve the quality of labour forces with the well-designed TVET and PES for the future sustainable economic development.

For My Family, Professors and Friends

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LIST OF ACRONYMS

ADB : Asian Development Bank

ALMPs : Active Labour Market Policies

CAMFEBA: Cambodian Federation of Employers & Business Association

CDRI : Cambodia Development Resource Institute

CQF : Cambodia Qualification Framework
CSES : Cambodia Socio-Economic Survey

DGTVET : Directorate General of TVET

EU : European Union

HEIS : Higher Education Institutions
HRD : Human Resource Development

ILO : International Labour Organization

GMAC : Garment Manufacturers Association in Cambodia

KEIS : Korea Employment Information Service

KRIVET : Korea Research Institute for Vocational Education & Training

MoEYS : Ministry of Education Youth and Sport

MoLVT : Ministry of Labour and Vocational Training

NCVER : National Center for Vocational Education Research

NEA : National Employment AgencyNIS : National Institute of Statistics

NTB : National Training Board

NTTI : National Technical Training Institute

ODA : Official Development Assistance

OECD : Organization for Economic Co-operation and Development

PES : Public Employment Service PTC : Provincial Training Center

RGC : Royal Government of Cambodia

RTC : Regional Training Center

TVET : Technical Vocational Education and Training

VSTP : Voucher Skills Training Program

VTC : Vocational Training Center

WDI : World Development Indicator

CHAPTER I INTRODUCTION

1.1. Background

The structure of labour markets in developing countries is uncertain and segmented. Only small percentages of people work in wage-based employment while the majority of labour forces work in subsistent agriculture sectors, self-employment, own-account employment, and unpaid family works. Resulting from this labour market structure, many employed labour forces are vulnerable workers and working poor. The International Labour Organization (ILO) reported that in South East Asia and the Pacific, the share of working poor earning less than US\$ 1.25 per day accounted for more than 20% in 2011.¹

Cambodia is no exception. As a developing country, labour market structure is not yet in a good condition, as seen by the Royal Government of Cambodia (RGC), and development partners such as ILO, Asia Development Bank (ADB), and others. The unemployment rate in Cambodia was only 0.3% in 2013 revealed by the National Institute of Statics (NIS).² Yet, those who rate as employed labour forces are mostly in the agriculture and informal economic sector, which is underemployment in reality. In addition, most of those employed labour forces are working in vulnerable conditions, low wages, and skills mismatches as labour forces in the current trend are moving from traditional sectors to modern sectors.^{3,4}. To fill this gap, subcategories of Active Labour Market Policies (ALMPs), labour market training and public employment service in particular, are supposed to build skilled labour forces for economic growth, and to match job seekers and employers.

^{1.} Duncan Campbell, "The Labour Market in Developing Countries," in *Perspectives on Labour Economics for Development*, ed. Sandrine Cazes et al. (New Delhi: International Labour Organization, 2013), 13.

^{2.} National Institute of Statistics, *Cambodia Socio-Economic Survey* (Phnom Penh, Cambodia, July 2014), 61–70.

^{3.} Ibid.

^{4.} International organization might see the level of unemployment rate in different ways.

However, there are some challenges of implementing these two elements of the ALMPs in Cambodia. Thus, this research is trying to analyze the challenges of implementing the ALMPs, and find out what can be done to solve the problems.

1.2. Concept of ALMPs

Active Labour Market Policies are the policies which are "active supports for labour market integration...to cope with unemployment and underemployment." There are three main subcategories of ALMPs commonly defined as job broking or employment service, labour market training, and direct job creation. While employment services function to match between job seekers and employers more efficient, the purpose of labour market training is to upgrade and adapt skills of applicants. The third category of ALMPs is direct job creation, which is not commonly used in developing countries. Direct job creation is to create jobs in the public sector or to subsidize the private sector.

The term of ALMPs used in this research is focusing on labour market training and employment service only.

1.3. Statement of the Problem

The labour market in Cambodia has faced some critical challenges. Even though the RGC claimed that most Cambodian people especially youth are employed, those employed labour forces are found to be in low quality employments which are mostly in subsistence sectors particularly in underdeveloped agriculture and other informal economic sectors.

Not different from experiences of other developing countries, the moving trend of unskilled labour forces from subsistence sectors to modern sectors has continuously occurred.

To facilitate the structural change of the current labor market, while the role of labour union

^{5.} ILO, "Active Labour Market Policies," *Second Item on the Agenda* (Geneva: International Labour Office, November 2003), 2-3.

^{6.} Lars Calmfors, "Active Labour Market Policy and Unemployment: A Framework for the Analysis of Crucial Design Features," *OECD Economic Studies*, no. 22 (1994): 8.
7. Ibid.

in Cambodia is weak, two labour market institutions, namely Public Employment Services (PES) and Technical Vocational Education and Training (TVET), are supposed to play important roles, yet these two institutions are slowly progressing to facilitate the current labour market situations.

1.3.1. Low Quality Employment

The Employment Policy Department of the ILO in February 2013 reported that around 65.7% of employed youth in Cambodia are self-employed.⁸ Among them, around half (46.8%) are family workers without payment (agriculture works may be counted), and they meet difficulties in moving from unpaid employment to a satisfactory employment in the modern sectors like manufacturing and services.⁹ Aside from the unpaid workers, the wage-obtaining workers are getting low salary, which is below the average salary of all workers, while others work in poor quality employment.¹⁰

1.3.2. Technical and Vocational Education and Training (TVET)

While people are moving from traditional sectors to modern sectors in urban areas, different skills are needed to equip those labour forces in order to get decent jobs. Yet, the employers association reported in 2013 that employers have met difficulties in recruiting new employees because many of them have no skills. To deal with this problem, TVET is supposed to play an important role in providing high quality of trainings that fit with the labour demands in the labour market in Cambodia. However, the quantity and quality TVET system does not meet labour market demands due to its underdeveloped condition. Low enrolment rate, lack of training equipment, low quality trainers, budget constraint etc. are found to be the main problems of TVET.

^{8.} Kanol Heang et al., *Labour Market Transitions of Young Women and Men in Cambodia* (Geneva: ILO, 2013), 3.

^{9.} Ibid.

^{10.} Ibid.

1.3.3. Public Employment Service (PES)

In order to obtain a decent job in new sectors, aside from TVET, PES is also supposed to be a significant labour market institution. The National Employment Agency (NEA) is a special operating agency under the authority of the National Training Board (NTB) of the RGC responsible for providing effective employment service.

Unfortunately, with its new establishment, NEA is almost invisible to Cambodian job seekers especially youth, which reflects the inefficiency of this employment information agency. The evidence from the ILO research showed that less than 10% of unemployed youth were registered at the job center and online job-matching services provided by NEA, while almost 95% of employed youth did not use any services of NEA.¹¹

1.4. Significance of the Study

While TVET and PES are in the developing stage, this research is being done at the right time to analyze its current situations and bottlenecks. It will also contribute to provide policy options for the RGC to structure labour market situations based on current status and good lessons learned from developed countries who experienced the same situations in the early stage of their development, like the Republic of Korea, Australia, and Singapore.

1.5. Purpose of the Study

The purposes of the research entitled "The Challenges of Implementing Active Labour Market Policies in Cambodia: TVET and PES" are:

- 1. To study the situations of the labour market in Cambodia
- 2. To analyze the current situation of TVET and PES in Cambodia responding to the structural changes of the current economy
- 3. To study the challenges faced by TVET and PES

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^{11.} Ibid., 37.

4. To provide policy recommendations to shape TVET and PES to increase skilled labour and to fill the gap of skill mismatch in the labour market.

1.6. Research Methodology and Research Questions

A qualitative approach is employed for this research by using primary data and secondary data collected from government institutions including the Ministry of Labour and Vocational Training and National Employment Agency. Secondary data from international development partners and NGOs were collected to overcome the data shortage from government institutions. What is more, primary data was also collected from interviewing senior government officials working in related ministries. This data was analyzed to answer to the following research questions:

- 1. What is the current situation of the labour market in Cambodia?
- 2. What is the current situation of TVET and PES responding to the structural change of Cambodia's economy?
- 3. What are the challenges of TVET and PES in the current labour market context?
- 4. How can the Royal Government of Cambodia shape TVET and PES to increase skilled labour and to fill the gap of skill mismatch in the country?

1.7. Structure of the Study

To answer the four research questions, the following chapters of this research are divided into six main thematic parts.

It begins with reviewing literatures from related researches done mostly in OECD and developing countries regarding development and labour policy implementation as a mirror to reflect the current situation in Cambodia (Chapter 2).

The economic situation and labour market in Cambodia are covered in Chapter 3. It briefly shows progress of Cambodian economic development during the last decade and presents the employment situation during the same period of time. In Chapter 4, the current

situation of TVET and PES is studied in detail before discussing the bottlenecks of the two systems in Chapter 5. Learning from international development experience is important, that is why Chapter 6 is devoted to lessons learned and experience of TVET and PES developments in three different countries: Korea, Australia and Singapore. Chapter 7 summarizes research findings and provides policies recommendations for government to shape TVET and PES system to build up skilled labour and to fix the mismatch between supply and demand in the labour market.

1.8. Limitations of the Study

As TVET and PES are relatively young, statistics related to these matters are not widely published, plus data from government is difficult to be collected. This limits the analyses of situation and the bottlenecks of TVET and PES in Cambodia.

CHAPTER II

LITERATURE SURVEY

2.1. General Situation of Labour Markets in Low-Income and Middle-Income Countries

An observation on 133 countries between the baseline period (1990-1995) and the comparison period (2005-2008) showed that the employment rate increased in line with the labour force growth in both low-income and middle-income countries. ¹² By analyzing the labour market situation in those countries, the authors, Yoonyoung Cho et al., claimed that with the increasing of employment, those countries met some challenges, among others, a growing share of the labour force in self-employed and other unpaid jobs, and a high employment rate among youth. ¹³

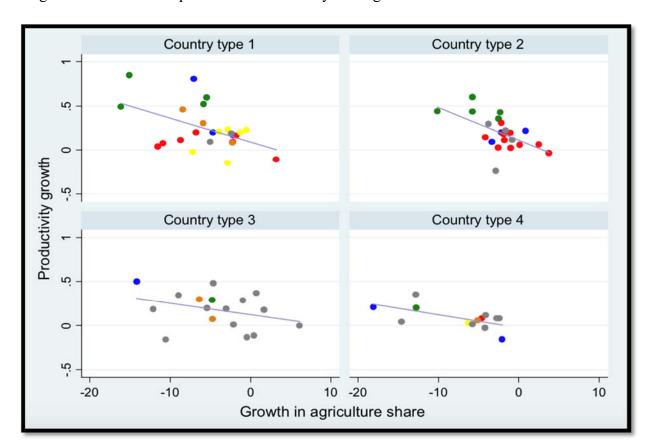
First, the high rates of self-employed and other unpaid employment are serious problems for low-income and very low-income countries, because those employments take in more than half of labour forces: 55% for low income countries, and 85% for very low income countries. Many self-employed jobs are unproductive, getting low wage, working in poor conditions, and mostly unprotected by labor regulations. Those jobs exist mainly in agriculture and other unorganized or informal sectors. Workers and their families in those sectors remain poor, which was accounted for 85% and 56% in very low-income and low-income countries respectively. Even though across developing countries, we now see the moving out of the labor force from agriculture to other sectors, the speed is very slow, and the research showed that the moving out of agriculture in developing countries is not sufficient to raise productivities, since the productivities increase very slowly compared to

^{12.} Yoonyoung Cho et al., "Labor Markets in Low-and Middle-Income Countries: Trends and Implementations for Social Protection and Labor Policies" *Social Protection & Labor No. 1207*, 2012. 13. Ibid., 8-12.

^{14.} Ibid., 8.

^{15.} Ibid., 9.

more developed countries. Thus, to solve this problem, some interventions should be done to directly increase productivities in agriculture and the informal sector.¹⁶



<Figure 2-1> Relationship Between Productivity and Agriculture Share

Country 1=Middle Income Countries, Country 2= Upper Middle Income Countries, Country 3= Very Low Income Countries, Country 4= Low Income Countries

Source: The World Bank, 2012

The second challenge for both low-income and very low-income countries is youth unemployment and underemployment. The size of the youth population is growing which is a challenge for the existing low quality education and training systems. The unemployment rate among youth is relatively low compared to middle income countries, yet the employed youth is forced to get the unsecured job with limited social protection, and low quality jobs due to less experiences, and low skills.¹⁷

^{16.} Ibid., 10.

^{17.} Ibid., 11-12.

2.2. Enhancing Skills by Improving Basic Education

Among others, many researches suggest that improving skills and education is the solution to the above challenges because more educated workers have more job opportunities, and earn more.

"Workers who acquire more skills also make other workers and capital more productive and within the firm, they facilitate the adaptation, adoption and ultimately invention of new technologies." ¹⁸

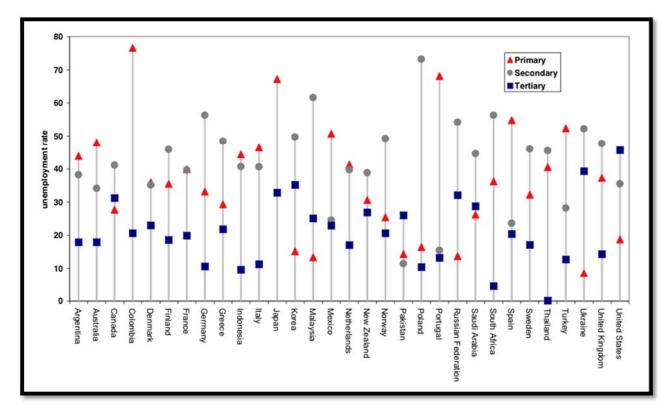
In contrast, without skills, especially for young people, they would encounter high risk because of lacking access to employment. The research shows that the unemployment rate among people who attained lower skill tend to be higher than those who attained higher skills, and without training they tend to end up with vulnerable positions in the labour market.¹⁹

However, improving skills is the matter of a good quality basic general education, which is the fundamental capability to attaining further skills. Without basic education, people are incapable to attend further vocational training, which results in being unemployed or underemployed in the labour market. The World Bank's report evidenced this claim as shown in Figure 2-2.

<Figure 2-2> Unemployment Rate by Education Level, 2007

^{18.} Ibid., 21.

^{19.} Costanza Biavaschi et al., "Youth Unemployment and Vocational Training," World Development Report, 2013.



Source: World Bank (Cited in World Development Report, 2013)

The labour force in low-income and very low-income countries had average years of schooling of 5.26 and 4.34 years respectively, and literacy rates were low compared to middle-income and upper middle-income countries (See Table 2-1).

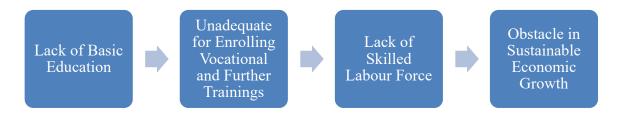
<Table 2-1> Characteristics of Labour Force (%)

	Middle Income	Upper Middle Income	Very Low Income	Low Income
Average Years of Schooling	7.53	8.47	4.34	5.26
Literacy Rate	95.76	93.87	56.18	65.68
Share of Working Age Population Having Completed Secondary School	27.79	30.92	9.93	14.69
Share of Working Age Population Having Completed Tertiary Education	6.44	7.45	1.35	3.09

Source: WDI, Barro and Lee (2010), cited in The World Bank (2012)

The Global Agenda Council on Employment of the World Economic Forum also evidenced that in most of the developing world, the enrollment rate of secondary education, which is the foundation for individuals to get technical and vocational trainings, was low: 52 percent in 2010 and 775 million adults cannot read or write.²⁰ The ILO also agrees that basic education is the foundation for future skill development in productive employment, so both developed and developing countries should ensure that basic education is provided with good quality to prepare students for future technical vocational and educational training.²¹

<Figure 2-3> Basic Education Signals Economic Growth



Source: Author

In OECD countries, a country with low literacy rate signals that its education system is of low quality, and unable to produce productive workers, and for those countries, skill shortages, and skill gaps are the challenges for the labour market.

2.3. Skilled Workforce for Sustainable Growth

A country's development depends upon creativity and productivity of workers.

Governments, employers, and workers in both developed and developing countries have also recognized that skill development can improve individuals' capacity to perform a specific job creatively and to improve opportunities of individuals at work. Many researches have also proved that there is a strong connection between education, skills training, and economic development. For instance, a research done in European countries showed that 1 percent

20. Klosters Davos, "Matching Skills and Labour Market Needs," *Global Agenda Council on Employment* (Switzerland: World Economic Forum, 2014).

^{21.} International Labour Office, "A Skilled Workforce for Strong, Sustainable and Balanced Growth," (Geveva: ILO, November 2010), 8-9.

increase in training days leads to 3 percent increase in productivities. ²² Good quality of education and trainings which are relevant to the labour market can encourage both domestic and foreign investments, drive job growth, push higher wages, reduce unemployment and underemployment in the country which can reduce social inequality, and increase social opportunity. ²³ In South and East Asia where the enrollment rate of Technical Vocational Education and Training is low, an analysis from the World Development Report has suggested that vocational training could be an important channel to increase good quality employments, especially for youth. While public opinion in the region does not value vocational training as general education, promotions for TVET should be done actively to attract youth to participate in the program, and bring education and training close to private sectors, so that trainees find it easier to get job after trainings.

Yet many factors are involved in designing such good training systems, and to make sure that the designed system properly works, governments, employers, and individuals are required to work together. From international experiences, to be successful in skills development, a country should work towards three important objectives: matching between labour supply and demand, adjusting to change, and building skills for future needs. First, to match supply and demand in labour market, a good public employment service is needed to collect, analyze, and disseminate labour market information that can connect employers and job seekers. Also, identifying and forecasting required skills in the current and future labour market are also the keys. The second objective is to adjust workers and employers by upgrading skills for workers to increase their productivity in order to maintain employability and competitiveness of business in the market. The third objective is to build long term perspective by foreseeing and investing in new skills, which can be used in the future.²⁴

22. Ibid., 4.

23. Ibid.

24. Ibid, 18.

2.4. Expenditure of Active Labour Market Policies (ALMPs) in OECD Countries

In many OECD countries, ALMPs are acknowledged to reduce unemployment rate, so the public expenditure on this policy has been increasing especially after the global financial crisis. Some countries have spent more than one percent of GDP on ALMPs.

Noticeably, as presented in OECD's employment and labour statistics, the Belgium government increased the public expenditure on ALMPs from 1.2% in 2007 to 1.6% of GDP in 2011, while Denmark increased from 1.3% to 2.3% of GDP in the same period of time.

*Table 2-2> Public Expenditure on ALMPs (% of GDP)

Countries	2007	2008	2009	2010	2011
Belgium	1.2	1.3	1.4	1.5	1.6
Denmark	1.3	1.4	1.7	2.1	<u>2.3</u>
Finland	0.9	0.8	0.9	1.1	1.0
France	0.9	0.9	1.0	1.1	0.9
Germany	0.7	0.8	1.0	0.9	0.8
Japan	0.2	0.2	0.4	0.3	0.3
Korea	0.1	0.3	0.6	0.4	0.3
Netherlands	1.1	1.1	1.2	1.2	1.1
Sweden	1.0	0.9	0.9	1.1	1.1

Source: Labour Market Program: Expenditure and Participants, OECD Employment and Labour Market Statistic (Key Table, 2014)

There are many different types of ALMPs, namely public employment services, educational and vocational training, employment subsidies, direct job creation, start-up incentives, and others. To implement ALMPs effectively, different countries may apply different policies and target different groups in the labour market, because the labour market

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^{25.} OECD, "Public expenditure on active labour market policies," *Employment and Labour Markets: Key Tables from OECD*, 2015.

in each country has different characteristics. Also, ALMPs alone cannot ensure the success of labour market policies in a country. Generally, OECD countries have spent the majority of ALMPs' budget on educational and vocational training followed by PES. In 2010, shown in table 2-3, OECD countries on average spent 28.5% on educational and vocational training and 26.0% on PES.

<a>Table 2-3> Composition of ALMPs in Selected OECD Countries (2010)

Country	PES	Job Educational and Vocational Training	Employment Subsidy	Direct Job Creation	Start-up Incentives	Others
Canada	44.3	41.6	1.5	5.5	2.4	4.7
Finland	17.1	50.8	7.3	8.6	2.2	14.1
France	26.7	33.3	9.5	19.1	4.8	6.5
Germany	40.2	32.5	10.2	5.1	8.3	3.7
Japan	19.3	26.3	37.5	16.9	0.0	0.0
Korea	2.7	17.2	5.0	67.3	0.2	7.6
Netherland	35.5	11.0	0.6	13.6	0.0	39.3
Norway	19.8	40.8	4.5	8.4	0.6	25.9
Spain	18.7	22.2	29.2	11.0	13.4	5.5
Sweden	29.7	8.2	39.4	0.0	2.0	20.7
U.K	89.5	4.3	3.4	1.1	0.0	1.7
U.S	32.7	33.4	6.0	4.2	0.0	23.6
OECD Average	26.0	28.5	16.0	12.5	5.1	11.9

Source: Yong Seong, Kim, "Labour Market Policy," (Presentation, KDI School of Public Policy and Management, 2014)

As mentioned above, educational and vocational training and public employment service are not guaranteed to work well in the labour market. Thus, in answering to the question of "what works" and "for whom," Robert G. Fay, in the article entitled "Enhancing the effectiveness of Active Labour Market Policies," suggested well-designed policies, and

emphasized it is necessary to do the evaluation.²⁶ This paper did the impact evaluation on the programs implemented in some OECD countries. The evaluation from the North America training program gives the positive impact, yet it takes a long time to appear. The result of the evaluation showed that the program was successful because it was implemented with the right target groups for both individuals and employer needs, while the course contents was also very important. The evaluation suggested that the program might be more effective if it is implemented with other services like job search assistance, for example, because job search assistance is generally effective to most target groups at the lowest cost.

<Table 2-4> General Training Program for Unemployed in OECD Selected Countries

Program Name	Key Result				
Belgium	Deadweight = 35%				
Firm Survey	Substitution = 9%				
Australia	Employment rates in the experimental group were about				
Job Train Program	12% higher relative to the comparison group, but				
	program appeared less effective than other strategies, e.g				
	Job Clubs				
	 Most effective for long term unemployed 				
	• Impact was strongest after the courses completed				
Norway	Significant impact of labour market training but only in one				
Labour Market Training	sector as defined by public services administrative and				
	technical works				
Norway	Vocational LMT gives positive effects to only those who				
Labour Market Training	plan to actively search for job				
Sweden	Negative impact on earning after a year of program				
Labour Market Training	completed				

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^{26.} Robert G. Fay, "Enhancing the Effectiveness of Active Labour Market Policies: Evidence from Programme Evaluations in OECD Countries," *OECD Labour Market and Social Policy Occasional Papers*, No. 18, 1996.

Sweden	Evaluation was done in 1995
Vocational Training	Participants who graduated from training in 1994 earned 3%
	more than control group while the earning of those who
	graduated in 1992 declined by 1.9%

Source: "Enhancing the Effectiveness of Active Labour Market Policies," OECD, 1996

2.5. Implementing ALMPs in Developing Countries

Two core elements of ALMPs implemented in developing countries are job training programs and employment service. In Latin America and the Caribbean (LAC) countries, the evaluation study by Ibarraran revealed that ALMPs, particularly training have positive impact on employment, wage, and productivity. ALMPs have positive impact on employment which statistically ranges from zero to ten percent.²⁷ However, the significant impact also depends on quality of training provisions. Based on quasi-experimental design, an evaluation research on ALMPs in Dominican Republic reveal that, proper designed trainings have on average 10% impact on wage.²⁸ In Mexico, the in-firm trainings are widespread, and labour forces training has also been increased. Along with this trend, labour productivity in Mexico has increased. The research suggested that the combinations of trainings and R&D had huge impact on wage and productivity. In Colombia, the research showed that trainings substitute for formal education, and also improve working conditions.²⁹

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^{27.} Maria Laura and Sanchez Puerta, "Labor Market Policy Research for Developing Countries: Recent Examples from the Literature," *The World Bank*, 2010, 18. 28. Ibid., 21.

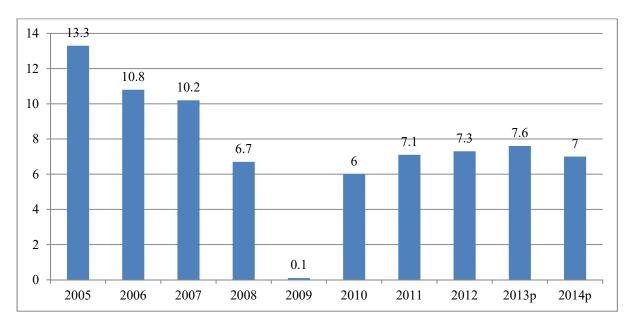
^{29.} Ibid., 19-20.

CHAPTER III

CAMBODIA'S SOCIO ECONOMY AND LABOUR MARKET

3.1. Socio Economic Context

Located in South East Asia with the population of around 14.7 million, Cambodia's economy has rapidly grown in the last decade. ³⁰ Official statistic from the Ministry of Economy and Finance, show that starting from 2005, Cambodia's real GDP growth rate was 7.5%, and noticeably in 2005 alone, the growth rate was 13.3%, which is the highest growth within a decade. Despite the global economic downturn in 2008, the impacts on Cambodia were pronounced in 2009 when the GDP growth was only 0.1%. From 2011 to 2014, the growth rate kept fluctuating between 7% and 7.6% with the highest growth in the construction sector, and hotel and restaurant industry of 17.2% and 13.7% respectively, while the main sector, agriculture grew only 4.2% in 2013. ³¹



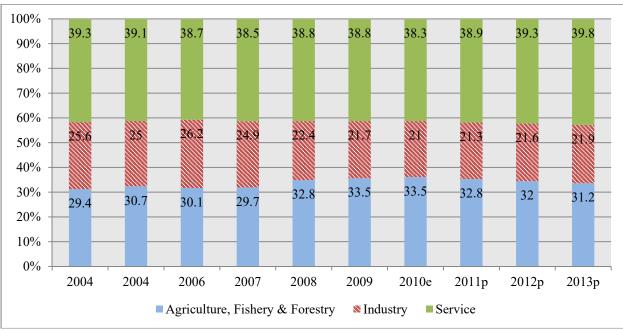
<Figure 3-1> Cambodia's Real GDP Growth Rate

Source: Ministry of Economy and Finance, 2014

^{30.} National Institute of Statistics, "Cambodia Socio-Economy Survey 2013," *Ministry of Planning*, July 2014, 6.

^{31.} Ministry of Economy and Finance, last modified September 28, 2014, http://www.mef.gov.kh/index.html.

After civil wars for several decades, GDP per capita at current market price gradually increased from \$216 in 1992 to \$971 in 2012, yet it was still the second lowest in the ASEAN region which was only above Myanmar. Cambodia's economic growth has heavily depended on three main sectors namely agriculture industry, and service. Most Cambodian people are working in agriculture, but the Ministry of Economy and Finance reported that this sector is predicted to contribute only at 31.2% of total GDP, while service is expected to contribute almost 40%, and 21.9% for the industrial sector. In the industrial sector, textile, wearing apparel, and footwear, which is the main exports for Cambodia's economy, contributed 43.37%. While the Cambodian labour market has changed, the contribution of agriculture is expected to continue decreasing whereas service and industry is expected to increase its contribution to the national economy.



<Figure 3-2> GDP at Current Price by Economic Activities (%Share of GDP)

Source: Cambodia Macroeconomic Framework 2000-2011, MoEF, 2010

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^{32.} NIS, "Key Figures," last modified January 31, 2015, http://www.nis.gov.kh/index.php/en/. 33. Royal Government of Cambodia, "The Cambodian Government's Achievements and Future Direction in Sustainable Development," (Paper presented at the National Report for Rio+20 United Nations Conference on Sustainable Development, 2012).

Scientific researches show that literacy and poverty has a strong relationship, and this can be applied to Cambodia's case. While Cambodia poverty headcount ratio at national poverty lines was 23.9% in 2009 and decreased to 17.7% in 2012, Table 3-1 shows that adult literacy rate increased from 73.9% to 80.7% from 2009 to 2013.³⁴ It was a good sign for Cambodia since the national literacy rate for adults increased both in rural and urban areas especially women's literacy rate which also nationally increased almost 10% within five years.

< Table 3-1 > Adult Literacy (15+) by Geographical Domains and Sex 2009, 2013 (%)

	2009			2013		
Domains	Women	Men	Total	Women	Men	Total
Cambodia	65.9	82.7	73.9	74.4	87.7	80.7
Phnom Penh	89.0	97.2	92.7	90.1	97.1	93.4
Other Urban	80.0	92.8	86.1	82.1	95.8	88.8
Other Rural	60.6	79.4	69.4	70.6	84.8	77.3

Source: CSES, 2009, 2013

Even though the literacy rate of adults aged 15 and over is high, nationally, the general education level of Cambodian people is low. Cambodian Socio Economic Survey (CSES) 2013 reports as shown in Table 3-2 that only 10.7% completed lower secondary school and only 5.4% completed upper secondary school, while 38.4%, which is the highest percentage, did not complete primary school education. Nevertheless, this shows a little bit of improvement compared to 2009.

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^{34.} The World Bank, "Poverty headcount ratio at national poverty lines (% of population)," World Development Indicators, 2014, http://data.worldbank.org/country/cambodia.

<Table 3-2> Persons Aged 25 Years Old and Over by Education Attainment and Sex 2009, 2013

		2009			2013	
Education Attainment	Women %	Men %	Total %	Women %	Men %	Total %
None or Only Some Education	37.3	17.5	28.3	27.7	11.8	20.4
Primary School not Completed	37.3	34.4	<u>36.0</u>	40.9	35.4	<u>38.4</u>
Primary School Completed	15.4	25.7	20.1	18.9	24.8	21.6
Lower Secondary Completed	6.5	12.4	<u>9.2</u>	7.4	14.6	<u>10.7</u>
Upper Secondary Completed	2.4	6.4	<u>4.2</u>	3.1	8.2	<u>5.4</u>
Post-secondary Education	1.0	3.3	2.0	2.0	5.2	3.5
Other	0.1	0.2	0.1	-	-	-
Total	100	100	100	100	100	100

Source: CSES, 2009, 2013

The CSES found that Cambodian population aged 6 years and over who never attended school was 14% in 2013, where the percentage of women who never attended school was higher than men in both rural and urban areas, and the reasons for not attending school were mainly economic. Table 3-3 shows that 28.8% of population aged from 6 to 17 years, which never attended school responded that they had to contribute to household income, while 12.2% responded that they were too poor.

<Table 3-3> Reasons for Not Attending School Among Person Aged 6-17 Years

Descens for not attending school	2013			
Reasons for not attending school	Women	Men	Total	
Do Not Want to	9.1	16.2	12.7	
Did Not Do Well in School	7.6	6.4	7.0	
No Suitable School Available/School is too Far, No	6.5	3.8	5.1	

Teacher Supplies

High Cost of Schooling	-	0.9	0.4
Must Contribute to Household Income	31.4	26.2	<u>28.8</u>
Must Help with Household Chores	9.4	5.5	7.4
Too Poor	9.1	15.3	<u>12.2</u>
Due to Disability/Long Term Illness (Over 3	3.1	2.8	3.0
Months)			
Too Young	22.5	21.5	22.0
Other	1.3	1.4	1.4
Total	100	100	100

Source: CSES, 2013

3.2. Labour Market Context

Contributing to such growth, the CSES 2013 reports that labour force participation rate of working age Cambodians was markedly high up to 83%: 78% for women and around 89% for men, and the employment rate was 82.8%. Among those, the employment rate at rural area was 85.2%, which was slightly higher than in Phnom Penh, capital city of Cambodia, and some other urban areas.³⁵ Surprisingly, Cambodia, which is a developing country in the region, has yet a very low unemployment rate, 0.3%: 0.1% in Phnom Penh, 0.5% in other urban areas, and 0.3% in rural areas.³⁶ For the youth unemployment was 2.1%, which was still low compared to global youth unemployment in 2012, and regional youth unemployment in South East Asia and the Pacific, which was accounted at 12.4% and 9.3% respectively.³⁷

^{35.} National Institute of Statistics, "Cambodia Socio-Economy Survey 2013," 63.

^{36.} Ibid

^{37 .} Kanol Heang et al., *Labour Market Transitions of Youth Women and Men in Cambodia* (Geneva: International Labour Office, 2013).

< Table 3-4 > Cambodian Labour Force (age 15-64 years), 2013

Labour Force	Total	Phnom Penh	Other Urban	Other Rural
Total Population	14,678	1,738	1,595	11,344
Total Working Age Population	9,604	1,273	1,057	7,274
Labour Force	7,974	942	814	6,219
Labour Force Participation Rate	83.0	74.0	77.0	85.0
Employment Rate	82.8	73.9	76.6	85.2
Unemployment Rate	0.3	0.1	0.5	0.3

Source: National Institute of Statistics, Ministry of Planning, 2014

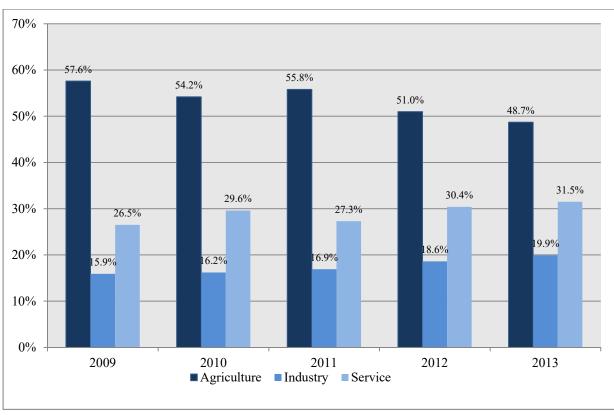
Even though the unemployment was low, those employed in the labour force were working mostly in low quality, low income, and bad working conditions especially for those who were the own account workers or self-employed workers which represented more than half of the total employed population. Table 3-5 shows that in 2011, own account and self-employed workers were 53.4% and increased to 55.1% and 54.7% in 2012 and 2013 respectively.

<Table 3-5> Employment Status (15-64 years), 2011, 2012, 2013

Employment Status	2011	2012	2013
Employment Population (number in thousand)	7,891	7,706	7,951
Paid Employee	31.4	35.8	40.6
Employer	0.0	0.0	0.0
Own Account Worker/Self-Employed	<u>53.4</u>	<u>55.1</u>	<u>54.7</u>
Unpaid Family Worker	15.1	9.0	4.7
Other	0.1	0.0	-
Total	100	100	100

Source: CSES, 2011, CSES, 2012, CSES, 2013

With the cheap labour incentive and political stability, the RGC has attracted many Foreign Direct Investment (FDI), especially from China, Korea, Japan, and Malaysia. From 2010 to 2012, inflow FDI increased almost double from 783 million dollars to 1,447 million dollars and slightly decreased in 2013 to 1,396 million dollars. Most investments were in tourism and service, followed by agriculture. This phenomenon has changed the labour market structure for the last decade. As illustrated in Figure 3-3, employment population in the agriculture sector gradually decreased from 57.6% in 2009 to only 48.7% in 2013 while in the industry and service sector it increased from 15.9% to 19.9% and from 26.5% to 31.5% respectively in the same period of time.



< Figure 3-3 > Employment Population (15-64 years) by Sector, 2009-2013

Source: CSES, 2013

^{38.} United Nations Conference on Trade and Development, "World Investment Report, 2014: Cambodia," last modified February 1, 2014,

http://unctad.org/sections/dite_dir/docs/wir2014/wir14_fs_kh_en.pdf.

By looking in detail in these three sectors, the majority, 39.8% of Cambodian employed populations are working in skilled agriculture, forestry, and fishery, while 16.8% of them are in service and sale and another 16.5% work in craft and related sectors. For skilled workers who work as a manager, professional, or technical and associate professional are very small at only 3.7% among the total employment population.

<Table 3-6> Employment Population (15-64 years) by Main Cccupations, 2013 (%)

Main Occupation	Women	Men	Total
Armed forces	0.0	1.4	0.7
Manager	0.6	1.2	0.9
Professional	3.0	2.9	2.9
Technical and Associate Professional	0.7	1.1	0.9
Clerical Support Workers	2.2	3.7	3.0
Service and Sale Workers	22.8	11.2	<u>16.8</u>
Skilled Agriculture, Forestry and Fishery Workers	41.4	38.2	<u>39.8</u>
Craft and Related Workers	16.5	16.6	<u>16.5</u>
Plant and Machine Operators and Assemblers	0.6	6.5	3.6
Elementary Occupations	12.2	17.2	14.8
Others	-	-	-
Total	100	100	100

Source: CSES, 2013

Cambodia's labour market consists of many informal sectors, which lead to many challenges at this development stage. Workers in those informal sectors are the most vulnerable group. Population census data shows that the vulnerable employment was 82.5% in 2009, which was very high. Furthermore, for the working poor, Kang and Liv defined it by applying the United Nations formation, and found out that between 2004 and 2009, in rural

areas, the working poor was increasing by 13% from 1.8 million to 2.1 million.³⁹⁴⁰ Those 2.1 million working poor mostly work in the subsistent agriculture sector. While the poverty rate in general in Cambodia was 19.8% in 2011, those who are the poorest are living in rural areas where the poverty rate pronounced up to 20.7%.

In general, the vulnerably employed and working poor were not only those who work in agriculture, but also self-employed workers, and also waged workers. Interestingly, the poverty rate in industry was counted as 22.7%, which is higher than agriculture (20.4%) and services (10.6%). ⁴¹

<Table 3-7> Poverty Rate by Sectors (%)

Sectors/Year	2007	2008	2009	2010	2011
Agriculture	46.4	28.5	25.4	20.6	20.4
Industry	39.1	23.7	21.7	22.6	22.7
Services	12.9	8.7	11.8	10.3	10.6

Source: CSES 2007-2011 (Cited in CIDS, 2013)

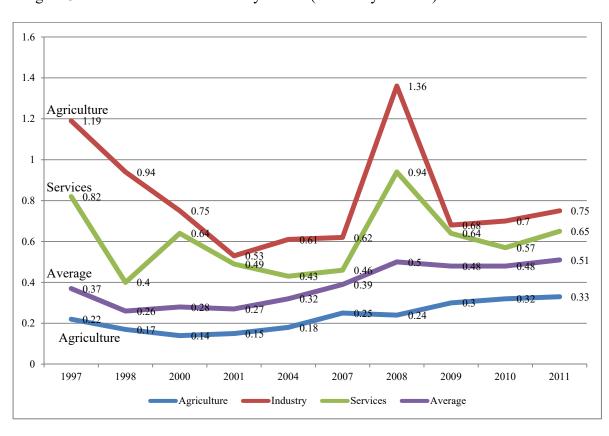
Productivity is another challenge for Cambodian workers. Employment opportunities are of course important for growth and poverty reduction, yet quality of labour is even more crucial to attract investments, and workers can also get better return from their labour with high productivity. To assess the productivity of labour forces, the author measured the level of education and calculated the unpublished data from NIS. The report claimed that in 2011, only 2.5% of Cambodian labour forces completed tertiary education while 21% finished secondary education, and another 27% completed only primary education.

³⁹ Working Poor = poverty rate * labour force age 15 years and over

^{40.,} Kang Chandararot et al., "Rural Development and Employment Opportunities in Cambodia: How Can a Nation Employment Policy Contribute towards Realization of Decent Work in Rural Areas?," *ILO Asia-Pacific Working Paper Series* (Bangkok: International Labour Office, 2013), 17.

^{41.} Phann Dalis, Links between Employment and Poverty in Cambodia (Phnom Penh, CDRI, June 2014).

Cambodian workers' productivity was low and only slightly increased between 2008 and 2011.⁴² In 2008, the productivity jumped to 0.50 USD per hour per worker from 0.39 USD/hour/worker in the previous year, and slightly increased to 0.51 USD per hour per worker in 2011.⁴³ The author assumed that the productivity of workers was low by proposing that the poor need to improve the quality of their human input and material input to benefit. Even labour costs was low which was the incentive for investors, yet the author suggests that Cambodia need decent wage for better qualify of life because low wages might be insufficient to pay for daily life.



<Figure 3-4> Labour Productivities by Sector (USD/Day/Worker)

Source: CDRI, June 2014

^{42.} Ibid.

^{43.} Ibid.

CHAPTER IV

CURRENT SITUATION OF TECHNICAL VOCATIONAL EDUCATION AND TRAINING & PUBLIC EMPLOYMENT SERVICE

4.1 Technical Vocational Education and Training

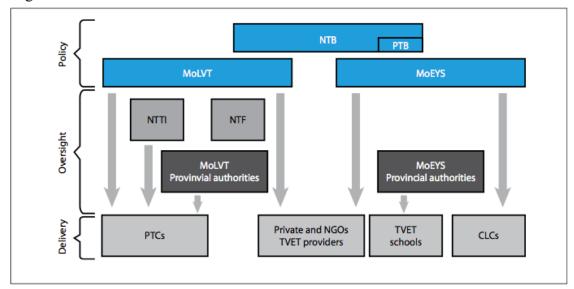
4.1.1. Governance of TVET

In Cambodia, National Training Board (NTB) is a supreme body responsible for the overall TVET system including policy formation, approving policy implementation strategies, and monitoring the authority of TVET as illustrated in Figure 4-1. Chaired by the Deputy Prime Minister, NTB has a total of thirty-five members including nineteen senior government officials, seven representatives from employers or private sectors, two representatives from trade unions, three representatives from NGOs, and four representatives from public training institutions. Acting as secretariat of NTB, Directorate General of Technical Vocational Education and Training (DGTVET), under the supervision of the Ministry of Labour and Vocational Training (MoLVT), is mandated to provide national policy guidelines for the TVET system, monitor and evaluate the performance of public and private institutions of TVET. Importantly, this body is set to review the labour market needs in order to set up suitable TVET policies to provide good quality of labour supply to fit the demand side in the labour market.

Even though formal and non-formal TVET is officially under the supervision of MoLVT, some other ministries still operate TVET programs with their own operational requirements such as the Ministry of Education Youth and Sports, the Ministry of Health, the Ministry of Women's Affairs and the Ministry of Agriculture, Forest and Fisheries.

^{44.} National Training Board, "Member of National Training Board," last modified March 23, 2015, http://www.ntb.gov.kh/ntb/membership.htm.

<Figure 4-1> TVET Governance



Source: UNESCO, 2013

4.1.2. TVET System

The TVET system consists of four levels: certificate, diploma, higher diploma, and higher education (graduate and post-graduate).

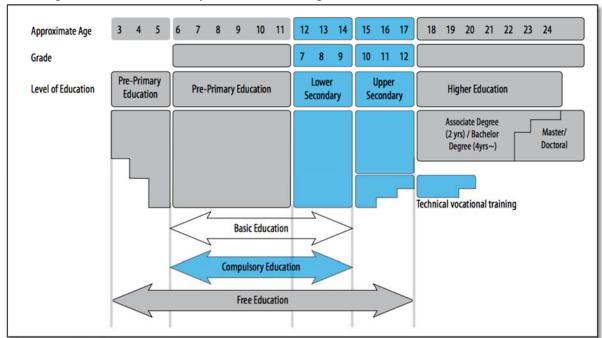
Certificate Level: Trainees can get certificate level by enrolling in a short course or non-formal course provided by a vocational training center or in the community. Short courses take from a few weeks to less than a year.

Diploma Level: After completing nine years of basic education (grade nine), students can decide to take academic pathway up to grade twelve or a formal TVET course, which is called diploma level. In this diploma level of TVET, there are three different levels: technical and vocational certificate level 1, certificate 2, and certificate 3 for which students are required to be in school for one year, two years and three years respectively.

Higher Diploma Level: Grade twelve graduates or trainees completed the three certificate level can enter high diploma levels by taking two year courses in technical institutes or polytechnic institutions.

Bachelor's Degree and Master's Degree: Grade twelve graduates or trainees who completed the three certificate levels plus four years of education (four years and a half for

engineering) can get a bachelor's degree. For diploma graduates, they are required to study for two years and a half for the same degree. For master's degree, students are required to continue another two years of studies (See Figure 4-2).⁴⁵



<Figure 4-2> Education System and Training in Cambodia

Source: UNESCO, 2013

4.1.3. Cambodian Qualification Framework

Cambodia Qualification Framework (CQF) was approved by sub-decree No. 153 dated on March 28, 2014 (Table 4-1).⁴⁶ This sub decree makes the TVET stream flexible. After completing each level, students have two options: they can continue to the next level or work and then return to school. For those who graduate from diploma or Technical and Vocational Certificate 3, they can take an exam or continue their studies at a university in the general education stream. This sub decree allows all training institutions to reform their system within a year from the signatory date.

^{45.} UNESCO, Policy Review of TVET in Cambodia, (Thailand: Clung Wicha Press, 2013).

^{46.} Royal Government of Cambodia, Sub-decree for Establishing Cambodia Qualification Framework (Phnom Penh, March 28 2014).

<Table 4-1> Cambodian Qualification Framework

General Education System	TVET System	Higher Education System	Minimum Credit Hours
	Doctoral Degree of	Doctoral Degree	54
	Technology/Business Education		
	Masters Degree of	Masters Degree	45
	Technology/Business Education		
	Bachelor of Technology/	Bachelors	120
	Business Education	Degree	
	Higher Diploma / Associate	Associate	60
	Degree of Technology /	Degree	
	Business Education		
Upper Secondary	Technical and Vocational		30
School Certificate	Certificate 3		
Upper Secondary	Technical and Vocational		30
School Certificate	Certificate 2		
Upper Secondary	Technical and Vocational		30
School Certificate	Certificate 1		
Lower Secondary	Vocational Certificate		30
School Certificate			
	Education System Upper Secondary School Certificate Upper Secondary School Certificate Upper Secondary School Certificate Lower Secondary	Education System Doctoral Degree of Technology/Business Education Masters Degree of Technology/Business Education Bachelor of Technology/ Business Education Higher Diploma / Associate Degree of Technology / Business Education Upper Secondary School Certificate Upper Secondary School Certificate Certificate 2 Upper Secondary School Certificate Certificate 1 Lower Secondary Vocational Certificate	Education System Doctoral Degree of Technology/Business Education Masters Degree of Technology/Business Education Bachelor of Technology/ Business Education Business Education Higher Diploma / Associate Degree of Technology / Business Education Upper Secondary School Certificate Upper Secondary School Certificate Upper Secondary School Certificate Certificate 1 Lower Secondary Vocational Certificate Certificate 1 Lower Secondary Vocational Certificate Certificate 1 Lower Secondary Vocational Certificate Lower Secondary Vocational Certificate Lower Secondary Vocational Certificate

Source: MoLVT, 2015

4.1.4. Institutions and Locations

In the whole country, there are a total of 304 training institutions, which include 63 public institutions, 188 private institutions, and 53 NGOs training institutions.⁴⁷ Among 63 public institutions, only 38 (around 60%) are under the supervision of MoLVT while others are under direct control of other ministries like the Ministry of Education Youth and Sports, the Ministry of Women's Affairs, the Ministry of Economy and Finance etc. Moreover, many private and NGOs training institutions are also not controlled by MoLVT.⁴⁸ Table 4-2 shows

^{47.} Insoo Jeong, "Industrial Skill Training in Cambodia," in *Policy Agenda for Cambodia in Developing Industrial Skills, Industrial Complex, and Agro-processing Industry*, Moon-soo Kang et al. (Korea: Korea Development Institute, 2013), 85.
48. Ibid.

that there are only 16 among 188 of private institutions and 13 among 53 of NGOs training institutions that have signed the MoU with MoLVT.

<a>Table 4-2> Number of TVET Institutes and Locations

TVET Institution	Total Number	Under MoLVT/Sign MoU with MoLVT
Public	63*	38 (Under MoLVT)
Private	188	16 (Signed MoU with MoLVT)
NGOs	53	13 (Signed MoU with MoLVT)
Total	304	68

^{*25} institutions are provincial centers, and 11 institutions are polytechnic institutions Source: Ministry of Strategic and Finance, Korea & KDI, 2013

4.1.5. TVET Enrolment

From 2004 to 2008, TVET enrollment gradually increased from 27,894 to 168, 630 and started to decrease during and after the global financial crisis from 120,173 in academic year 2009-2010 to 86,616 in the academic year 2012-2013. Noticeably, most trainees enrolled in short-term training courses, which last from a few weeks to less than a year, while less than 2% of total enrollment numbers enrolled in long-term trainings and around 8% enrolled in higher education on average (See Table 4-3).⁴⁹

Interestingly, in a paper written by Insoo Jeong, number of students enrolled in higher education in TVET was low between 2004-2005 and 2010-2011, yet reported by MoLVT, this number jumped to around 19% and 14% in 2011-2012 and 2012-2013 respectively.⁵⁰ <Table 4-3> TVET Enrollment by Training Level (2004-2014)

Year	Short-Term	Long-Term	Higher Education	Total
2004-2005	25,022 (89.7)	594 (2.1)	2,278 (8.2)	27, 894 (100)
2005-2006	44,156 (92.0)	503 (1.0)	3,327 (6.9)	47,986 (100)

^{49.} Ibid., 87.

^{50.} MoLVT, 2013, 2014.

2006-2007	52,914 (91.5)	1,562 (2.7)	3,330 (5.8)	57,806 (100)
2007-2008	107,565 (94.6)	1,524 (1.3)	4,559 (4.0)	113,648 (100)
2008-2009	163,127 (96.7)	1,214 (0.7)	4,289 (2.5)	168,630 (100)
2009-2010	114,138 (95)	746 (0.6)	5,289 (4.4)	120,173 (100)
2010-2011	86,925 (95)	860 (0.9)	3,702 (4.0)	91,487 (100)
2011-2012	85,775 (79.1)	2,251 (2.1)	20,421 (18.8)	108,447 (100)
2012-2013	74,090 (85.5)	409 (0.5)	12,117 (14)	86,616 (100)

Source: MoLVT, 2010 (Cited in Policy Agenda for Cambodia in Developing Industrial Skills, Industrial Complex, and Agro-processing Industry, 2013) & MoLVT, 2014

4.1.6. Characteristic of Trainees

As presented in Table 4-4, trainees enrolled in vocational trainings were mostly youth aged from 15 to 34 years old, which accounted for 38.17% of total enrollment in 2012. The majority of them enrolled in short-term trainings, 29.15%, and 24.70% for the age groups of 15-25 and 25-34 respectively. The policy agenda paper for Cambodia in Developing Industrial Skills, Industrial Complex, and Agro-processing Industry published in 2013 by the Korean Development Institute showed that most trainees who enrolled in short-term training courses were from families with difficult economic situations, and without good academic background.⁵¹

<Table 4-4> Trainees' Characteristic by Age Group, 2012

-	Age Group	Short Course	Long Course and Higher Education	Total
-	15-24	21,599 (29.15)	11,463 (91.51)	33,062 (38.17)
	25-34	18,298 (24.70)	1,004 (8.02)	19,302 (22.28)
	35-44	13,636 (18.40)	39 (0.31)	13,675 (15.79)
	45-54	12,063 (16.28)	9 (0.07)	12,072 (13.94)

^{51.} Insoo Jeong, "Industrial Skill Training in Cambodia," 86.

 54- Up	8,494 (11.46)	11 (0.09)	8,505 (9.82)
Total	74,090 (100)	12,526 (100)	86,616 (100)

Source: MoLVT, 2014

In 2012, the initial report of TVET statistics from the Department of Technical and Vocational Education and Training Management of MoLVT revealed that most students (82.09%) that enrolled in training courses were unemployed while there were only 17.53% and less than 1% were regular workers and casual workers respectively (See Table 4-5).⁵² The statistics presented that among those who enrolled in short-term trainings, casual workers or irregular workers who are defined as the most vulnerable groups represented only 0.30% while in the long-term trainings this group represented 0.87%, the least among others.

<Table 4-5> Trainees' Characteristic by Employment Status, 2012

Employment Status	Short Course	Long Course	Total
Unemployed	58,906 (79.51)	12,196 (97.37)	71,102 (82.09)
Regular Workers	14,964 (20.20)	221 (1.76)	15,185 (17.53)
Casual Workers	220 (0.30)	109 (0.87)	329 (0.38)
Total	74,090 (100)	12,526 (100)	86,616 (100)

Source: MoLVT, 2014

4.1.7. Number of Trainers

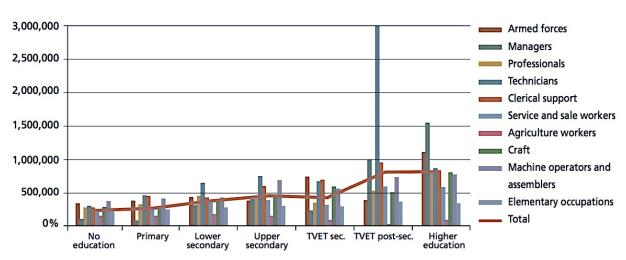
In the 38 public training institutions under the supervision of MoLVT in the academic year 2012-2013, there were a total of 1,796 teaching staffs where the total enrollment at the same year was 86,616. It means that one trainer was responsible for 49 students per year.⁵³

^{52.} Ministry of Labour and Vocational Training, "Technical and Vocational Education and Training Statistics," *Initial Report*, 2014.

^{53.} Ministry of Labour and Vocational Training, "Technical and Vocational Education and Training Statistics," *Initial Report*, 2014, 2.

4.1.8. High Return of TVET

Cambodian people who attend TVET programs tend to have high return compared to those who attend general education programs. The World Bank report in 2009 stated that return to TVET reached 60% at secondary level compared to primary education, and 112% for post-secondary TVET compared to lower-secondary education. Interestingly, compiled data from the CSES 2009, the same report confirmed that there was a high return to post secondary TVET, which was almost equal to return for tertiary education especially for associate professionals and technicians as demonstrated in Figure 4-3.⁵⁴



<Figure 4-3> Monthly Wages by Level of Education and Occupation in Riels (2009)

Source: The World Bank, 2012

The synthesis report published in 2013 by Cambodia Development Resource Institute (CDRI) and Royal University of Phnom Penh (RUPP) also supported this claim. The report stated that those who graduated from TVET could earn more than white-collar workers and government officials on average pay, and if students graduate from recognized TVET

54. The World Bank, *Matching Aspirations: Skills for Implementing Cambodia's Growth Strategy* (Phnom Penh: The World Bank, 2012).

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institutions, they can even hold more professional positions and earn more than university graduates.⁵⁵

4.1.9. Budgeting

The budget supporting TVET in Cambodia comes from many different sources including the RGC, non-governmental funding through NGOs, private sectors, international development partners through technical assistance grants, foreign loans and others. The Rectangular Strategy Phase II and Phase III of the Cambodian government with the central theme of "Growth, Employment, Equity and Efficiency" has given strong support for human capital investment through government budget as well as other development partners. The government budget funds TVET through the National Training Fund (NTF) to support any training programs related to employment needs and in line with training strategies and policy of the NTB. From the global financial crisis period, 2008 - 2009, the Prime Minister initiated to establish Prime Minister's Special Fund for TVET to cope with the recent unemployed and out of work youth as well as to increase opportunities for skills acquisition.⁵⁶ For funding from development partners, the TVET sector in Cambodia has been supported by many sources since 1996. The main development partners supporting this sector are Asian Development Bank (ADB), International Cooperation Agency (JICA), United Nations Educational, Scientific and Cultural Organization (UNESCO), Agence Française de Développement (AFD), Swiss Agency for Development and Cooperation (SDC), United Nations Development Programme (UNDP), German development cooperation through Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) and others. Table 4-6

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^{55.} CDRI, RUPP, "The Roles of TVET and Higher Education in Economic Development in Cambodia," *Synthesis Report*, no. 1 (2013): 3.

^{56.} UNESCO, Policy Review of TVET in Cambodia, (Thailand: Clung Wicha Press, 2013), 41.

illustrates important development partners' supports for TVET in Cambodia between 1996 and 2015.57

<Table 4-6> Development Partners for TVET Since 1996

Development Partner	Project Name	Duration	Amount
ADB	Basic Skills Project	1996-2002	\$20 million
ADB	Education Sector Development Program	2002-2004	\$20 million program loan; \$18 million project loan
ADB	Local Governance and Community	2008-2013	\$106.3 million
	Development Program		
ADB	Second Education Sector Development Program	2005-2008	\$20 million program loan; \$25 million project loan; TA \$0.5 million
ADB	Strengthening Technical and Vocational	2010 -	\$27.5 million
	Education and Training	2015	
ADB-JFPR	Piloting the Post-Harvest Technology and Skills Bridging Program	2009–2012	\$2 million
AFD	Support to Vocational Training – Garment Manufacturers Association in Cambodia	2012–2015	\$3.26 million
ASEAN-India	Technical Assistance for the Support of the Cambodia–India Entrepreneurship Development Center	2006–2007	
CCA	Cooperation in TVET of Construction	2012–2015	\$0.096 million
JICA	Japanese Overseas Cooperation Volunteers Program		
JICA	Japanese Vocational Center Workshop and Technical School	1990–2000	
KDI	Korean Research Institute for Vocational Training	2005–2009	\$1.2 million

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^{57.} Asian Development Bank, "Proposed Loans Kingdom of Cambodia: Technical and Vocational Education and Training Sector Development Program," *Report and Recommendation of the President to the Board of Directors*, September 2014.

SDC	Not Specified, Pipeline Project		
UNDP/ILO	ILO Employment Generation Program	Phase 1:	\$18 million
	Vocational Training for Employment	1992–1997	
	Generation	Phase 2:	
		1997–1998	
UNDP/ILO	Vocational Training for Poverty Alleviation	1994–1998	\$12 million
UNDP/ILO/	National Strategy Plan for TVET	1994–1996	
GIZ			
UNESCO	Policy Review of TVET in Cambodia	2012–2013	\$0.282 million

ADB = Asian Development Bank, AFD = Agence Française de Développement, CCA = Cambodia Construction Association, ILO = International Labour Organization, JFPR = Japan Fund for Poverty Reduction, JICA = Japan International Cooperation Agency, SDC = Swiss Agency for Development and Cooperation, UNDP = United Nations Development Programme, UNESCO = United Nations Educational, Scientific and Cultural Organization, KDI = Korean Development Institute, GIZ = German development cooperation through Deutsche Gesellschaft für Internationale Zusammenarbeit.

Source: ADB, 2014

4.2. Public Employment Service: National Employment Agency (NEA)

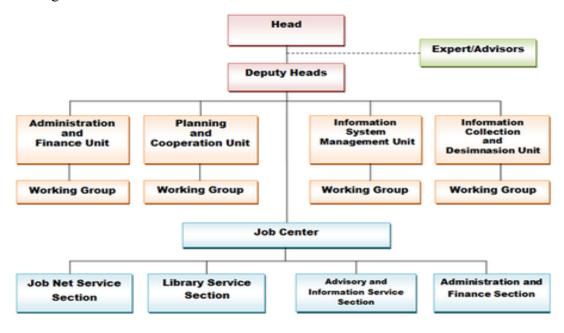
4.2.1. Governance of NEA and Services

Under the jurisdiction of the NTB, besides the Directorate General of TVET, there is another public agency, which is assigned to work in labour market sectors: the National Employment Agency (NEA). Headed by a Director General, NEA is a special operating agency established on 27th April 2009 by sub-degree No. 67 of Royal Government of Cambodia. Back then, the main mission of NEA was set to provide effective and efficient employment services and labour market information to job seekers and employers, training providers to exchange information among those key players in the labour market. ⁵⁸ One year later, on 13th September 2010 through a new sub-decree No. 118 of the RGC, this special agency have received a new function to collect, analyze, publish and disseminate labour market information through any means to related stakeholders in the labour market.

58. NEA, "About NEA," last modified April 21, 2015,

http://www.nea.gov.kh/nweb/en/home_page/home/aboutnea.

<Figure 4-4> Structure of NEA



Source: NEA, 2014

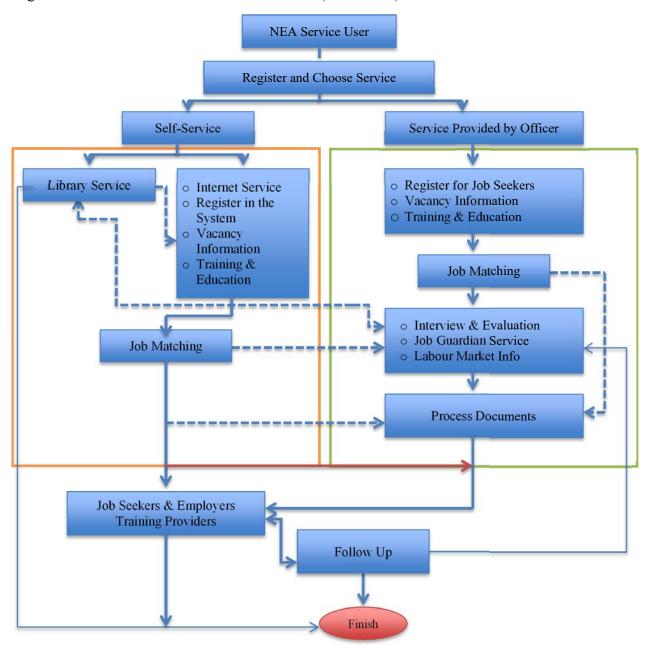
To implement the assigned functions effectively, the organizational structure of NEA is divided into back office and front office. The back office refers to the management and support sections which are stationed in head office in Phnom Penh, while the front office refers to the Job Center which works directly with the service users. There are four main units in the back office section: Administration and Finance Unit, Planning and Cooperation Unit, Information System Management Unit and Information Collection and Dissemination Unit (Figure 4-4).

The service users, including job seekers, employers, training providers, have two options to use services of NEA. First, if they can access to the Internet, those services can be used through the existing website of NEA without coming directly to the job centers. For the second option as shown in Figure 4-5, at each of the job centers, users can choose between self-service and support from officers.

At the job center, employers can post job announcements on the available channel of NEA, are recommended job seekers that fit with their posted positions, get information about available trainings for their employees and other labour market information. Moreover, there

is also a space for employers to interview applicants. For job seekers, they can apply for available jobs and trainings courses posted on the website of NEA, at the job centers or in the Labour Bulletin of NEA. They are entitled to be recommended to employers if their backgrounds match with the jobs. Other labour market information can also be accessed. For training providers, they can also announce available training courses by using this service.

<Figure 4-5> NEA's Frontline Service Structure (Job Center)



Source: NEA, 2014

Established in 2009, NEA has been doing some important functions in the labour market. Reported in 2014, there were 131,443 jobs announced and there were almost 5,000 people who got jobs via its services as shown in Table 4-7.⁵⁹ The Career Fairs are now commonly used by many Cambodian job seekers especially university students, and the number of Career Fairs and seminars had been increased every year from 11 in 2010 to 94 in 2013.⁶⁰ NEA is also trying to expand the Career Fairs to provinces especially to recruit low skills workers for the garment and textile industry in particular.

<Table 4-7> NEA's Outcome From the Establishment to 2013

Activities	2010	2011	2012	2013	TOTAL
Number of Job Announcement Collected and	10,648	30,854	53,640	36,301	131,443
Posted					
Number of Job Seekers Registered at NEA	2,324	30,854	53,640	36,301	34,336
Number of Career Guardian Services	524	2,040	5,420	1,789	9,773
Provided					
Number of Job Seekers Sent to Employers	1,281	4,456	7,396	2,883	16,016
Number of Applicants Got Jobs from NEA	123	786	3,317	688	4,914
Service					
Number of Career Fairs and Seminars	11	48	57	94	210
Number of Career Fairs for Recruiting	-	-	8	2	10
Garment Workers					
Number of National/Provincial Career Fairs	3	5	3	5	16
Visitors of NEA's Website	111,380	363,973	497,725	353,012	1,326,090

Source: NEA, 2014

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 $^{59.\} NEA,$ "Summary Report on the Outcome of NEA," 2014.

^{60.} Ibid.

CHAPTER V BOTTLENECKS OF THE CURRENT SYSTEM

Vocational training and public employment service play an important role in promoting livelihood of vulnerable groups in the labour market. Yet these two labour market institutions are facing some challenges in Cambodia.

5.1. Technical Vocational Education and Training

5.1.1. Low Completion Rate of Secondary Education and TVET Enrollment

Students are required to finish grade nine (lower secondary level) to enter the vocational training certificate level 1. However, the drop out rate before completing lower secondary school is high resulting in low completion rate. Among the school starters, there was only 36.2% who reached grade nine in the academic year of 2009 – 2010.⁶¹ The data shown in the report from the MoEYS between 2010 and 2014 is worrisome because the completion rate of lower secondary education was less than 50%, and kept gradually decreasing to only 39.09% in the academic year 2013-2014 (See Table 5-1).⁶² Thus, a huge number of students who drop out of school before completing lower secondary school have no chance to go for formal vocational training which is an obstacle, among other for vocational training in Cambodia.

<Table 5-1> Lower Secondary Completion Rate, Total (% of relevant age group)

Sex / Year	2009-2010	2010-2011	2011-2012	2012-2013	2013-2014
Male	50.01	49.20	42.60	42.23	38.23
Female	47.32	44.30	41.60	40.35	40.02
Total	48.71	46.80	42.10	40.62	39.09

Source: MoEYS, Education Statistics and Indicators, 2010-2014, compiled by the author

^{61.} MoEYS, "Education Indicators, 2010-2011", EMIS Office, Department of Planning, 2011, 56.

^{62.} MoEYS, "Education Indicators" EMIS Office, Department of Planning, 2010-2014.

5.1.2. Geographical Challenges

While there are relatively few public training institutions, those institutions are located only in the urban areas as agreed by the RGC stated in its proposal to the ADB to propose loans for Technical and Vocational Education and Training Sector Development Program 2015-2019.

At the end of 2014, after two new Provincial Training Centers (PTCs) in Mondolkiri and Preah Vihear were opened on 18 August 2014, there are in total of 23 PTCs covering 23 out of 25 provinces in the Kingdom that provide non-formal TVET training, while a new PTC in Kep province started to construct the building on 18 August 2014.⁶³ The locations of PTCs are in towns. Furthermore, among the top six outstanding polytechnic institutes, five of them are located in Phnom Penh.⁶⁴ Claimed by a paper entitled "Policy Agenda for Cambodia in Developing Industrial Skills, Industrial Complex, and Agro-processing Industry" done by the Korean Development Institute, in the whole country, there are around 750 private vocational training institutions of which 50% of them are located in Phnom Penh.⁶⁵ The location of training institutions does not fit the current labour market in the sense that the majority of Cambodian low skill or non-skill labour forces are mostly living in the rural areas, so still they cannot get the various skills trainings.

Through the five-year grant, supported by ADB, some rural villagers had a chance to attend informal skill trainings in the Voucher Skills Training Program (VSTP) that was targeted to recruit trainees from 530 communes in 23 provinces by implementing in three phases between 2011 and 2014 with three training courses: community-based, enterprise-based and center-based training. Until the third quarter of 2014, MoLVT reported that there

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^{63.} Ministry of Labour and Vocational Training, "3rd Quarterly 2014 Progress Report," *Strengthening Technical and Vocational Education and Training Project: ADB Grant 0178-CAM*, October 2014.

^{64.} Insoo Jeong, "Industrial Skill Training in Cambodia," 87.

^{65.} Ibid., 88.

were a total of 190,386 trainees, including around 600 trainees in Phnom Penh that were trained under the VSTP.⁶⁶ However, the CSES 2013 shows that Cambodian labour force in the rural area was 6,219,000 which means that there were only around 3% of the total rural labour force that participated in the program since 2011.⁶⁷

<Table 5-2> Number and Location of TVET Institution under MoLVT 2012-2013

By Institution Category	Number	
Institution	11	
PTC/VTC	27	
By Location		
Phnom Penh	8	
Provinces	30	
Total	38	

Source: MoLVT, 2014

5.1.3. Lack of Information of Training Providers/Vocational Training Centers

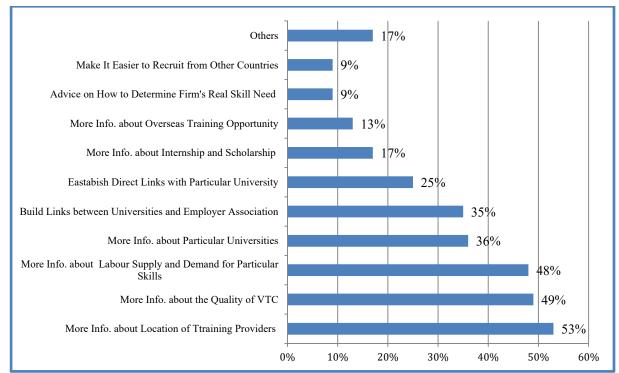
As mentioned in the previous section, there are only 27 PTCs/VTCs in the whole country and only a few of training centers are in communities. Most people living in rural areas have no idea about locations of those training centers as information about vocational training programs and vocational training centers do not reach rural communities. The technical paper of the World Bank in 2012 revealed that the majority of employers (53%) proposed to widely provide information regarding locations of training providers. The quality ranking of vocational training centers or accreditation system does not exist. Thus, Cambodian people who want to pursue vocational trainings do not know which vocational training centers they should go to. This is the second reason that employers (49%) introduced

^{66.} Ministry of Labour and Vocational Training, "3rd Quarterly 2014 Progress Report," *Strengthening Technical and Vocational Education and Training Project: ADB Grant 0178-CAM*, October 2014, 17.

^{67.} National Institute of Statics, "Cambodia Socio-Economic Survey 2013," 2013, 63.

^{68.} The World Bank, "Matching Aspirations: Skills for Implementing Cambodia's Growth Strategy," Technical Paper, no. 67349-KH (2012): 10.

to give more information on quality of particular vocational training centers (See Figure 5-1).⁶⁹



<Figure 5-1> Employers' Solutions to Skill Shortages

Source: HRInc, 2011 (Cited in ADB, 2012)

5.1.4. Misperceptions on TVET

Being trained in TVET sectors is a secondary option in Cambodian people's perception; also the society values vocational training school graduates less than general high school or college graduates regardless of wages they can earn after graduation.

As many have stated, most people drop out of school early at the average age of 16 or 17 years old when they are in secondary school, and many others have not attended school at all. The main reason for leaving school or not attending school is poverty, so the first priority for them is finding a job to support their family, but not going for vocational trainings. For those who have ability to support school materials, they prefer to go for general education. Male students, not female, normally enroll in vocational training courses and it is

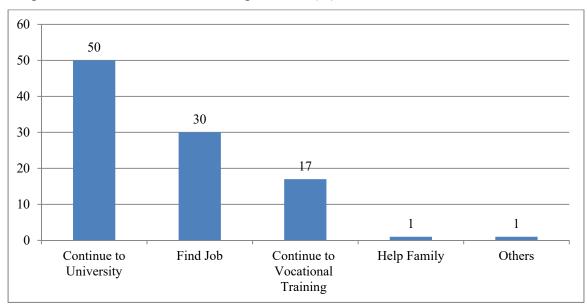
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^{69.} Ibid.

^{70.} National Institute of Statistics, International Labour Organization, *Cambodia Labour Force and Child Labour Survey 2012* (Cambodia: Sunway Publishing Shop, 2013), 28.

also the perception of Cambodian people that males rather than females should go for vocational training courses. As a result, among the Cambodian male population, 1.5% completed vocational education compared to only 0.6% for Cambodian female (See Table 5-3).

The fact that Cambodians do not value vocational trainings can also be drawn from the research done by Korea Research Institute for Vocational Education & Training (KRIVET) in 2010, as shown in Figure 5-2 by asking students about their plan after finishing high school. There were only 17% of respondents who planned to continue to vocational trainings institutions while 50% and 30% of respondents planned to continue to universities, and find jobs respectively.⁷¹



<Figure 5-2>Students' Plan After High School (%)

Source: KRIVET, 2010

As noted by H.E. Dr. Hang Choun Naron, Minister of Education Youth and Sport, in his keynote speech in 2014 at the National Institute of Education, higher education institutions (HEIs) in Cambodia has increased rapidly from 18 in 1997 to 101 in 2013/2014

^{71.} Young Saing Kim et al., *TVET Policy Reviews of 8 Asian Countries* (Korea: Korea Research Institute for Vocational Education & Training, 2010), 92.

which increased its intake by 250,000 enrollments.⁷² As shown in the Labour Force Survey 2012, while there were 2.1% of Cambodian people who had graduated from universities, there was only 1% who had completed vocational trainings.⁷³ HEIs produced a labour surplus for higher education graduates. In 2010, for instance, it was projected by the HRInc that the labour market demanded around 16,000 university graduates while HEIs produced around 29,000. In contrast, the labour market demands more graduates from TVET sectors.⁷⁴

<Table 5-3> Population Aged 15 or Older by Education Status, Sex and Area, 2012

		Cambodia			Urban			Rural	
	Both Sex	Male	Female	Both Sex	Male	Female	Both Sex	Male	Female
15+ Total	10 749 946	5 152 234	5 597 712	2 688 823	1 293 478	1 395 345	8 061 124	3 858 756	4 202 367
	(100%)	(100%)	(100%)	(100%)	(100%)	(100%)	(100%)	(100%)	(100%)
Currently	1 270 719	698 450	572 269	476 908	258 198	218 710	793 811	440 252	353 559
Attending School	(11.8%)	(13.6%)	(10.2%)	(17.7%)	(20.0%)	(15.7%)	(9.8%)	(11.4%)	(8.4%)
Never Attended	1 707 651	560 454	1 147 197	211 490	62 480	149 008	1 496 161	497 972	998 189
School	(15.9%)	(10.9%)	(20.5%)	(7.9%)	(4.8%)	(10.7%)	(18.6%)	(12.9%)	(23.8%)
Not Completed	1 467	113	1 354	0	0	0	1 467	113	1 354
any Levels	(0%)	(0%)	(0%)	(0%)	(0%)	(0%)	(0%)	(0%)	(0%)
Completed	4 340 355	1 907 307	2 433 048	768 014	288 510	479 504	3 572 341	1 618 797	1 953 544
Primary	<u>(40.4%)</u>	(37.0%)	(43.5%)	(28.6%)	(22.3%)	(34.4%)	(44.3%)	(42.0%)	(46.5%)
Completed	3 091 298	1 755 201	1 336 097	984 498	516 529	467 970	2 106 799	1 238 672	868 127
Secondary	(28.8%)	(34.1%)	(23.9%)	(36.6%)	(39.9%)	(33.5%)	(26.1%)	(32.1%)	(20.7%)
Completed	<u>111 978</u>	77 450	34 528	70 336	47 929	22 408	41 642	29 522	12 120
Vocational	(1.0%)	(1.5%)	(0.6%)	(2.6%)	(3.7%)	(1.6%)	(0.5%)	(0.8%)	(0.3%)
Completed	<u>224 017</u>	152 350	71 667	176 935	119 831	57 104	47 082	32 519	14 563
University	(2.1%)	(3.0%)	(1.3%)	(6.6%)	(9.3%)	(4.1%)	(0.6%)	(0.8%)	(0.3%)
Don't Know	2 463	910	1 552	642	0	642	1 821	910	910
Level Completed	(0%)	(0%)	(0%)	(0%)	(0%)	(0%)	(0%)	(0%)	(0%)

Source: NIS, ILO, Cambodia Labour Force Survey, 2013

Because of labour surplus of higher education graduates, they end up with a high rate of unemployment or underemployment, while the unemployment rate of vocational education graduates is very small as shown in Table 5-4.

^{72.} Cambodian Higher Education Association, "The Final Report of the Cambodia Education Research Forum," February 2014, 38.

^{73.} National Institute of Statistics, International Labour Organization, *Cambodia Labour Force and Child Labour Survey 2012* (Cambodia: Sunway Publishing Shop, 2013).
74. Ibid.

<Table 5-4> Unemployment Rate by Level of Education (%)

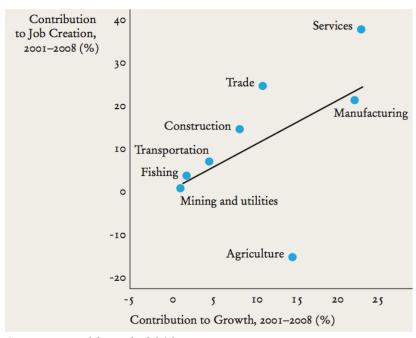
Education Level		Cambodi	a		Urban			Rural	
	Both	Male	Female	Both Sex	Male	Female	Both Sex	Male	Female
	Sex								
Total	2.7	2.7	2.7	3.0	3.3	2.7	2.6	2.5	2.7
None	3.4	3.5	3.3	1.6	4.0	0.0	3.6	3.4	3.8
Primary	2.3	2.4	2.3	1.6	1.1	2.1	2.5	2.6	2.3
Secondary	2.7	2.6	2.7	3.1	3.6	2.5	2.5	2.2	2.9
Vocational	<u>0.6</u>	<u>0.4</u>	<u>0.8</u>	<u>0.1</u>	<u>0.0</u>	<u>0.4</u>	<u>1.0</u>	<u>0.9</u>	<u>1.1</u>
University	7.7	7.4	8.5	8.8	8.0	10.4	4.4	5.3	2.8

Source: NIS, ILO, Cambodia Labour Force Survey, 2013

5.1.5. Training Mismatch with Labour Demand

Because of labour market structural change, most jobs are created outside the agricultural sector. UNESCO reported that more and more jobs were created in the services and industries sectors in the middle and long term (See Figure 5-3).⁷⁵

<Figure 5-3> Contribution to Growth and Employment Generation, 2001-2008



Source: World Bank, 2010

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^{75.} The World Bank, *Providing Skills for Equity and Growth: Preparing Cambodia's Youth for the Labour Market* (Washington, DC: The World Bank, 2010), 36.

Based on Figure 5-3, between 2001 and 2008, the service sector contributed to job creation more than others, around 40% of all jobs created, and followed by trade and manufacturing which created jobs around 25%, and 20% respectively, and these sectors will continue to contribute to job creation in the medium and long term.

This signals that TVET should have focused more on those three sectors: services, trade, and manufacturing. However, formal and informal TVET does not train based on labour demand for long-term benefits, but based on immediate needs and unreasonable preferences. While service, manufacturing, and trade are expected to be the most potential sectors in job creations in medium and long term, Labour Force Survey 2013 showed that the population aged 15 years and older received trainings mostly on humanities and arts (31.3%) which was the second highest proportion after agriculture (32.3%).⁷⁶ Those who received trainings in services were only 7.8% while trainees in engineering, manufacturing and construction accounted for only 2.2% (See Table 5-5).⁷⁷

<Table 5-5> Population Aged 15 or Older Received Training in 2012 Outside Formal Education System

Education Level		Cambodia			Urban			Rural	
	Both Sex	Male	Female	Both Sex	Male	Female	Both Sex	Male	Female
Total	422 875	231 421	191 454	133 297	82 019	51 278	289 578	149 402	140 176
Totai	(100%)	(100%)	(100%)	(100%)	(100%)	(100%)	(100%)	(100%)	(100%)
General Programs	14 083	7 271	6 812	3 324	2 073	1 251	10 759	5 198	5 561
	(3.3%)	(3.1%)	(3.6%)	(2.5%)	(2.5%)	(2.4%)	(3.7%)	(3.5%)	(4.0%)
Education	16 321	7 946	8 376	3 659	1 543	2 116	12 662	6 402	6 260
	(3.9%)	(3.4%)	(4.4%)	(2.7%)	(1.9%)	(4.1%)	(4.4%)	(4.3%)	(4.5%)
Humanities and Arts	132 555	71 228	61 327	87 768	44 693	43 074	44 788	26 535	18 253
	(31.3%)	(30.8%)	(32.0%)	(65.8%)	(54.8%)	(84.0%)	(15.5%)	(17.8%)	(13.0%)
Social Sciences, Business	21 894	13 316	8 578	5 169	4 607	562	16 725	8 709	8 016
and Law	(5.2%)	(5.8%)	(4.5%)	(3.9%)	(5.6%)	(1.1%)	(5.8%)	(5.8%)	(5.7%)
Sciences	23 134	18 571	4 564	14 015	12 233	1 782	9 119	6 338	2 781
	(5.5%)	(8.0%)	(2.4%)	(10.5%)	(14.9%)	(3.5%)	(3.1%)	(4.2%)	(2.0%)

^{76.} National Institute of Statistics, International Labour Organization, *Cambodia Labour Force and Child Labour Survey 2012* (Cambodia: Sunway Publishing Shop, 2013).
77. Ibid.

Engineering,	<u>9 179</u>	5 291	3 888	127	127	0	9 051	5 163	3 888
Manufacturing and	(2.2%)	(2.3%)	(2.0%)	(0.1%)	(0.2%)	(0.0%)	(3.1%)	(3.5%)	(2.8%)
Construction									
Agriculture	<u>136 583</u>	65 856	70 727	2 412	2 262	150	134 171	63 594	70 577
	(32.3%)	(28.5%)	(36.9%)	(1.8%)	(2.8%)	(0.3%)	(46.3%)	(42.6%)	(50.3%)
Health and Welfare	35 938	20 538	15 400	4 271	3 894	377	31 668	16 645	15 023
	(8.5%)	(8.9%)	(8.0%)	(3.2%)	(4.7%)	(0.7%)	(10.9%)	(11.1%)	(10.7%)
Services	33 187	21 404	11 782	12 553	10 587	1 965	20 634	10 817	9 817
	(7.8%)	(9.2%)	(6.2%)	(9.4%)	(12.9%)	(3.8%)	(7.1%)	(7.2%)	(7.0%)

Source: NIS, ILO, Cambodia Labour Force Survey, 2013

H.E. Dr. Hang Chuon Naron revealed that enrolment in short-term courses increased rapidly from around 10,000 students in the 1990s to more than 100,000 in 2012, yet it is not different from the data shown in Table 5-5, among those enrolled in short-term courses, only a small proportion of them were trained in technical skills. Similar to short-term courses, the Department of Technical and Vocational Education and Training Management showed in its report that in the academic year 2012-2013, there were totally 419 courses with a total enrolment of 12,526 students. However, more than 50% of trainees enrolled in Accounting and Finance, Banking and Finance and Business Administration while only 1.85% and 0.65% enrolled in Civil Engineering and Tourism & Hospitality respectively. Those skills are the high demand skills in the current and future labour market in Cambodia.

<a hre

No	Course Name	Number of Course	Total Enrollment		
110	Course Name	Number of Course	Number and Percentage		
1	Accounting and Finance	52	2,645 (21.12)		
2	Banking and Finance	48	2,224 (17.76)		
3	Business Administration	44	1,648 (13.16)		
4	Information Technology	61	1,486 (11.86)		
5	Marketing	26	831 (6.63)		

^{78.} Cambodian Higher Education Association, "The Final Report of the Cambodia Education Research Forum," February 2014, 38.

^{79. &}quot;Industrial Skill Training in Cambodia" by Insoo Jeong reported that in school year 2007-2008, there were only 16 total courses with 703 graduated students.

^{80.} MoLVT, "Technical and Vocational Education and Training Statistics," Initial Report, 27.

TOT	AL	419	12,526 (100.00)
18	Business Economic	2	57 (0.46)
17	Metal	4	63 (0.50)
16	Tourism and Hospitality	4	81 (0.65)
15	Veterinary Science	4	83 (0.66)
14	Mechanical	9	94 (0.75)
13	Electronic	7	129 (1.03)
12	Accounting	9	179 (1.43)
11	Graphic Design	13	203 (1.62)
10	Air Conditioning	10	207 (1.65)
9	Civil Engineering	15	231 (1.84)
8	Electricity	41	766 (6.12)
7	Automobile	35	781 (6.24)
6	English Language	35	818 (6.53)

Source: MoLVT, 2014

5.1.6. Gender Gap in TVET Enrollments

Increasing female labour participation rate is an important feature to push up total labour participation rate in a country driving for increasing output and economic growth. By investing in human capital including education and training for women, the labour force participation would increase. However, Cambodian people have a misperception that vocational training is not for women. Table 5-7 shows that women enrolling at the National Technical Training Institute (NTTI) and Regional Training Centers (RTCs) increased from 6.7% to 18.8% from 2009 to 2012. However, this number is small compared to men enrollment.

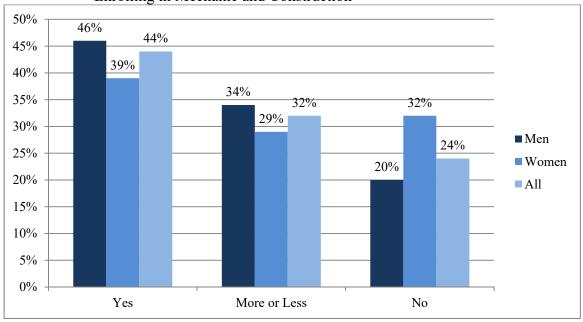
<Table 5-7> Percentage of Female Students Enrolled at NTTI and RTCs 2009-2012

Sectors	2009	2010	2011	2012	
Business	51.1	35.8	59.5	51.3	
Construction	0.7	6.0	7.8	10.5	
Mechanic	1.9	11.7	6.2	7.9	
Total	6.7	11.7	16.4	18.8	

Source: MoLVT, 2014

The survey on Gender Training Need Assessment interviewed staffs and trainers from 29 training centers, 5 RTCs, and 24 PTCs about the perception toward future career of women enrolling in TVET. The result showed that the respondents felt doubt that TVET can ensure good future to women especially in mechanic and construction. Only 44% of interviewees thought that mechanic and construction is good for the future of women while 32% said more or less, and the other 24% thought negatively about this sector (See Figure 5-4). Interestingly, women respondents were more negative about the career opportunities for women taking TVET than male respondents, as shown below.⁸¹

<Figure 5-4> Perception of Staffs and Trainers on Career Opportunity for Women Enrolling in Mechanic and Construction



Source: MoLVT, Aug 2014

^{81.} MoLVT, ADB, "Gender Training Need Assessment," STVET Gender and Social Consultants, Aug 2014, 11.

5.1.7. Lack of Research Guidance for TVET Course Offering

TVET course offering needs direction in order to provide skill training responding to labour demand. However, in Cambodia, labour market information is very limited. Employer Skills Need survey was first done in 2012 by the NEA under the support from the ILO. Since then, this kind of important research has not been done. Because there is no independent research institute to guide TVET provisions, the course offerings by public and private TVET providers does not rely on labour market demands. The RGC also agreed on this challenge as stated in the proposed loans paper to the ADB in 2014.

"While the National Training Board (NTB) stipulates that TVET be demand driven, there is limited use of systematic labor market information or employer surveys to identify skill shortages to inform TVET course offerings."82

5.1.8. Low Quality of Trainings

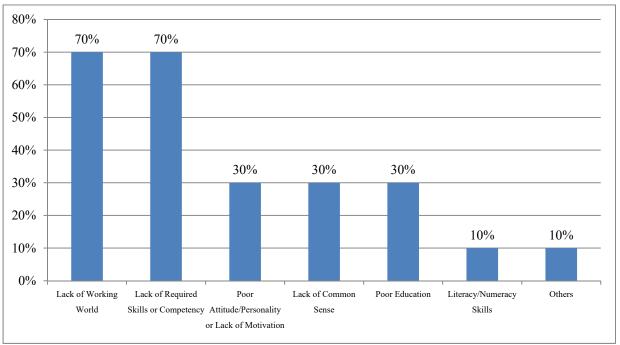
Quality of training in TVET institutions defines competency of labour forces in the labour market. In Cambodia, quality is always a public concern not only in general education system but also in TVET system. The survey of the ILO and NEA reported that the majority of employers complained mainly about lacking of skills for their newly recruited workers who are the first-time jobseekers after graduating from TVET institutions. Figure 5-5 discloses that around 70% of employers complained that most workers are lacking required skills or competency and working experience. ⁸³ In the same report employers claimed the vacancies that are hard to fill are in skilled agriculture, forestry and fishery, and primary

^{82.} Asian Development Bank, "Kingdome of Cambodia: Technical and Vocational Education and Training Sector Development Program," *Asian Development Bank*, September 2014, 2.

^{83.} Michele Bruni et al., "Skills shortages and skills gaps in the Cambodian labour market: Evidence from employer skills needs survey," *ILO Asia Pacific Working Paper Series* (Thailand: International Labour Organization, 203), 42.

occupation.⁸⁴ This shows the problem regarding the quality of TVET while there were around 64% of students enrolled in agriculture and related courses for short-term trainings.

<Figure 5-5> Skills and Competencies Lacking Among First-Time Jobseekers of TVET Trainees



Source: ILO, NEA, 2013

To increase quality of trainings, few elements are believed to be the important key players including good curriculum, teaching equipment, and especially qualified trainers.

Unfortunately, the 101 pages report of UNESCO confirmed that the training classes and workshops that their team visited had poor quality of training equipment while some others were lacking teaching materials, and pedagogical methods were not sufficiently used.⁸⁵

5.1.9. Quality of TVET Trainers

The education level of trainers is relatively low. Based on report from a the Department of Technical and Vocational Education and Training Management of MoLVT, in the academic year 2012-2013, there were 45% of trainers, which was the majority, completed

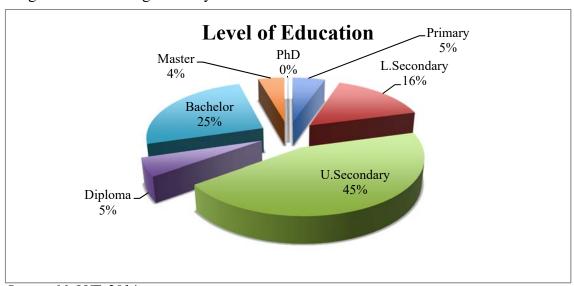
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^{84.} Ibid., 47.

^{85.} UNESCO, "Policy Review of TVET in Cambodia," *Education Sector* (Thailand: Clung Wicha Press, 2013), 49.

upper secondary education, while 16% completed lower secondary education level. There were only 25% holding bachelor degrees and 4% got master degrees (See Figure 5-6).86

It is a big challenge in TVET sector in Cambodia while quality assurance mechanisms for teachers has limited progress. Indeed, to fit with the new curriculums which have been developed, trainers require new skills related to workforces. Yet, NTTI, which is responsible for trainers' professional development complained about shortage of both financial resources and human resources.87



<Figure 5-6> Training Staffs by Education

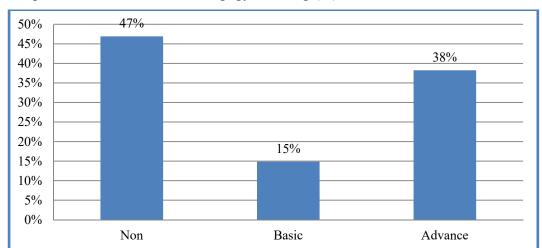
Source: MoLVT, 2014

In some training centers and workshops, trainers lack pedagogical methods, and this claim can be verified. The TVET statistic report of MoLVT 2013 shows that in all 38 provincial training centers, almost half (47%) of trainers have not received any pedagogy training at all while 38% and 15% of them received advance and basic pedagogy trainings (See Figure 5-7).88

88. Ministry of Labour and Vocational Training, "Technical and Vocational Education and Training Statistics," Initial Report, 2014, 12-13.

^{86.} Ministry of Labour and Vocational Training, "Technical and Vocational Education and Training Statistics," Initial Report, 2014.

^{87.} UNESCO, "Policy Review of TVET in Cambodia," 51.



<Figure 5-7> Trainers with Pedagogy Training (%)

Source: MoLVT, 2013

5.1.10. Lack of In-Firm Training

Article 57 of Cambodian Labour Law states that any enterprise employing more than sixty employees must provide apprenticeship, and the number of apprentices must be equal to 10% of the total number of employees in the enterprise, and the article 8 of the same law requires employers to teach the apprentice his/her occupations (trainings). In 2013, the ILO confirmed that 62% of establishments provided trainings in 2011. The data shows that firms that employed large workforces tended to provide training to it employees (See Figure 5-8) especially in the finance and insurance sector (See Figure 5-9). However, without government interventions, 70% of training provisions were only introductory training. Beside the financial sectors, firms did not provide relevant training aimed at solving skills problems that they faced. Also, the information of numbers of training hours, types of training providers, and types training courses are not available.

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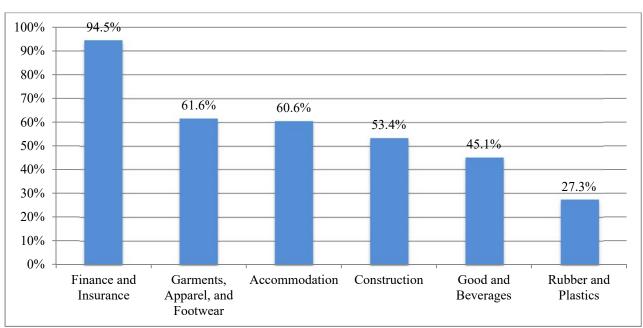
^{89.} Ministry of Labour and Vocational Training, "Cambodian Labour Law," 1997.

^{90.} Michele Bruni et al., "Skills shortages and skills gaps in the Cambodian labour market: Evidence from employer skills needs survey," *ILO Asia Pacific Working Paper Series* (Thailand: International Labour Organization, 203), 60-62.

10-19 Workers 21% 20-99 Workers 35%

<Figure 5-8> Type of Firms that Provided Training by Workforce Size in 2011

Source: Employer Skills Need Survey, NEA, 2012 (Cited in ILO Asia-Pacific Working Paper Series, 2013



< Figure 5-9 Share of Firms that Provided Training by Sectors in 2011

Source: Employer Skills Need Survey, NEA, 2012 (Cited in ILO Asia-Pacific Working Paper Series, 2013

5.1.11. Lack of Partnership with the Private Sector and Labour Unions

Cambodia's commitment to build public private partnership has been recognized by international organization. However, the process is slow and limited. The current members of NTB, which is responsible for overall TVET system, consist of representatives from employer associations, labour unions, and government. However, UNESCO in its report

mentioned that the employers associations, CAMFEBA and GMAC, which are the two biggest employers associations in Cambodia, are not active members of NTB especially in decision-making process, and there is also less connection between TVET institutions and firms. ⁹¹ Furthermore, there are two union representatives as members of NTB: Cambodia Workers Labor Federation of Trade Unions, and Cambodia National Confederation Trade Union. However, these two unions are seen as inactive in the labour sector since they have strong links to the ruling party. Thus, their role in NTB is expected to be ineffective.

<Table 5-8> Key Members of NTB (19 government's representatives are not included here)

N	Representatives	Name of Institutions/Enterprises			
1		Cambodian Federation of Employers and Business Association			
1		(CAMFEBA)			
2		Garment Manufacturers Association in Cambodia (GMAC)			
3	Employers	Hotel Industry Association			
4	Employers	SME Association			
5		Mong Reththy Roup Co., LTD			
6		Chamber of Professional and Micro Enterprises of Cambodia			
7		Cambodia Chamber of Commerce			
8	Trade Unions	Cambodia National Confederation Trade Unions			
9	Trade Officials	Cambodia Workers Labor Federation of Trade Unions			
10		National Polytechnic Institute of Cambodia			
11		Polytechnic Institution of Battambang Province			
12	Training Providers	Smile Children Organization (Training Provider and NGO			
12	and NGOs	Representative)			
13		Don Bosco Phom Penh Thmey (Training Provider and NGO			
		Representative)			
54	Development Partners	Asian Development Bank (ADB)			
14	Development Latinets	International Labour Organization (ILO)			

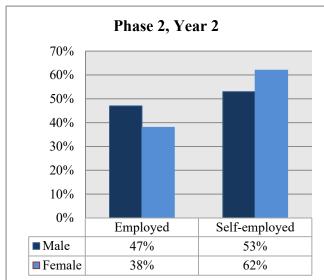
Source: Royal Government of Cambodia, Sub Decree No. 790 Dated October 14, 2005

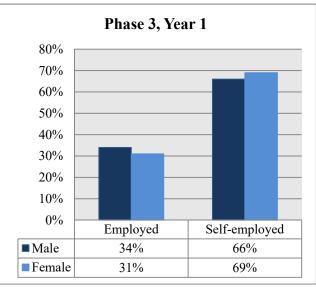
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^{91.} UNESCO, Policy Review of TVET in Cambodia, (Thailand: Clung Wicha Press, 2013), 60.

PTCs and VTCs are also lack partnership with enterprises. Employers complained about skilled-labour shortage, which are supposed to be supplied from vocational training graduates. However, the monitoring report of Voucher Skills Training Program (VSTP) of ADB showed that numbers of vocational training graduates employed by the firms was not much, and the majority of them ended up self-employed in 2013 (Phase 2 Year 2, and Phase 3 Year 3 were implemented in 2013) as presented in Figure 5-10.⁹²

<Figure 5-10> Job Placements for VSTP Graduates in 2013





Source: MoLVT, STVET Project 2014

5.1.12. Financial Challenge

The government budget for public TVET is very small which is a big challenge for government to guarantee both quality and quantity of skilled and semi-skilled labour forces in the country. In 2006, MoLVT invested only USD 750,000, and this budget increased to USD 2 million in 2009.⁹³ A little amount of budget from government can only used for wage related expenses, while training funds are received from other sources. TVET in Cambodia highly depends on funding from development partners, which is not a sustainable source of

92. MoLVT, ADB, "3rd Quarterly 2014 Progress Report," *Strengthening Technical and Vocational Education and Training (STVET) Project*, October 2014, 18.

^{93.} Asian Development Bank, "Kingdom of Cambodia: Preparing the Strenthen Technical and Vocational Education and Training Project," *Asian Development Bank*, 2008, 3.

funding. The biggest development partner for TVET is ADB. Currently, ADB is funding a five-year project between 2010 and 2015 for strengthening technical and vocational education and training in Cambodia with the budget of USD 24.50 million equal to 89% of the total budget for the whole project while Cambodian government can contribute only USD 3.02 million equal to 11% (See Table 5-10, Table 5-11). This amount of government budget can be spent only on land for two PTCs, accommodation for Project Coordinator Unite (PCU), salary for staffs of DGTVET, and taxes charges.

<Table 5-9>: Budget of Strengthening Technical and Vocational Education and Training

Item	Output	Amount (\$ million)
A	Formal Program and More Industry Relevant	7 587
	Expanded and Better Quality Non-Formal Training	12 138
	Strengthened Capacity to Plan and Manage TVET	3 005
	Project Management	2 297
	Subtotal (A)	25 028
В	Contingencies	2 291
	Total (A+B)	27 519

Source: ADB, 2009

<Table 5-10> Budget Source of Strengthening Technical and Vocational Education and Training

Source of Fund	Total (\$ million)	Percentage (%)
Asian Development Bank	24.50	89.0
Government	3.02	11.0
T	otal	100.0

Source: ADB, 2009

⁹⁴ Asian Development Bank, "Kingdom of Cambodia: Preparing the Strenthen Technical and Vocational Education and Training Project," *Asian Development Bank*, 2009, 15.

In a letter signed by the Minister of Economy and Finance, and the Minister of Labour and Vocational Training on July 15th, 2014, Cambodia will continue to get policybased loans and project loads from ADB for the Second Strengthening Technical and Vocational Education Project (STVET II) for 2016-2019. The Cambodian government will contribute USD 2.6 million equal to 8% of the total project cost of USD 32.6 million while ADB will finance the rest 92%.⁹⁵

Because of unsustainable budgeting for public TVET, Cambodia's government is facing a big challenge in the future for increasing skilled labour for new structure of labour market in the country.

5.2. Public Employment Service: National Employment Agency

Beside TVET, PES is defined as the most effective Active Labour Market Policies (ALMPs) by many researches, yet there are so many challenges for the newborn PES in Cambodia.

5.2.1. Small Geographical Coverage

After six years of establishment, NEA has established 7 job centers in 7 different provinces including Svay Rieng, Siem Reap, Kampot, Battambang, Phnom Penh, Kampong Cham, and Takeo (See Figure 5-11). Provincial Job Centers are located in the campus of polytechnics or training institutions except in Phnom Penh where the Job Center is located in the campus of MoLVT.

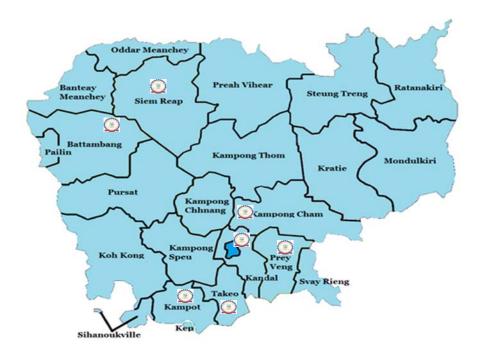
As mentioned above, Job Centers are located in only 7 out of 25 cities and provinces whereas people who are living in other cities and provinces cannot easily access them.

Moreover, not different from locations of TVET institutions, the 7 locations of Job Centers are in towns where people who are living in the rural areas have difficulty reaching.

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^{95.} Asian Development Bank, "Kingdome of Cambodia: Technical and Vocational Education and Training Sector Development Program," *Asian Development Bank*, September 2014, 6. 96. NEA, "NEA's Workplan for 2014-2016," 2014.

<Figure 5-11> Location of Job Centers



Source: NEA, 2014

5.2.2. Limited Number of Staffs

To run the project in the whole country, NEA has only 45 staffs and another 50 interns and volunteers in total (See Table 5-12). Among 95, there are only 29 staffs are working in 7 job centers, so on average there are 4 people including interns and volunteers working in each center. Four people working in four main different sections at each job center is impossible to function effectively.⁹⁷

< Table 5-11> Number of Staff of NEA, 2014

Type of Staff	NEA Phnom Penh	Job Center	TOTAL
Civil Servant	30	15	45
Intern (Trainee)	26	02	28
Volunteer	10	12	22
TOTAL	66	29	95

Source: NEA, 2014

97. NEA, "NEA's Workplan for 2014-2016," 2014, 14.

5.2.3. Lack of Job Counseling Capacity

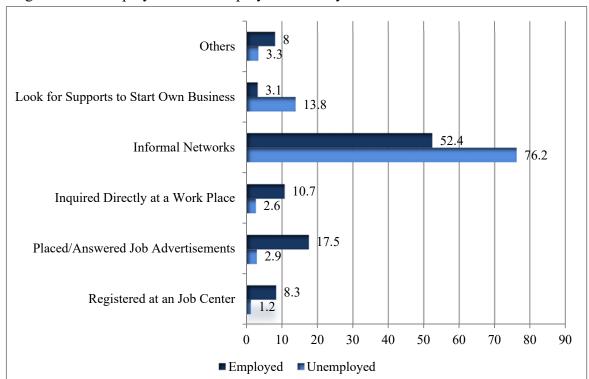
The main function of NEA is supposed to provide in-deep consultation to job seekers in order to increase chance of employability. However, interviewed by the author, a senior official of NEA confirmed that this main service does not work because all staffs at NEA are not professional job counselors. 98 Thus the main task of NEA's staffs is to facilitate job seekers to register in the system and do the matching process.

5.2.4. NEA's Service is Invisible to the Public

The public service provided by this labour market institution, NEA, is invisible to the majority of Cambodia's population even for youth, including high-educated youths, who are able to access to many information through different channels. NEA through job centers and its webpage is supposed to be effective job-search assistance for job seekers especially for unemployed people. Yet, in 2013, the ILO reported that there were only 1.2% of unemployed youth and 8.2% of employed youth who registered their names at the job centers to seek for a job. 99 Cambodian public especially youths have less knowledge about services provided by NEA and this claim is supported by the statistic of the same survey which stated that 94.7% of Cambodian youth have not used any services provided by NEA as presented in Figure 5-12.

^{98.} Hunleng Hay, interviewed by Sopheana Bronh, October 29, 2014.

^{99.} Heang Kanol et al., "Labour market transitions of young women and men in Cambodia," *Work4Youth Publication Series* (Geneva: International Labour Office, 2013), 37-38.



<Figure 5-12> Employed and Unemployed Youth by Job Search Methods

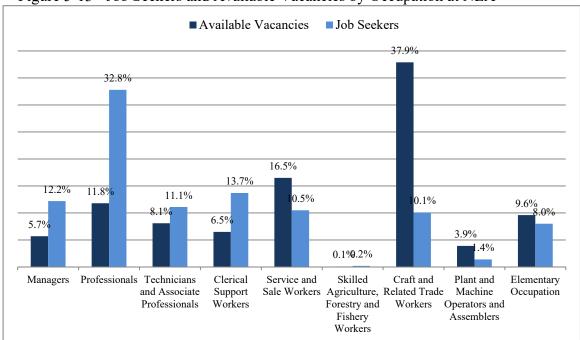
Source: International Labour Office, 2013

5.2.5. Mismatching Channels

From March 2010 to November 2014, NEA claimed that there were 23,966 job seekers registered at job centers, and 195,572 available vacancies were announced by through its services. By looking at Figure 5-13, there are two main problems of accessibility. First, people with high education who live in the urban area can access the NEA to seek for semi-skilled and high skilled jobs as shown in the supply side that job seekers mostly sought for professionals jobs such as science and engineering professionals, health professionals, teaching professionals, business professionals, and others. This group accounted for 32.8% while demand for labour forces was only 11.8% as announced through NEA.

In contrast, NEA's services are mostly used by only industries that needs low skilled workers as in the craft and related trade sector like handicraft and printing, food processing, garment and textile industry. There were a huge amount of labour supplied, 37.9%, announced while there were only 10.1% of workers who want to work in these sectors

registered to find a job. Working closely with MoLVT, which have dealt mostly with the garment and textile industry might be a reason that more job available vacancies are from those sectors.



<Figure 5-13> Job Seekers and Available Vacancies by Occupation at NEA

Source: NEA, 2014

As shown in Figure 5-14, more than half of job seekers hold a bachelor degree registered at NEA, yet the available vacancies that required a bachelor degree was only 16.1%, while 64.4% does not need any schooling level, and those jobs are mostly in the garment and textile industry.

This evident that job seekers who have used the job search assistance service of NEA are mostly those who have high education levels because they know the channels to reach the NEA services through Internet by connecting directly to the NEA's webpage. They also can access to National Career Fair or Labour Market and Career program broadcasting through different television channels in the country.

For the non-skilled and low-skilled workers with low education level, who are the most vulnerable and dominant group in the labour market and supposed to be assisted in Cambodia, have very limited opportunity to access to public employment service.

■ Job Seekers ■ Job Vacancies 0.4% Others 0.3% 0.1% Doctoral Degree 0.5% Master Degree Bachelor Degree 59.7% 1.0% Associate Degree 0.3% Vocational Training Degree 0.2% Vocational Training Certificate 3 0.0% Vocational Training Certificate 2 Vocational Training Certificate 1 0.0% 0.2% Short Course for VT 7.0% 8.2% High School Graduate 4.7% 4.9% High School Secondary School 0.7% 1.6% Primary School 64.4% No Schooling 14.2% 0% 10% 20% 30% 40% 50% 60% 70%

<Figure 5-14>: Job Seekers and Available Vacancies by Level of Education

Source: NEA, 2014

5.2.6. Disconnection Among Job Information System

The job information network is not integrated from all sources. As shown in Figure 5-13, available vacancies, which are announced by firms, are mostly in craft and related trade sectors but few from other sectors. This function is not effective because even among the public institutions, NEA's service is rarely used for job announcements. Instead, most job announcements from government ministries are seen in private employment agencies like newspaper and online employment agencies. Employers have no incentive to recruit high-

skilled workers through the public services since most job announcements for high-skilled workers, not different from government agencies, have been found in private employment agencies even though they have to pay the fee while using NEA's service is free.

5.2.7. Inconvenient Online Service

The online service of NEA is inconvenient. The only webpage of NEA, which is the main channel for high-skilled and high-educated job seekers to seek for a job, is not user-friendly, and there are not so many data and information uploaded on the page. What is more, confusing words both in English and Khmer are used which make difficulties for users.

These factors also discourage people to use this service.

5.2.8. Financial Challenge

The budget used by NEA is from both the RGC and development partners including the Chinese government, ILO, ADB and some others. However, experienced from the previous year, NEA complained that even though there was support for the budget from government, the amount is still limited to implement its activities. ¹⁰⁰

In the two-year work plan, 2014-2016, NEA planned to spend 4,400 million Riels on its activities, which is around USD 1,073,170.

<Table 5-12> Budget Plan for NEA 2014-2016 (Million Riels)

Source of Funding/Year	2014	2015	2016
Government	2,200	2,200	2,200
Development Partners	2,200	2,200	2,200
Total	4,400	4,400	4,400

Source: NEA, 2014

 $100.\ NEA,$ "NEA's Workplan for 2014-2016," 2014, 15.

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CHAPTER VI

LESSON LEARNED FROM INTERNATIONAL EXPERIENCES:

Korea, Australia, and Singapore

6.1. Korea's Experience: Building Skilled Workforce and Employment

Within three decades, Korea lifted itself up from an aid recipient country to a donor county, and this rapid development is known as a man-made miracle, which can be a good experience for many other developing countries to set a proper plan for economic development in their individual countries. Among others, skilled-workforces are acknowledged as a driving force for this miracle. The Korean government made strong commitments to build up and implement vocational training system in the country.

Government's determination to provide skills education and traning (Demand) (Supply) (State-certified TVET) Obligatory R&D Technical enterprise Formal skills education Qualifications training system One—year vocational System training Aid and loans from advanced countries Complementary Motivation of · Loans (hardware, facilities implementation trainees and equipment) of in-plant Non-grant and grant aid (software) training

Expansion of public training

<Figure 6-1> Vocational Training System in Korea

Source: Ministry of Employment and Labor & KRIVET

To build strong vocational training system, in 1967 along with the first Vocational Training Act, the Office of Labour launched the trainers license system and obligatory inplant training, which were a backdrop of successful vocational training system.¹⁰¹

6.1.1. Integrated Vocational Education and Training and General Education

One of the two tracks of the education system in Korea is TVET. The TVET system is divided in to two categories. While one track is vocational education, another one is vocational training. Students enrolling in vocational education can start from high school, which is called vocational high school and they can continue to vocational college after three years of education. Another track is vocational training. Public and private training institutions as well as training centers in firms provide vocational trainings. Students who choose vocational training track are required to begin after high school. Major vocational training institutes are Korea Polytechnics, and HRD centers supervised by the Korea Chamber of Commerce & Industry. The two tracks are flexible where students can move around from one track to another, and this is the aim of government to make an effective transition from school to work and vice versa (See Appendix: Figure A-1).

6.1.2. Obligatory In-Plant Training (1974-1995)

The Park administration believed that enterprises' voluntary trainings could not build skilled labour force to supply to the rapid growth in labour demand for some industries in the country; thus, government decided to make it mandatory for particular firms to provide inplant trainings under the Vocational Training Special Measures Act in 1974. The act was applied to firms with 500 workers and over in six leading-industries: manufacturing,

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^{101.} Ministry of Employment and Labor, Korea Research Institute for Vocational Education & Training, "2011 Modularization of Korea's Development Experience: Vocational Training System for a Skilled Workforce," 2012, 32-34.

^{102.} UNESCHO-UNEVOC, "World TVET Database: Republic of Korea," 2013, 7.

electricity, construction, transportation, communication, and mining. Those firms were required to provide training to their new recruited employees.¹⁰³

In 1976, the Basic Vocational Training Act was introduced to strengthen obligatory in-plant vocational training. Under this new Act, firms with the minimum of 300 workers are mandated to provide trainings to their employees, and government controlled the number of trainings, number of employees to be trained, and training courses in accordance with expected labour demands in each industry. The number of employees who got in-plant training was increased almost nine-fold between 1972 and 1979. Under the Act, employers, who failed to provide in-plant training, were punished by paying levies to government. The initial intention to promote in-plant training was successful because one year after the new Act was put in implementation, 70% of firms provided in-plant trainings while the rest paid training levies. Training levies were used as budget for public vocational training beside foreign loans and grants. By receiving skill upgrading while working for wages, Korean people changed their perception over the value of vocational training.

6.1.3. Vocational Trainers License System

The Office of Labour of Korean government launched trainers license system in 1967. The requirement for vocational training instructors were "familiarity with, and experience in, practical work at production sites in the enterprise concerned," and after fulfilling these requirements, individuals who wanted to be vocational training trainers had to obtain a training instructor license. To produce high quality training instructors, in November 1991, Korea University of Technology and Education (KOREATECH) was established to provide two types of training courses. The first course is a general course for those who are eligible to enter college under Education Act and this course lasts for four years aimed at equipping

^{103.} Ministry of Employment and Labor, "2011 Modularization of Korea's Development Experience," 2012, 32-34.

^{104.} Ibid.

^{105.} Ibid., 35.

vocational training instructors with both theory and practical knowledge, while the second course is for professionals who can earn a trainers license after four weeks of education. ¹⁰⁶

6.1.4. Research and Development (R&D)

To implement training policies effectively, R&D is important to evaluate training policies and systems. In Korea, various institutions have conducted evaluation research, cost-effectiveness analysis, and developed training materials in order to develop better training policy and better implementation mechanism for vocational training system in the country.

The Korea Research Institute for Vocational Education and Training (KRIVET) has four research labs and eight organizations to work on training policy evaluations, while the Human Resources Development (HRD) Service of Korea is working on development standards and materials for trainings. What is more, Korea Labour Institute (KLI) and Korea Employment Information Service (KEIS) have also built and analyzed databases from various surveys to provide information regarding the effectiveness of vocational training and introduce policy recommendations in the employment sectors. 108

6.1.5. Public-Private Partnership

During the early year of industrial economy, Korean government did intervene in the market failure of vocational training by imposing an obligatory in-plant training mechanism as stated in the previous section. As the economy stepped ahead to a higher level, in 1995, the in-plant training system was abolished and the employment premium levy mechanism was implemented. In this new system, government, by law, asked all enterprises to pay vocational training levies. Training levies are used as employment insurance premiums. For enterprises

106. 1610., 43

^{106.} Ibid., 45.

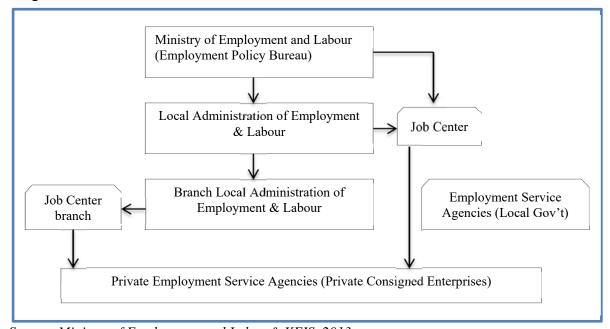
^{107.} KRIVET, "Vocational Education and Training in Korea," 2013, 114-115.

^{108.} Ministry of Employment and Labor, Korea Research Institute for Vocational Education & Training, "2011 Modularization of Korea's Development Experience: Vocational Training System for a Skilled Workforce," 2012, 66.

that voluntarily provide trainings for their employees, the cost will be reimbursed, and this is the incentive for large enterprises to voluntarily provide training in the 1990s and 2000s.¹⁰⁹

6.1.6. One-Stop Service of Public Employment Service

To achieve its human resource development goal, the Korean government has tightly connected two labour market institutions together: vocational training (VT) and Public Employment Service (PES). Even though PES is claimed to be in the construction period these days, it has served as an effective public service in the labour market in Korea. Job Center was first established one year after the Asian Financial Crisis to cope with high unemployment rate in Korea by integrating Employment Insurance Department and Job security Department. Job Center is put under the direct control of central government though the Ministry of Employment and Labour and controls over all employment service agencies: non-profits and for-profits employment service agencies (See Figure 6-2).¹¹⁰



<Figure 6-2> PES Structure in Korea, 2011

Source: Ministry of Employment and Labor & KEIS, 2013

^{109.} Ibid., 67-69.

^{110.} Ministry of Employment and Labor, Korea Employment Information Service, "2012 Modularization of Korea's Development Experience: Building and Employment Service System for Efficient Utilization of National Human Resources," 2013, 79-81.

Job Center is the one-stop service not only to provide job-matching service but also to guide for vocational trainings, career guidance, and unemployment insurance benefits.

Vocational training and Job Center are tightly connected to assist job seekers to take the right track in their career life. In total, there are 80 Job Centers and Job Center Branches in Korea where the large Job Centers are located near by the major traffic points (mostly near by the exit of subway stations) in the metropolitan cities, and small Job Centers are located in the small cities and towns. Beside the Job Centers, there are also other public employment services, which are operated by municipal governments.

Staffs at the Job Centers are divided into government officials and job consultants. In 2006 there were 1,323 government and 1,574 job consultants stationed in 85 Job Centers all over the country, and in 2008 most job consultants were converted into government officials, which drove government officials to increase to 3,157 and job consultants to decrease to 112 in 2014. Nowadays, there are 3,269 staffs in 80 Job Centers, which equal to around 41 staffs stationed at each Job Center.¹¹¹

< Table 6-1 > Number of Staffs at Job Center

Year	Number of Job Center	Total	Government Officials	Job Consultant
1998	99	2,050	754	1,296
2002	156	2,364	543	1,821
2006	85	2,897	1,323	1,574
2011	81	3,269	3,157	112
2014	80	3,269	3,157	112

Source: Insoo Joeng, Paper Presented at KDI School, 2015

In addition to the off-line service at the Job Center, online job seeking and hiring services were created and named as Job-Net in April 1999. Job-Net had the most numbers of

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^{111.} Ibid., 83.

visitors among government websites. By opening this online service, job seeking and hiring activities have become cost-effective, and labour market efficiency also improves. 112 Job-Net is a popular site because it retrieves all related labor market information, especially available vacancies and training information from firms, non-profit organizations, and labour vocational training agencies to post on its own site. In 2011 it was upgraded to be more user-friendly service, and nowadays, job seekers can receive text messages through their cellphone about the result of job matching, information on available vacancies, as well as information about job fairs. 113

6.2. Australia's Experience: A Modern System

Australia is well known for its Vocational and Education and Training (VET), and Job Services. As stated in the "Private Sector Development: Policy Handbook" of OECD, the Australian VET system is considered as a good practice for OECD countries because of its strong and deep research for policy development and national qualification framework. Different types of trainings are also encouraged through Job Service Australia (JSA), which is a new system of employment service in the Commonwealth.

6.2.1. Integrated VET and General Education

In Australia, VET starts at secondary education. At secondary level, senior students can choose between the two: Senior Certificate of Education or VET qualification. For both options, after graduation, they can continue to vocational training schools. At vocational training school, students are awarded certificates, diplomas, advanced diplomas, and bachelor degrees where some of them are recognized as university level (See Appendix: Figure A-2). 114

113. Ibid., 65.

114. UNESCHO-UNEVOC, "World TVET Database: Australia," 2012, 7.

^{112.} Ibid., 69.

6.2.2. Australian Qualification Framework

VET is operating under the national qualification framework from primary to doctoral education. The system is controlled by the Ministerial Council for Vocational and Technical Education (MCVTE) at the national level, and Council of Australian Governments (COAG) at the state level. The national operating bodies of the qualification framework strongly involve employers which is a good engagement in developing effective national training program.

<Table 6-2> Australian National Qualification Framework

Post-compulsory Secondary Education Accreditation	VET Accreditation	Higher Education Accreditation	International Standard Classification of Education Equivalent
	Certificate I		2C
Senior Secondary	Certificate II		2C
Certificate			
	Certificate III		3C
	Certificate IV		4B
	VET Diploma	HE Diploma	5B
	VET Advanced	HE Advanced Diploma	5B
	Diploma		
		Associate Degree	5B
		Bachelor Degree	5A
	VET Graduate	HE Graduate Certificate	5A
	Certificate		
	VET Graduate	HE Graduate Diploma	5A
	Diploma		
		Masters Degree	5A
		Doctoral Degree	6

Source: OECD, Private Sector Development: Policy Handbook

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^{115.} OECD, "Developing Skills in Central Asia through Better Vocational Education and Training System," Private Sector Development: Policy Handbook, 37.

6.2.3. Strong Research and Information Base

The National Center for Vocational Education Research (NCVER) is an independent and non-profit research center set up to collect, analyze and dissimilate all information related to VET in Australia. Research findings from this particular research institution are used as a tool to develop national VET policy. This research institution is funded by national grants and several other agencies. However, government has no direct intervention on any research activities and finding even though there are some government representatives in selection and advisory panels. To conduct research, NCVER conducts consultation three times per year with related stakeholders including government officials, researchers, training institutions, and employers to seek problems to be researched for solutions. Most research findings are transparent to the public by publishing and uploading in the website of NCVER for free access. The most important contribution of this independent research center is to give free policy advice to government without promoting any interests or under control of any government agencies. The

6.2.4. Encourage Training Through Employment Service

Through JSA, job seekers are encouraged to get trainings in different ways. JSA places job seekers into one of the four streams based on Job Seeker Classification Instrument (JSCI) score provided through evaluation questionnaire. Normally, job seekers are placed into stream 1 to stream 3 while stream 4 is for those who have serious health problems and other barriers. At each stream, job seekers are provided many different services. For instance, for job seekers in stream 1 who cannot obtain any job after four months, providers are required to arrange the special activities like job search trainings or vocational trainings. After a year staying in one of the four streams, they are required to go for work experiences

^{116.} Ibid., 37-38.

^{117.} Ibid.

^{118.} OECD, "Activating Jobseekers: How Australia Does It," 2012, 104-105.

phase for six months by doing part-time, voluntary work, and training among others. For job seekers who dropped out before grade 12, they are required, through JSA, to participate in study or training either full-time or part-time courses. 119

6.3. Singapore's Experiences: Training for Economic Development

Being independent from Malaysia in 1965, between the 1960s and 1980s, Singapore experienced skilled labour shortage and low productivity workforces while it was trying to implement Export Oriented Industrialization policy. This small country has limited natural resources, so one of the most successful policy tools for the Singaporean government was to heavily invest in education, training and human capital development. Within a short period of time, Singapore has transformed itself to "science-based manufacturing and intensive technical service" country in the world. 120

6.3.1. Integrated Vocational Education and Training and General Education

Adapting to economic development, the education system in Singapore has been changed several times. The current system, which is called "Ability-driven Education System," has been implemented since 2007. Under this system, youths are provided ten years of general education including six years of compulsory education. The new system provides students flexible options to choose an education track based on their abilities. TVET and general education is transferable allowing students to move easily from general education to vocational training and vice versa (See Appendix: Figure A-3). 121

6.3.2. Government-Industry Partnership (1960s-1980s)

To promote foreign direct investment that was an element of industrialization policy, Lee Kuan Yew's government tried to match efficient skilled labour required by industries. To

119. Ibid.

^{120.} The World Bank and the National Institute of Education, Toward a Better Future: Education and Training for Economic Development in Singapore since 1965 (Washington: Office of the Publisher of the World Bank, 2008), 1.

^{121.} Ibid., 30-32.

do so, government-industry partnership was strongly built up in different ways. First, in curriculum building, a special agency called Industry-Training Advisory Committee was established to include firms and industries in the process of building curriculum to ensure that the designed curriculum fit the current skills required in the country. Second, under supervision of Industrial Training Board (ITB), industry-based training was developed and promoted to provide on-the-job trainings, so that firms and industries could have the required skilled labour for their productions. Third, government also signed MoUs with several big companies to provide technological updates for teaching staffs, so they could provide up-to-date knowledge and skills to trainees. Fourth, to promote foreign direct investment (FDI), the Economic Development Board (EDB) was established to play an important role in supporting industrial training system by cooperating between government and industry to build the joint-government training centers.

6.3.3. Promote Vocational Training Image to Public

Not different from other Asian countries, in Singapore, people value academic graduates over vocational training graduates. People enrolling in vocational trainings are considered as being poor performers in school. To deal with this traditional common perception, government promoted vocational training in different ways. "Use Your Hands" campaign was launched in mid-1976 to encourage manual works in the country. What is more, for secondary education, the subject of basic workshops such as woodwork, metalwork, drawing, basic electrical knowledge was made as compulsory. Not different from Korea, vocational trainings were also promoted through national and commercial television channels through broadcasting programs. The "Top of the Trade" television competition was launched

^{122.} Ibid., 114-134.

^{123.} Ibid.

¹²⁴ Ibid

^{125.} Ibid.

^{126.} Ibid., 131.

in 1977 by the joint-work of the Science Council of Singapore, Industrial Training Board, Economic Development Board and Radio and Television Singapore. Eventually, the image of vocational training has been recognized in the Singaporean society and vocational training graduates have been considered as successful careers.

^{127.} Ibid.

CHAPTER VII

RESEARCH SUMMARY, CONCLUSION, AND RECOMMENDATIONS

7.1. Research Summary and Conclusion

As a developing country, Cambodia is an agriculture-based economy where the majority of Cambodians are employed in this substantial sector. Yet, agriculture contributed only 31.2% of GDP less than the contribution of the service sector, 39.8%, in 2013. Not different from development history of other countries, the Cambodian economy has been slowly shifting from agriculture-based to service and industry-based as employed population in agriculture decreased around 9% between 2009 and 2013, and increased in industry and service around 4% and 5% respectively in the same period. Caused by this shifting, there are problems with the skill gap and skill shortage in the labour market. From development experiences, the two important elements of ALMPs, TVET and PES, are the effective policies to improve the labour market situation in this transition economy. However, this research found that the vocational training system and the newborn public employment service have many challenges.

The enrollment rate in the formal vocational training courses is very low at around 1% of the population aged 15 and older. There are many reasons that cause this low enrolment rate. The current system requires students to finish lower secondary education in order to enroll in formal vocational training programs. However, the completion rate of lower secondary education students is less than 50% and there was a decreasing trend between 2010 and 2014. There is also the geographical challenge in implementing ALMPs. There are a total of 304 training institutes, and only 38 among those are under the supervision of MoLVT. With the limited number of training institutes, most of them, especially the good quality institutes are located in urban areas particularly in Phnom Penh, where the rural population finds it difficult to access the training programs. The information of training providers and

vocational training programs do not reach both the general public and employers. The majority of employers (53%) stated that they were not aware of locations and other information of training providers such as quality of training centers, as there is no ranking system.

People concern about the quality of training and supply-demand mismatch.

Employers complained that 70% of first-time job seekers of TVET graduates lack skills and competencies reflecting poor quality of training programs. The quality of trainers is found to be one of the main causes, as the majority of them, 45%, completed only upper-secondary education, and 47% of trainers have not received any basic pedagogy trainings before and after being in the position. Also, training equipment are not enough as reported by UNESCO. Training courses themselves do not match with the current and future labour demands as it has been done mostly in accounting, finance and business administration, while the Cambodian labour market demands for more labour force equipped with technical skills.

Another challenge is the misperception of Cambodian people over TVET graduates regardless of high employment rate and wages. Post-secondary TVET graduates can earn almost equal to college graduates especially for associate professionals and technicians, and the unemployment rate of TVET graduates was only 0.6%, the lowest rate compared to other education levels including college graduates. However, in Cambodians' perception, TVET is only the secondary option, and thought to be only for males resulting in only 0.6% of Cambodian women aged 15 and older completed vocational trainings.

The research on the in-firm trainings is not widely available, yet a very few researches claimed that firms in the finance and insurance sector provide more trainings compared to others. However, the training courses are mostly the basic trainings, which do not respond to the needs of the firms. In implementing labour related policies like training and employment service, social dialogue between private sector, government and trade

unions is also inactive as seen in the structure of NTB and claimed by development partners in labour sectors.

PES and TVET are supposed to work together to facilitate the labour market in Cambodia, yet employment service, another element of ALMPs, also faces similar challenges. Not different from vocational training centers, geographical coverage of employment service centers in Cambodia is located in only a few provinces and cities, and its services are almost invisible to the general public. The existing seven job centers of the NEA only perform basic functions of job matching processes, as there are limited human resources, 95 staffs including volunteers in the whole country. More importantly, the position of job counselor does not even exist. Beside the offline job matching, NEA also runs the online matching system allowing job seekers and employers to post and search for jobs, yet this system is seen to be ineffective as most available vacancies require low skilled workers while the job seekers registered in the system are mostly middle and high skilled labour forces who have enough knowledge to access to the internet. The job information uploaded in the NEA's webpage is not integrated from all sources as many private firms, NGOs/INGOs and even government agencies prefer private employment agencies to announce the opened vacancies in their institutions.

Overall, the Cambodian government has made efforts in developing vocational training system and employment service in Cambodia to correct the mismatch and imbalance of the labour supply and demand in the transitional labour market in the country, yet there is slow progressing in developing these two systems due to a number of challenges including limitation of human and financial resources, low quality of general basic education, weak and ineffective regulations and governance structures, and perceptions of Cambodian public.

7.2. Policy Recommendations

Unarguably, solving the skill gap and skill shortage requires a strong TVET and PES in the transitional labour market in Cambodia. Based on the above findings and discussions, the research recommends the following policy options:

7.2.1. Improve the Quality of Basic General Education in Math and Science by Reforming Curriculum and Content, and the Best Performers Should be Rewarded

The curriculum and content of the subjects of math and science in both primary and secondary educations should be reformed to improve the quality of teaching in those subjects and other technical disciplines in order for students to be ready for formal or informal vocational trainings.¹²⁸

At each primary and secondary school, MoEYS should prepare the annual competition or rewarding program for the best performing students in math and science in order to encourage students to put more efforts on those disciplines.

7.2.2. Increase Number of Lower Secondary Schools in Rural Area with the Supports from the International Organizations and the Education ODA

To make an opportunity for students to enroll in the formal TVET and to have enough ability to enroll in informal vocational trainings, the number of students completing lower secondary education should be increased through increasing the number of lower secondary schools by building more secondary schools especially in rural areas with enough qualified teachers, studying materials, enough drinking water, and latrines so that students can easily access schools nearby their homes.

The Cambodian government through MoEYS can use the financial supports from international organizations including the World Bank, ADB, EU, UNICEF, and the ODA

^{128.} The basic learning achievements of primary and secondary school students remain low according to World Bank (2012) especially in math as shown in Appendix: Table A-4.

funds from other donor countries. On top of that, the Cambodian government has to play a leading role for funding allocation.

Korea also is experienced in using such funds from the World Bank, ADB, Japan, the United Kingdom, and the United States between 1969 and 1999 to support 22 education and training programs in the whole country. 129 With the supports, in the Second Five-Year Economic Development Plan (1967-1971), the main education plan primarily focused on building classrooms and facility expansion to solve the problem of double-shift and tripleshift uses of classrooms. 130 As the result the school enrolment as percentage of corresponding age group increased from 86.2% to 107.6% for primary school, and from 33.3% to 74% for secondary school between 1960 and 1975. 131

7.2.3. Increase Parents-School-Community Involvements by Strengthening the **Implementation of Existing Policies**

Increasing enrolment and completion rates in secondary education can prepare students to be ready for formal and informal vocational training programs, so parents-schoolcommunity involvement can also be an effective way to encourage parents to keep their children in school rather than fully involve in economic activities. The following recommendations are suggested:

Increase parents-school involvements through monthly parents-teachers meeting to motivate parents, especially poor families, to send their children to school. The existing Child-Friendly School Policy should prioritize implementing in rural areas, and a reliable annual assessment should be done.

^{129. &}quot;Education Assistant in Korea," K-Developedia, accessed May 30, 2015,

https://www.kdevelopedia.org/Development-Overview/official-aid/education-assistance-korea-201412070000363.do?fldRoot=TP ODA&subCategory=TP ODA SI#.VWkc6kJiERU.

^{130.} In 1971, government invested 19% of government budget on education.

^{131.} Noel F. McGinn et al., Education and Development in Korea (London: Harvard Press, 1980), 38-70.

Local authority should strengthen the implementation of Safety Village
 Commune/Sangkat Policy to make parents feel safe sending their children,
 especially daughters, to school.

7.2.4. NTB Should Adjust Vocational Training Provision and Labour Demand with Licensing System

To meet the labour demand driven for the current and future economic development, NTB should fully coordinate the vocational training courses provided by public, private and NGOs. Through MoLVT, new licenses for vocational training centers should be provided to establishments providing skill training needed in six industries: manufacturing, service, construction, machinery, electrical assembly, and agro-processing industry.

7.2.5. Vocational Training Related Data and Information Should be Fully Obtained by NTB and Open to Public

NTB should obtain all detailed information of training courses provided by all public, private and NGOs to be available as the basic information for policies and decision-making. Those data and information should be published and accessible offline and online. NTB's website needs to be regularly updated particularly for vocational training data and information.

7.2.6. Bring the Secondary School Students the Basic Knowledge of TVET and the Services of NEA Through Visiting Program and Basic Workshop Subject

MoLVT and MoEYS should work together to bring secondary school students especially in rural areas the basic knowledge of TVET and the service of NEA through:

 Monthly visiting program to secondary schools in order to raise awareness of TVET and NEA to teachers and students. Secondary schools located in rural areas should be prioritized. • Effectively put the basic workshop as a compulsory subject in the curriculum of secondary education along with enough workshop equipment. Commitments and collaborations from school's principals and teachers are the main source of success of implementing this recommendation.

7.2.7. Use Media and Social Media to Promote the Image of TVET and PES

In Korea, and Singapore in the early development stage, broadcasting was widely used to promote the image of TVET. In Singapore, to promote the image of vocational and technical skill especially to the youth, government launched the annual awarded programs called "Top of the Trade" television competition awards in 1977. Trainees from different vocational training institutions countrywide with different skills were invited to participate to show their skills and creativities.¹³²

For Cambodia, in the current economic development context, while the media and social media are widely used, the vocational training program and employment service should be promoted through media and social media. The research suggests the following recommendations:

- O Use the National Television of Kampuchea (TVK) and at least the top three of commercial television channels to raise the awareness of TVET and NEA at the efficient broadcasting times. The effective motivations can be the stories of successful careers of TVET graduates, and employees who have used NEA as a channel for their careers.
- NTB, GDTVET, and NEA should use social media, Facebook in particular, to
 effectively promote the two systems as Cambodian public especially youths
 using social media are increasing.

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^{132.} Science Council of Singapore, *News Release For Top of The Trade* '78, (Singapore, 1978), http://www.nas.gov.sg/archivesonline/data/pdfdoc/625-1978-06-05.pdf (accessed May 31, 2015).

7.2.8. Trainer Training Courses Should be Increased in Prioritized Industries Set in the Industrial Development Policy 2015-2025

NTTI, a trainer training national institute, should increase numbers of trainers to be trained in machinery and electrical assembly industry, agro-processing industry, energy and heavy industry to be in line with Cambodia's Industrial Development Policy 2015-2025.

7.2.9. Trainer Licensing System Should be Innovated by Setting Specific Criteria to Become a Trainer, and Pedagogy Training Should be Provided to All Trainers Countrywide

From Korea's experience, the qualification system and standard for vocational training teachers are currently set in the Workers Vocational Training Skills Development Act. A vocational training instructor has to obtain a certificate issued by the Minister of Employment and Labour after completing required training courses at a national, local, public, or private training/education institution announced by the Ministry of Employment and Labour. Also, the instructors have to have experience with the practical works in the enterprises for a certain period of time concerning the skills they teach.

In Cambodia, to improve the quality of trainers in vocational training system, government should:

- Establish the Trainer Licensing System to guarantee the professionalism of each trainer. The following criteria are suggested:
 - Have been trained in one of the training institutions recognized by the
 MoLVT
 - Are familiar with and have at least one year experience in practical works in the fields they are responsible for.

^{133.} Ministry of Government Legislation of Republic of Korea, "Workers Vocational Skills Development Act," Republic of Korea, June 30, 2014.

^{134.} Ministry of Employment and Labor, "2011 Modularization of Korea's Development Experience," 2012, 35.

- Obtain a vocational training trainer certificate issued by MoLVT
- Provide pedagogy trainings to all current trainers at all training levels in the country to ensure that they can use proper training methodology to effectively transfer knowledge to trainees.

7.2.10. Quality Assurance for Training Institutions Need to be Innovated Using Institutional Evaluation Project to Establish the Annual Institutional Ranking

Government should innovate different types of quality assurance to ensure that public and private training providers are offering good quality of trainings and set regulations to strictly take actions on low quality trainings providers. Among others, the research suggests the following recommendations:

- O NTB should independently conduct institutional evaluation annually. From the evaluation result, vocational training institutions' performance ranking should be established and opened to public, so that people can decide to receive training in good quality institutions, and the system can also be encouraged for competitiveness in improving quality of trainings.
- Based on the evaluation result, the poorly performing training institutions are entitled to be shut down with specific criteria, which the NTB should be responsible for setting and enforcing.

Korea used a similar way to improve quality of vocational training. The Training Institution & Course Evaluation Project was established in 1998. Since then, the project has conducted a course and institutional evaluation every year to select the outstanding institutions and courses, and to eliminate the poor performers.¹³⁵

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^{135.} Ministry of Employment and Labor, "2011 Modularization of Korea's Development Experience," 2012, 66.

Singapore also adopted Australian and European system to establish the Singapore Quality Award (SQA) as a national benchmark to provide awards for public and private institutions in Singapore. Institute of Technical Education (ITE), a TVET institution in Singapore, received the award in 2005 for its organizational excellence. ¹³⁶

7.2.11. Investment in Research and Development (R&D) is an Urgent Need

For the international experiences mentioned in this paper, all countries invest in R&D resulting in strong research institutes working in TVET and PES. Based on those experiences and current situation of the Cambodia context, the research suggests the following recommendations:

- o The research function of NEA should be strengthened by conducting, publishing, and disseminating labour market research regularly. NEA should be given an independent authority in practice to give policy recommendations for government to improve the labour market situation. Regular labour market forecasting is an urgent need to design a better training system and to improve labor related policies in Cambodia. The functions of Korea Employment Information Service (KEIS) can be a good model. The research function of KEIS includes: labour market forecast, employment survey and analysis, employment service evaluation, career education, occupation research, and employment policy evaluation. 137
- Establish a national independent research institute for vocational training supported by government budget to conduct policy research and development to give policy recommendations for government. The functions of the National Center for Vocational Education Research (NCVER) implementing in Australia (See Box 7.1),

^{136.} The World Bank and the National Institute of Education, *Toward a Better Future: Education and Training for Economic Development in Singapore since 1965* (Washington: Office of the Publisher of the World Bank, 2008), 122.[17]

^{137. &}quot;Korea Employment Information Service," last modified May 21, 2015, http://eng.keis.or.kr/main/eng.do.

and the Korea Research Institute for Vocational Education & Training (KRIVET) implementing in Korea can be a model (See Box 7.2)

<Box 7.1> About NCVER, Australia

Owned by the Commonwealth, NCVER is an independent non-profit body established in 1981 to conduct researches and produce high-quality independent research results on vocational education and training nationally. The functions of NCVER are:

- Conducting research under the National Vocational Education and Training Research grants program
- Supporting public and private VET providers to report their activities
- Running programs to build capacity of researchers in general to evaluate the impact of VET policy intervention
- Conducting three consultation sessions per year with stakeholders to access the current issues prior to national research decisions made by ministers
- Being transparent on research results to public, VET data and information is widely
 opened and uploaded in the online database (<u>www.ncver.edu.au</u>), and public can
 download it with free-of-charge service

Source: OECD, Private Sector Development: Policy Handbook

<Box 7.2> The Functions of KRIVET, Korea

The ten important functions of KRIVET are summarized below:

- Conduct national policy researches for human resource development and to support their implementations
- Support stakeholders working in TVET and Human Resource Development (HRD)
- Conduct the TVET researches and related research projects that support the objective of life long learning for all.

• To develop TVET programs for lifelong learning

• Conduct researches on the national and private qualification system

• Conduct evaluation on TVET institutions upon request from government

• Provide information and career counseling for employment and career development

• Establish and manage a system for data collection and analyzing labour market trends

regularly

• Collect, analyze, disseminate TVET information and

• Promote international exchange on TVET information

Source: KRIVET, 2015

7.2.12. Collaborations Between Government, Private Sector and Labour Unions Need to be Improved in Both Local and National Level

Singapore's experiences in government-industrial linkages implemented between 1960s and 1980s can be considered as a model. In the early 1970s, the Singaporean government established the training advisory committees by actively involving employers to develop effective curriculum based on industrial needs. The industries also supported apprenticeship and on-the-job training through industrial-based training schemes.

Government signed MoUs with multinational companies like Mitsubishi, Robert Bosch, IBM, Cisco, and Sun Microsystems in order for them to support upgrading trainers' capacity with new technologies. 138

In Cambodia's context, the research suggests the following policy recommendations to link between vocational training programs, enterprises, and labour unions:

Provincial Training Centers (PTCs), and Regional Training Centers (RTCs)
 should build more cooperation with provincial and regional private firms to link

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^{138.} The World Bank and the National Institute of Education, *Toward a Better Future: Education and Training for Economic Development in Singapore since 1965* (Washington: Office of the Publisher of the World Bank, 2008), 118.

TVET trainees and graduates with the firms for employment opportunities. MoU can be used as a tool.

- O At the national level, Samsung, Toyota, Mong Reththy Group can be the important partner for trainers' skills upgrading and curriculums reform. Including them as the members of NTB and sign MoU for trainer' training programs with those companies are recommended (Mong Reththy Group is already in NTB).
- Include Cambodian Labour Confederation (CLC), an independent labour union recognized by international organizations, as a union representative in NTB and involve unions in TVET and PES related policy-making process.

7.2.13. Obligation In-Plant Training and Levy System Need to be Implemented Under the Supervision of the DGTVET

In Korea, obligation in-plant training was implemented successfully to build skilled labour between 1974 and 1995 as mentioned detail in Box 7.3.

<Box 7.3> Compulsory In-Plant Training in Korea

In 1974, government made it mandatory for firms employing 500 workers or more in 6 industries (mining, manufacturing, gas and water supply, construction, storage and communication, services, and transportation) to provide in-plant trainings. In 1976, the compulsory in-plant training was strengthened. Firms with 300 workers or more were obligated to provide training to their workers, not exceeding 10% of total workers. Numbers of workers to be trained and training courses were announced by government. Firms that failed to provide trainings were required to pay vocational training levies.

Source: Young-Sun Ra, KRIVET, 2012

In Cambodia, obligation in-plant training and levy system is needed, and should be implemented in six industries: manufacturing, service, construction, machinery, electrical assembly and agro-processing industry.

This system should be put under supervision of Directorate General of TVET (DGTVET) in setting types and numbers of training courses, trainees, and amount of levy to be paid. Levy paid by firms can be used as a source of training funds.

7.2.14. Upgrade the NEA's Service to be the Channel for Vocational Training Guidance

NEA and DGTVET should work together to create the linkage platform to transform job centers as an effective one-stop service that can encourage and introduce job seekers to vocational trainings. On top of that, Cambodian Vocational Outlook attached with detail training and job requirement for each job should be prepared and published for individuals to prepare for their future careers.

7.2.15. Job Counseling Service by Professional Counselors Should be Added at Each Job Center

NEA should hire job counselors at least two persons to work at the Job Center in Phnom Penh, with one person for each Job Center in provinces as contracted staffs between 2016 and 2018, and numbers of job counselors can be adjusted after 2018. The job counselor plays an important role in providing effective career counseling services to jobseekers in order for them to select and plan their careers.

7.2.16. NEA Should Improve its Online Service with User-Friendly Interface Website and Build Strong Job Network Integration

NEA should develop a user-friendly interface website and effective matching process for online service to attract job seekers, especially job seekers with medium and high skills. Both Khmer and English webpages should be used consistently. Experience of KEIS of Korea is worth learning (See Box 7.4).

In short-term, NEA should integrate its job information network by collaborating with at least all government agencies/ministries to use the online service as a channel to announce

the opening vacancies. Each year, NEA should work to attract 10% of total number of private firms in the country to use its online service to announce their vacancies.

<Box 7.4> Characteristic and Function of Online Job-Search Service of KEIS

- Innovative improvement of Work-net function by: connect Job-vocational training information, enhance data integrity to improve reliability of job offering/job seeking information, to collect job information via Job Robot, and develop "Work-net" Smart Phone Service. 139
- Build integrated job information networks including the central and local government
- Search by different combination search conditions (e.g. wage level, education level)
 with a Fuzzy technique that job seekers are matched with job offering within 0.3
 seconds.

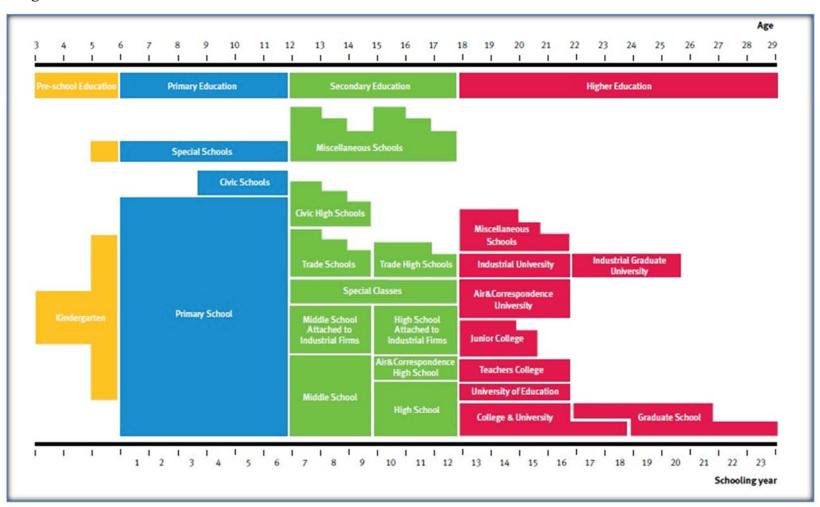
Source: Insoo Jeong, paper presented at the KDI School, April 2015

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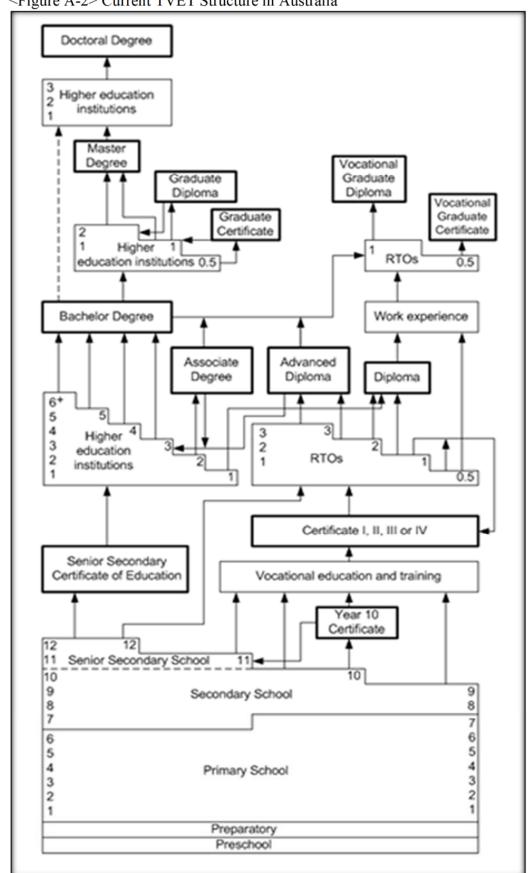
^{139. &}quot;Job Robot" is a technique that can automatically search websites and collects related job information.

APPENDIX

<Figure A-1> Current TVET Structure in Korea



Source: UNESCHO-UNEVOC, World TVET Database: Republic of Korea



<Figure A-2> Current TVET Structure in Australia

Source: UNESCHO-UNEVOC, World TVET Database: Australia

Universities GCE A-level examination GCE A-level examination/other qualifications Institute of Technical Polytechnics Education JC/CI Specialized independent schools/privately funded schools 0-levels Integrated program Secondary 5N Special/express GCE N-level course examination (secondary 1-4) Normal (academic)/ normal (technical) course (secondary 1-4) Primary school leaving

<Figure A-3> Current TVET Structure in Singapore

Source: UNESCHO-UNEVOC, World TVET Database: Australia

Primary education (primary 1-6)

<Table A-4> National Achievement in Khmer and Math (Score from 0% to 100%)

Year	Subject	Grade 3	Grade 6	Grade 9
2005-2006	Khmer	40.4		
2003-2000	Mathematics	37.5		
2006-2007	Khmer		68.2	
2000-2007	Mathematics		58.9	
2007-2008	Khmer			68.0
2007-2008	Mathematics			41.2
2008-2009	Khmer	54.1		
2006-2009	Mathematics	48.0		
2009-2010	Khmer			68.3
2009-2010	Mathematics			43.8

Source: The World Bank, Implementation Completion, and Results Report, Education Sector Support Project, 34.

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