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Master's Thesis of Public Administration

**The Role of Official Development Assistance
(ODA) in Supporting Technical and
Vocational Education and Training (TVET)
for Industrial Development in Cambodia**

**캄보디아 기술 및 직업 교육훈련에서의
공적개발원조(ODA) 역할**

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**Graduate School of Public Administration
Seoul National University
Global Public Administration Major**

Sovannara Suy

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Academic Advisor Lee, Suk Won

Submitting a master's thesis of Public Administration

April 2020

**Graduate School of Public Administration
Seoul National University
Global Public Administration Major**

Sovannara Suy

**Confirming the master's thesis written by
Sovannara Suy**

June 2020

Chair

Kwon, Huck-Ju



Vice Chair

Lee, Soo Young



Examiner

Lee, Suk Won



Abstract

The Role of Official Development Assistance (ODA) in Supporting Technical and Vocational Education and Training (TVET) for Industrial Development in Cambodia

Sovannara Suy

Global Public Administration Major

The Graduate School of Public Administration

Seoul National University

This study examines the roles and practices of Official Development Assistance (ODA) in promoting and supporting the development of Technical and Vocational Education and Training (TVET) in Cambodia. The study employed a qualitative approach, using in-depth interviews and semi-structured interviews, supplemented by a small-scale questionnaire survey. In this study, 16 key informants were from Ministry of Education, Youth and Sport, Ministry of Labour and Vocational Training and Development Partners such like KOICA, JICA, ADB, World Bank and so on, while eight institute directors were selected for the semi-structured interviews. Also 60 respondents were chosen for the survey. The findings of this study indicate that ODA have played crucial roles in promoting and supporting TVET by creating new educational infrastructures such as class rooms, storage facilities, staff rooms, and internship program and curriculum development in the study area. These supports were provided to TVET institutions in the

form of grants, curriculum materials and for educational infrastructure development. However, some problems and challenges usually the ministries face in their practices of TVET promotion. These include disparities in terms of aid distribution, educational materials, curriculum and infrastructural development and teachers training. Of eight institutions studied, all institutions received aid in terms of grants, five of them received curriculum materials, two institutions received grants for infrastructure development and only one institution received grants for internship programs. Despite failure in some fronts, the ODA has contributed significantly to the development of TVET education in Cambodia.

Keywords: Official Development Assistance (ODA), Technical and Vocational Education and Training (TVET), Educational Materials, Infrastructure Development, Community Participation

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Chapter I: INTRODUCTION

This thesis aims to examine the role of ODA in supporting TVET development in Cambodia. This study is based on the information from in-depth interviews with two ministries, six major development partners. Semi-structured interviews were also conducted with ten TVET Institute Directors and a questionnaires survey with seventy-five instructors. This study consists of six chapters. This chapter introduces the background of the study, problem statement, research objective, research questions, the significant of the study, and details of research methodology. At the very end of this chapter is the overall organization of the study.

1.1 Background

In the aftermath of WWII, many developing countries have opted to develop policies aimed at promoting their new infant industries to increase the productivity. The growth in industries productivity is to determinant of a country's living standards as well as its ability to complete in the world market (Lall S, 2000). As an example, some countries from Latin American would advocate import substitution policies, whereby local industries would more fully benefit from domestic demand and some countries from East Asian like Korea or Japan, would favor export promotion policies rather than advocating import substitution policies, which in turn would be achieved partly through tariffs and nontariff barriers and partly through maintaining undervalued exchange rates.

Since the level of productivity and its potential for growth are vary across activities of the developing countries, a country's ability to catch up with develop countries is largely dependent on what it produces and sells in the world market. Economic development implies structural transformation,

typically from how low productivity to high productivity activities, from agriculture and simple manufacturing activities to modern industry.

In Cambodia, the four main industrial sectors (i.e., agriculture, garment, tourism, and construction) play a lead role in economic development. The growth rate of the Cambodian economy was one of the highest among the ASEAN member nations before the Global Financial Crisis (GFC) occurred in 2008. On the other hand, the economy is over dependent on the above-mentioned sectors as proven by their large share in GDP as compared with other sectors.

According to the Rectangular Strategy Phase IV (2018), the Royal Government of Cambodia (RGC) views private sector as the ‘engine growth’. Therefore, the government adopted its first Industrial Development Policy (IDP) 2015-2025 to maintain the high rate of the economic growth through economic diversification, strengthened competitiveness and increased productivity (IDP, 2015). However, industrial sector in Cambodia still remains weak and confronts a number of challenges such as the lack of leadership and coordination, poor infrastructure and technology, and especially lack of skilled labor (IDP, 2015).

The IDP role of Official Development Assistance (ODA) is to increase an enabling environment for supporting private investment, to serve as a catalyst for mobilizing other forms of development finance as well as to provide a direct source of funding for IDP-related public goods and services. According to the Development Cooperation and Partnership Report (DCPR), Development Partners (DP) have been providing supports to USD 228.74 million with an annual disbursement ranging between USD 26-32 million in the period 2015-17. Resources devoted to TVET are rather low, only USD 7.9 million in 2017, with Japan and Switzerland being the most active development partners (DCPR, 2018). Furthermore, 9 partners are active in the TVET field and, with an

increased coordination and mobilization by responsible ministries, there is some potential to increase collaboration in this important area.

ODA has an important role in creating an enabling environment for mobilizing private investment such as supporting to infrastructure development, institution building and human resource development, mainly skilled labor development (CDC, 2015). Hence, ODA is significant to promote human capital development in Cambodia, particularly skilled labor through Technical and Vocational Education and Training (TVET). The skilled workforce is essential for the competitiveness and productivity of a country.

1.2 Objective of the Study

The main purpose of this research is to provide a whole picture of how ODA can contribute to the development of TVET system in Cambodia. Firstly, this paper will look at what foreign aid does and what it potentially could achieve, especially in relation to its contribution to improvement in TVET quality. Secondly, the research aims to study about the challenges facing TVET promotion and provide policy recommendations to the government to address those challenges. This research will try to put forward some recommendations for the RGC on how to mobilize external development cooperation resources for Cambodia's TVET promotion.

1.3 Problem Statements

TVET is a crucial component for Cambodia's socio-economic development as it is a key factor to promote skilled labor, which helps Cambodia's industries transit from labor-intensive to high-tech or innovation-led ones (Laov, 2013). TVET is also significant to support government's new initiated policies including the Industrial Development Policy 2015-2025. In addition, in the context of ASEAN Economic Community (AEC), Cambodia needs to put a strong focus on high quality of workforce to boost country's productivity and

competitiveness in order to competitively cooperate with the other ASEAN member states (Aring, 2015).

Despite its significance over the past decade, TVET in Cambodia is still lagging comparing to other countries in Asia-Pacific region and facing several challenges. First of all, TVET has received insufficient budget support from the RGC to meet the huge amount of capital investment needed to build competitive workforce for the nation and the region as AEC allows free flows of skilled labor (National TVET Policy, 2017). Secondly, although many agencies (including government and non-government actors) have been working on skills development in Cambodia, there is poor coordination mechanism among those agencies, and the assistance to TVET is fragmented (Fin Church Aid Cambodia, 2017). These include identification, skill needs, provision and supervision of informal TVET, and communication between TVET and secondary education, as well as the design and delivery of professional guidance (UNESCO, 2013). Thirdly, the quality of TVET has not yet fully responsive to demands of labor market. Due to unskilled labor, low salaries, and labor costs, Cambodia is attracting low-tech industries and labor-intensive industries, affecting its long-term growth strategy. These trends, coupled with a weak base of human resources in Cambodia, make it difficult for Cambodia to shift from agriculture, technology, agribusiness, light industry and tourism to the modern based industries. Finally, the government is not capable of creating effective policies and mechanisms to promote quality TVET in Cambodia (CDRI, 2013).

1.4 Research Question

Specific research questions are as follows:

1. What are the impacts of Official Development Assistance on Technical and Vocational Education and Training in Cambodia?

2. How effective can TVET in Cambodia prepare its graduates for the labor market in Cambodia and ASEAN nations?
3. What are the key challenges facing TVET promotion in Cambodia?

1.5 Rationale

TVET Education is important for the socio-economic in Cambodia especially for the country's industrialization. It is also provided the labor force, especially the youth, with a livelihood and future career path that would contribute to higher levels of welfare and human development. Increasingly there has been a significant flow of educational aid to USD 171 million in 2016. A systematic study to reflect on the impacts of ODA on TVET development in Cambodia is lacking. So, there is a greater need for a systematic study to assess the impact of ODA on TVET Education and this study intends to bridge up the knowledge gap and deal with Development Partner aid in TVET education in Cambodia.

1.6 Significance of the study

This study will provide added values to the TVET development in Cambodia, which is a crucial component for its industrial development and economic growth. First of all, it will provide a better understanding of the current development of TVET system in Cambodia, which includes the efforts of the RGC and other stakeholders in strengthening Cambodia's TVET system. Secondly, this research will seek to highlight key challenges facing TVET promotion in Cambodia and propose solutions to the RGC to deal with those issues. Thirdly, this research will provide recommendations to the Government of Cambodia on how to effectively mobilize ODA for TVET promotion in Cambodia. It will also suggest how the government and development partners can improve the governance and management of TVET system in Cambodia. Furthermore, this study will identify new key strategic areas in TVET sector for improvement through the effective use of Official Development Assistance

in the future. Thus, these strategic areas can be made to justify the need for continued ODA support for the development of the TVET sector in Cambodia. Finally, this research will significantly contribute to the industrial development in Cambodia because now Cambodia desperately needs skilled workforce to attract Foreign Direct Investment (FDI) and support domestic investment. The investments will then create more jobs for Cambodia's growing number of working populations in this demographic bonus period. Therefore, skilled workforce, industrial development and employment creation go hand in hand.

1.7 Organization of the study

This thesis consists of six chapters. Chapter I is already introduced above which deals with the general context regarding ODA, objective of the study, problem statement, research questions and significance of the study. Below are the five remaining chapters.

The second chapter presents the conceptual framework and theoretical discussion on aid. It also includes the review of inter-linkage of basic concepts with educational aid. The chapter also provides a detailed review of literature on works done previously on the education aid, particularly in the context of Cambodia.

The third chapter describes the research methodological approaches and details the methodologies employed in carrying out the study. This chapter is also included the study area, and the selection of the study area, time period and the limitation of the study.

Chapter four describes the current situation and issues in the Cambodian labor market. This chapter provides an overview of the Cambodian macroeconomic context, policies on socio-economic development and employment, and

education and skill attainment. It also depicts the trend in Development Cooperation as well as the support to TVET and Higher Education in Cambodia.

Chapter five presents the research findings on the role of ODA in supporting and promoting TVET Development in Cambodia based on in-depth interviews, semi-structured interviews and questionnaires.

Finally, chapter six primarily discuss the findings of the study, followed by the policy implications and suggestions for further research.

Chapter II: LITERATURE REVIEW

This chapter focuses on the conceptual framework. It provides a review of literature and discussion on aid and education development. It also discusses on framework for the idea of aid by exploring the linkages with development and education. Furthermore, it attempts to explain how aid is used as development strategy in developing countries in general. It ends with the conceptual framework for this study which set to be analyzed.

2.1 Concept of Aid Allocation

On the first point, by and large, the term “**foreign assistance/aid**” has been widely used by scholars and researchers (e.g. Alestina, 2000; Ear, 2006, 2013; Mertha, 2014) in their studies about the impacts or relationship between foreign assistance/aid and politics, economics and socio-culture of both donors and recipient countries in general. Based on the Development Assistance Committee (DAC) of the Organization for Economic Cooperation and Development (OECD), **Official Development Assistance (ODA)** is defined as “those flows to countries and territories on the DAC List of ODA Recipients and to multilateral institution” which are provided by official agencies of donors; and each transaction is for the promotion of the economic development and welfare of developing countries (OEC, 2014). Literature on ODA generally follows three sets of variables: recipient country need, recipient country merit and donor country interest. These variables reflect fundamentals on economic, social and political conditions that pull or stimulate donor countries to allocate ODA to the recipient countries. Although donor countries tend to pursue either of the goals or combinations of them or may sometimes be indifferent to how recipient utilize their aid resources (Radelet 2006). For instance, on recipient need, Berthelemy (2005) assessed different donor approaches to aid allocation using the Heckman and two-part approach and concluded that most donors largely consider the need of developing countries. In addition, the study

observed that donors tend to target recipient countries with good performance indicators on governance. Further, in a study that employed a two-part selection model to study British bilateral aid allocation between 1980 to 1987, McGillivray and Oczkowski (1992) concluded that British ODA seeks recipient welfare and donor interest.

Recipient need motive of ODA was further fortified by Alesina and Dollar (2000) in their studies on the pattern of aid allocation by many donors and concluded that allocations are influenced by commercial considerations of the donor and the recipient's economic need consideration. They employed an empirical study to investigate the patterns of foreign aid allocation by various donors to poor countries. Their study revealed that political and strategic factors, rather than the economic and policy performance of recipient countries, were the main determinants of foreign aid allocation. Donor countries tended to give more aid to their former colonies with which the former had close economic and political links. Despite poor economic and policy performance of these former colonies, a substantial amount of aid was still being distributed to them. In contrast, the poor countries without colonial, political, and economic links with donors did not receive much aid, regardless of how good the former's economic and policy performance was. This study further revealed that democratized countries which were in strategic geographic locations beneficial to donors' interests also tended to receive more aid. In other words, donors therefore respond to recipient developmental need and merit with respect to democracy and institutions that could facilitate the effective utilization of aid.

Subsequently, Mc.Gillivray, Leavy, and White conducted a quantitative analysis of the determinants of foreign aid distribution. In this study, commercial and political factors were also found to have high influence on the distribution of foreign aid by donors. In other words, donor countries were more likely to distribute a substantial amount of aid to their former colonies, the

countries located in strategic geographical regions beneficial to the former's interests, and the countries having close economic ties with the former.

Maizel and Nissanke investigated the principles of aid allocation by major bilateral and multilateral aid agencies during two periods, 1969-70 and 1978-80, using recipient need and donor interest models. In this study, they found that donors' political, economic and security interests were the main determinants of bilateral aid distribution. In other words, donor provided aid with the intention of maintaining and strengthening close political ties with their allied states, maintaining and expanding their sphere of interests in strategic geographical regions, ensuring favorable business environment and business profitability for their investors, and guaranteeing the smooth flow of trade with recipient countries (particularly the flow of products from donors to recipients and the flow of natural resources from recipients to donors). However, multilateral agencies including the UN bodies and international financial institutions such as the International Monetary Fund (IMF), the World Bank, the Asian Development Bank, and other regional banks tended to distribute their aid in response to the needs of the recipients, that is, the reduction of poverty and the promotion of economic development in recipient countries.

Another research study on ODA was conducted by Younas to examine the motivations of bilateral aid allocation by Organization for Economic Cooperation and Development (OECD) countries. Through this study, Younas found that aid donors tended to provide more aid for those recipient countries which imported goods from the former, which had a comparative advantage in the production of those goods. Also, foreign aid donors, with regards to the distribution of their foreign aid, tended to pay more attention to the alleviation of physical miseries (infant mortality) and the promotion of human rights than the eradication of economic hardship (poverty). Finally, Younas asserted that

political and strategic factors remained the main determinants of aid allocation in the post-Cold War era.

2.2 Aid and Development

The flow of money or resources transferred from one country or a funding institution to another is not a new phenomenon. International development emerged as one of the strategies employed to achieve equal rights between men and women and between prosperous nations and poor countries. It was actively promoted with the framework of democratic principles of individual self-determination and equal rights and opportunities. In the 1950s, and the post-world war II period of reconstruction, the western economic development planners were convinced that aid based strategic planning would enable developing countries to bridge up the gap that separate them from the industrial world. Developed nations committed themselves to monetary and technical aid channeled through the United Nations (UN) agencies, and later through direct and bilateral programs, based on the theory that this aid would foster economic growth that would trickle down to the masses. Neoclassical economic theorist and planners argued that this strategy would ultimately benefit the poor and transform the economies of developing countries (Taufe'ulunaki, 2002:7).

2.3 Development and Development Model

The contemporary idea of “development” has become a topical and important only in the post-World War II period. It was a result of the growing awareness of the differences in the quality of live and degree of “development” or modernization between the nations of the world. This awareness gave rise to theories such as modernization theory, which measures development in terms of comparison, and in this case a nation becomes developed depending on how similar to or different it is from the industrialized nations of the Western Europe and North America. This was associated with the rise in the 1960s and 1970s

of the linear theory of development as advanced by Rostow (1960 cited in Kabutaulaka, 1993).

This school of thought views development as progression of growth from traditional society to that of a high mass consumption society found in the Western and North America. Today the development debate has taken many twists and turns (Kabutaulaka 1993:3). So, we could interpret that, development should be understood as a process, not a product. Societies are always changing, some improve, while others fail. Development theories aim at explaining both the processes. Development practice intends to provide tools that can be applied to entire societies or specific communities.

The idea of progress is nearly as old as human history. Human beings had always tried to improve technologically, psychologically and even physically. These improvements were catered for both human innovations as depicted in Darwin's theory of human evolution, the "survival of the fittest" (Cambell 1985, cited in Kabutaulaka, 1993). However, simple progression or change cannot be equated with development because the concept of development is much more complicated than a mere change (Kabutaulaka 1993). The modernization theory represents several perspectives: the belief that societies undergo economic development in phases and development is linked to aspects of culture or values (Rostow, 1960, McCland, 1993: and Khan, 1993 cited in Kabutaulaka, 1993). Whatever the variation, central to the modernization theory is the task of transforming traditional societies.

According to Isbister (cited in Kabutaulaka, 1993), the basic assumption of modernization theory is that developing countries are "traditional" with values that are spiritual, stagnant, and not progressive. Consequently, the modernization theory emphasizes changes in personal attitudes and behaviors. Kabutaulaka (1993) says that a traditional life is not necessarily negative and

that “from an economic viewpoint, however, it is a poor, subsistence life, a life that has no hope of accumulation, income and wealth”. The strategy to alleviate this situation, proponents of modernization theory argue, is for Third World societies to change their traditional values to modern ones. This can be achieved through education (Sanga, 2005:26). However, the developing countries are faced with the problems of high population growth, inaccessibility to education services. Aid is therefore needed by many Third World countries to help alleviate these difficulties. Education is closely linked to economic growth. As it is now widely accepted that it is the human resources of a nation, and not its raw materials or capital, that determine and ultimately shape the pattern, and character of its economic, social and political development (Schumacher, 1976, Simmons, 1979, Psacharopoulos & Woodall, 1995 cited in Luteru, 1991). Aid is used as catalyst to economic growth as well. It was assumed that once economic growth was achieved, the benefits would trickle down to the masses and therefore, poverty would be alleviated. This idea was the basis of America’s foreign aid in the 1950 (Martinussen & Pederesen, 2003:26). However, critics argued that inequality persist and that modernization theorist failed to acknowledge that it was the lack of resources and not modernity that holds back many of the less developed countries.

The dependency theory was dominant in the 1970s. Economists like Andre Gunder Frank was one of the leading proponents of this theory. Dependency theorists argued that aid creates conditions of its failure by the way it was delivered. For example, when aid is tied, it is a requirement that capital, technology and expertise from the donor country must be used to implement the projects. While this approach might produce the desired output, it undermines local population for the purpose of self-reliance. This gave rise to aid dependency, which has deepened the development problems more than simple lack of resources (Edgreen, 2002 cited in Lenga, 2006).

Since the 1980s onward – the approach of foreign aid has oriented to Structural Adjustment Programs (SAP). The focus was on transforming national and economic structures and institutions by reducing the role of the state whilst increasing the role of the private sector as a producer and supplier of goods and services. It was a means of increasing the efficiency of state-owned enterprises to deliver efficient and effective services to the public. By the 1990s, democratization and good governance became the explicit goals of foreign aid. It was argued that democracy and good governance were the necessary preconditions for achieving economic growth and development (Martinussen & Pedersen, 2003:28). There are many ways the development theories and approaches shaped the way aid is conceptualized (Lenga, 2006: 39).

2.4 Aid Effectiveness

Aid effectiveness refers to the degree to which development aid works, and is a subject of significant disagreement.

The average amount of foreign aid transferred to developing countries is small compared with the size of their economies – 2 percent to 3 percent of their gross national product. The international standard is set for the developed countries to reach ODA target of 0.7 percent of Gross National Income. In individual cases, that figure can exceed 60 percent in a given year. However, more assistance is not always more effective. Receiving too much foreign aid may overwhelm a country's absorptive capacity and thereby undermine the overall effectiveness of aid. A small quantity can be useful in achieving results, depending on its purpose and how it is spent (Wikipedia, 2007).

Foreign Aid has at times been a spectacular success. Botswana and the republic of Korea in the 1960s, Indonesia in the 1970s, and Bolivia and Ghana in the late 1980s and Uganda and Vietnam in the 1990s are examples of countries

where aid has contributed significantly and uplifted these countries from crisis to rapid development (World Bank, 1998:1).

On the flip side, foreign aid has also been seen at times, as unmitigated failure. While the former Zaire's Mobutu Se Seko was reported amassing one of the world's largest personal fortunes (invested, naturally, outside his country), decades of large – scale foreign assistance left not a stress of progress (World Bank, 1998:1) Zaire is just one of several examples where steady flow of aid ignored, if not encouraged, incompetence, corruption and misguided policies. Consider Tanzania, where donors poured a colossal USD 2 billion into building roads, over 20 years. Roads were built but due to the lack of maintenance, roads deteriorated faster than they could be built (World Bank, 1998:1). This indicates that the aid assistance was not a success.

2.5 Aid, Education and Development

Although the overarching development assumption that aid leads to reduction in poverty has remained, understanding about how this should happen have shifted considerably over time (Rinddell, 1997:454 cited in Coxon and Tolley, 2005). Development theory and practice have been considered to uphold the importance of the relationship between them, that has changed (Coxon and Tolley, 2005:31).

The modernization and development theory states that one way forward for the developing countries is to quickly go through the five stages of development. Development interventions are intended to move societies in which they are believed to be worse off to better off. Education is seen as the catalyst to fast track development. This idea was further supported by Buchert (1995) by identifying that it is one of the obvious common attentions and features for the agencies is on the believe that human resource development is crucial potential resources in achieving economic growth, provision of environmental protection,

increasing political participation, and mitigation of gender and other social inequalities.

Although the underlying motives of aid are debatable and sometimes questionable, aid is likely to remain critical in most contexts as one of the ways forward for financing education in many countries.

2.5.1 Education and Development

Education is the key to unlocking human potential. The acquisition of skills and knowledge enables people to overcome poverty. Education enables people to come out of oppression and alienation and take control of their lives. Education empowers communities and gives nations the confidence to shape their own future.

Education helps alleviate poverty and advances economic and social development. A diverse body of literature demonstrate that adults in the developing countries who have higher levels of educational attainment have more pain employment, higher earnings, greater agriculture productivity, low fertility, better health and nutritional status and more modern attitudes than adults who have lower educational attainment (Lockheed and Verspoor, 1991). They are also more likely to send their children to schools. These characteristics are dimensions of development. Education forges national unity and social cohesion by teaching common mores, ideologies, and languages. It also improves income distribution, increases saving and encourages more rational consumption, enhances the status of women, and promotes to technological change.

2.5.2 Education and Economic Development

Research and experience demonstrate that an educated labor force is necessary, albeit, condition for economic development (Schultz, 1961: Denison, 1962:

McMahon, 1984). The correlation between national investment in education and economic growth is striking. The industrialized economies of the late nineteenth and early twentieth centuries were based on relatively well educated and skilled labor force. Zouliatou examined the relationship between growth in TVET enrollment and national Gross National Product (GNP) per capita. He found that none had achieved significant economic growth before attaining the education.

2.5.3 Education and Productivity

Investment in education has become an important driving force of economic competitiveness in the knowledge-based society (OECD, 2010). As stated in the Global Competitiveness Report 2013-2014, the fifth of 12 competitiveness pillars highlights that it is crucial to have a quality higher education and training for a country to nurture well educated workers who will be able to perform complex jobs under the changing world and in the changing production chains (the World Economic Forum [WEF], 2013).

Now that the advancement of new information technologies has made it possible to create new demands for higher-level cognitive skills and for lifelong learning over lifetime work. Thus, this technological progress reveals that the knowledge and skills from school and at the workplace may turn obsolete rapidly. Moreover, new, complicating knowledge and skills that workers must acquire need to respond to rapid changes in technology at workplaces. Therefore, the education and training system plays a vital role in response to these changes and obstacles. That is, skills training and skills upgrading are necessary instruments for each nation to remain competitive in terms of national development (Riboud, Savchenko, & Tan, 2007).

According to the study findings of the World Bank (2010), higher education holders could earn 67 percent higher than workers without education, Workers

with primary and secondary schools can find jobs but lower wages. Undeniably speaking, in accordance with the human capital theories, investing in human resources crucially brings high rates of return in terms of individual productivity and societal advancement, accelerating each country's socio-economic development. It also means that individuals with higher education can gain more employment opportunities while firms can make more profits when hiring educated people (World Bank, 2010).

This rate of return reflects a relationship between education, economic growth and employment for individuals and social development (Fagerlind & Saha, 1983). The strong relationship is usually seen in developed countries where significant expenditure is spent on education. The expansion of higher education exists ubiquitously in hope that educational attainment will largely contribute to national productivity and competitiveness (Douglass, 2010) However, developing countries have limited resources to expand their education to meet the societal needs.

Despite the change in human demographics and technology advancement keeping business competitive, an imminent threat of having not enough qualified workers to fill positions available in the labor market is emerging (Fitz-Enz, 2009). In the developing world, skills have become high pressure under globalization for most South Asian countries. At the same time, employers in those countries regard skills shortage as a crucial issue in their businesses. As a result, many initiatives are being undertaken by the governments to promote education and training system to be more responsive to the skill needs of the labor market and the industrial development process (Riboud et al., 2007).

At individual levels, education and training system is an imperative channel for young people to obtain their qualification resources. These vital resources from

education are varied in terms of market values and effectiveness in helping youth move from school to work (Müller & Gangl, 2003). The educational qualifications are usually key assets available for young people in obtaining jobs in the labor market (Gangl, 2003). Although a level of educational attainment does not guarantee young job seekers to be employed stable, it remains one viable and available resource for job vacancies in most cases (Ashton & Sung, 1992; Elder, 2014; Heang et al., 2013).

Despite the promising idea of investment in education, price competitions among job seekers set a mixture of opportunities. A few highly competent individuals tend to continue to enjoy a plethora of employment benefits, but many others with less education and competence seem left behind in the labor market (Brown et al., 2011).

In the real world of work, employers need more than just educational qualifications generated by educational systems. The relevance of education and training to the working world is always a concern for employers they recruit new employees. How employers reach educational provider and policymakers is in questions.

2.6 International Trend in TVET Assistance

In recent years, TVET has ceased to belong to the mainstream of educational development assistance, but in the 1960s and 1970s it had been one sector, along with tertiary education, where aid was highly concentrated. For example, in 1963 the World Bank started a grand scale lending program for vocational education geared toward developing countries, and from 1964 to 1969 secondary vocational education comprised 20% of the World Bank's lending in the education sector, thus ranking as the second largest sub-sector of all. From 1963 to 1976, expenses relating to technical and vocational education continued to decrease until, by 2002, the ration had dropped to no more than

9% of the World Bank's gross education sector assistance. Conversely, with every year, the proportion of primary education assistance grew at an inversely proportional rate, from no more than 6% during the 1963-76 period to 39% in 2002. The trend towards emphasizing primary education becomes clearer when including other donors as well. Figure 1-2 shows all education assistance going to Least among Less Developed Countries (LLDC) as classified by sub-sector. One can see from this diagram that nearly 60% of aid in education goes to primary education. However, when analyzing policy and finance in TVET sector, it is important to note that sub-sectors maybe classified in different ways and the way of sub-dividing TVET in particular tends to be inconsistent. Unlike primary education and other sub-sector where the dividing lines are evident, TVET consists of secondary, post-secondary and non-formal sub-sector – while stretching as far as teacher training as well. Consequently, it is not uncommon for elements of TVET to be found scattered throughout other sub-sectors, and the fact that Figure 1-2 includes no category for “Technical and Vocational Education” reflects these conditions. Meanwhile, even where a category for technical and vocational education may be indicated, often it is still impossible to determine with any certainty what is meant to be included therein. As a result, it is better to consider the fact that only a general current can be grasped from education statistics and financial indicators relating to this sub-sector.

World Bank has taken the form of promoting efforts to improve the quality of training and reduce the burden of costs shouldered by the government by forming a competitive training market and actively involving private training institutions in that market, in addition to both clarifying the government's role in TVET and preventing TVET operations from becoming scattered. Also, other international organization beside World Bank has announced their own comprehensive TVET assistance policies including International Labor Organization (ILO), United Nations Educational, Scientific and Cultural

Organization (UNESCO), etc. ILO is an organization whose major concerns are labor issues, and its policy paper examines the efficiency and effectiveness of TVET within the global economy. According to ILO, within modern-day international economic settings characterized by the high turnover technology and product cycles, to development human resource effectively, certain measures should be adopted by the government, such as 1) setting the standards for technical skills and developing a skill qualification system which corresponds to the standards, so as to enable employers to more objectively grasp the capability of workers, 2) reinforcing collaboration with the private sector, and 3) offering incentives to encourage the private sector to share the burden of human resources training costs with the government (ILO, 2000 pp.3-15). In contrast with ILO and World Bank, UNESCO approaches TVET from the perspective of ideals in education. UNESCO has stated that every person must have the chance to learn life skills and vocational skills as a part of his or her right to lifelong study, and for the sake of sustainable development (UNESCO-IIEP, 2001 – p.45). But there is not much different between these aid agencies in terms of fundamental policy for the promotion of TVET, seeing themselves as advocates that the government should focus on preparing guiding laws, regulations and framework while it keeps its own implementation of trainings to a minimum and utilizes the private training institution for the rest.

2.7 Chapter Summary

Development aid especially educational aid is important for developing countries to meet the resource gaps in the education sector. Development aid is aimed at alleviating poverty and to improve quality of life. In developing countries where there is a trend of fast-growing population brings the problem of having limited or access to education. So, the need for international education aid is required to improve the situation. Education plays a major role in the development process. It is said to be the cornerstone for social and

economic development. The knowledge and skills acquisition enable people to alleviate poverty; it empowers people to take control of their lives. The challenge is for both the donor and the recipients of aid to assess the needs of the society and design workable mechanisms where aid reaches and touches the lives of people whom aid is tailored for. The success of any aid program depends on the commitment of the donor, the recipient country and other stakeholders.

Chapter III: RESEARCH METHODOLOGY

As William Zikmund (1984) stated in Business Research Methods 9th Edition, “the degree of uncertainty about the research problem determines the research methodology.” In other words, the methodology of a research paper is defined by the nature and characteristics of the problem.

3.1 Research Design

This research mainly uses qualitative approach of analysis. The qualitative method by theoretical and literature analysis is conducted to have more deep analysis the problems and challenges that TVET faces in Cambodia. This study will be developed based on in-depth interviews with but not limiting to, the government officials, donor representatives and technical staffs, etc. With these approaches, the findings of this research can provide a comprehensive picture of the key roles and the impact of ODA in supporting education especially TVET Education in Cambodia.

3.2 Research Data Collection Tool

The data collection tool will be carefully chosen due to the research objective and research questions. It should be noted that the time frame for this fieldwork in Phnom Penh city and 3 provinces is conducted in 20 days. The following are the data collection tool that will be applied in this study.

3.2.1 Individual Interviews

I developed an in-depth interview tool to examine the roles and current policy of Development Partners regarding the skill development in Cambodia. The interview will be conducted with key Development Partners that have been provided their supports to the government of Cambodia, high-level government officer and technical staffs from Ministry of Education Youth and Sport

(MoEYS), Ministry of Labor and Vocational Training and NGOs. It is difficult to conduct this interview, but the process needs to be more flexible.

In order to make this in-depth interview to be more responsive, the questions will be sent to the key informants after they agreed to participate in the study. There are three sets of interview questions since the participants work in different field. The first set is for in-depth interview with the Development Partners. The second set is for the key high-level government officials. And the third set of questions is for the technical staff who are involve in the TVET projects and institutions.

3.2.2 Secondary Data

The study also uses secondary data in order to describe and analyze Cambodia TVET sector ODA and compare TVET sector ODA disbursement with other sectors. The total amount of ODA to the TVET sector from donor countries to recipient country by commitment and disbursement will extract from Cambodia ODA Database which manage by the Cambodian Rehabilitation and Development Board CRDB) in Cambodia. This database is well recognized from all development partners in Cambodia since CRDB asked all DPs to update their projects and their disbursement twice a year. In addition, information beside Cambodia ODA Database, Internet source were also consulted.

The country specific data, information and government policies and strategies were retrieved from annual report (Development Cooperation and Partnership Report), the Ministry of Labor and Vocational Training (MoLVT) and Ministry of Education, Youth and Sport (MoEYS). Also, donor policies or country partnership strategies, RGC-Development Partner ODA agreements, research publications and mass media-newspaper were used in this research. The

information from these sources fundamentally serves as a basis for the study of the roles of ODA in supporting TVET in Cambodia.

3.3 Research Sample

Eight TVET Education institutions were selected in the study area for this study. These institutions include: National Polytechnic Institute of Cambodia, Preah Kossamak Polytechnique Institute, Cambodia-India Entrepreneurship Development Institute, JVC Technical Schools & Workshop, Cambodia-Thai Skill Development Center, Regional Polytechnic Institute Techo Sen in Kampot, in Battambang and in Siem Reap. The criterion used for the selection of informants was on their direct involvement with the Development Partner's educational aid. The researcher selected two groups of informants: (i) institution directors and deputy directors and the instructors of the selected institute. A total number of eighty-three people were selected, as primary informants in this study, of whom, eight were principle and seventy-five were trainers.

The first group were institution principle. They work closely regarding the aid that come under the development partner aid package. They were the link between the community and the Ministry of Education on all aid. The second group was the class instructors. They were important since they were the one actually instructing and using the curriculum materials produced under the education aid package.

3.4 Study Area

The study was conducted in Phnom Penh, Kompot Province, Battambang Province and Siem Reap Province. The reason these sites were chosen because of the concentration of the aid institutions in this area. Another reason was that the schedule for the interview would be more flexible with the respondents during the filed work with limited time. They are convenient location since

most institutions and ministries are located. With these justifications, these locations were appropriate for conducting this study and for selecting for research sample.

3.5 Ethical Consideration

When deal with people, treating then with respect is vital. This treatment reflects how to deal with key informants and respondents before, during and after the research. Since the people from DPs, Government and NGOs are in high positions, the interview will be conducted in a very formal manner. All the interviews and questionnaires will be made due to their agreements without power enforcement but base on the understanding of the importance of the research.

To avoid ethical problems, the researcher will explain the process and asked the permission from the respondent to voluntarily participate in answering the questions in the questionnaire forms and interview questions. The participant can deny participating thus all the confidential information will be kept properly.

Chapter IV: COUNTRY OVERVIEW

This chapter presents the overview of Cambodian socioeconomic development, policies on socio-economic development, education and skills attainment, and the situation of the Cambodian labor market. It provides general characteristics of the labor market supply and demand.

4.1 Cambodia's Socio Economic

Cambodia has experienced a profound structural change as the effect of integration of the global economy, which shifts from the agriculture sector to the service sector, and human movements from rural areas to urban areas since 1991 (the United Nations in Cambodia, 2010). With an export-oriented and opened trade policy (Kuoch, 2015), the Cambodian economy grew at remarkable rates from 1.2 percent in 1990 up to 13.3 percent in 2005, but sharply decreased to 0.1 percent in 2009 after the effect of economic downturn in 2008. Before the economic crisis (1998-2008), the average annual GDP growth rate was 9.1 percent, driven by the high average annual growth rates in the industry sector (14.4 percent) and service sector (9.9 percent), followed by agriculture (4.6 percent). After the crisis, however, the economic growth recovered from 0.1 percent 2009 to 7.9 percent in 2013.

The country's socio-economic performance has been internationally recognized as an example of good practice for several reasons. The IMF has noted that, "Cambodia has achieved a remarkable average annual growth rate of 7.7% in the last two decades". The 2014 World Bank Economic Update acknowledges that "Cambodia has joined the Olympians of growth" and is the sixth fastest growing economy in the world. Cambodia is also one of the largest recipients of Foreign Direct Investment (FDI) and a top exporter of textiles. This strong growth has been accompanied by a significant decline in poverty from around 53.2% in 2004 to 13.5% of the population in 2014. Cambodia is also one of a

few countries that have outperformed the United Nations' Millennium Development Goals (MDGs) on poverty reduction and other social indicators before its 2015 deadline.

As the steady economic growth rate keeps increasing, the Southeast Asian emerging economies have gained their competitive advantages in attracting Foreign Direct Investment (FDI). Therefore, the substantial FDI inflows into the region and domestic investment growth are still in good position (OECD, 2013). Cambodia, for example, has attractiveness for labor-intensive manufacturing to gain more FDI inflows (OECD, 2013). The FDI investors have come to invest in construction, financial sector, apparel and footwear industries, hospitality, telecommunication, farming, and other sectors across the country. According to the Asian Development Bank, the acute increased FDI from 900 million US dollars in 2011 to 1.3-1.5 billion US dollars in 2012 has also coexisted with the increased investment in higher-valued-added manufacturing industries such as automotive parts and electronics. The big inflow of FDI has contributed to the Cambodian economic growth, reduction in poverty rate and generation of employment.

Figure 4. 2: Trend of Cambodian Real GDP Growth Rates from 1990 to 2017(%)



Source: Key Indicators for Asia and the Pacific 2009 & 2018, ADB (2009, 2018)

According to the Garment Manufacturers Association in Cambodia (GMAC, 2013), the garment and footwear industries have absorbed about 300,000 new workers in the labor market every year. Actually, the apparel industry has been a major source of export generation and employment, and this industry has employed a great deal of low-skilled and unskilled workers, which comprises 70-80 percent of women (Savchenko & Lopez-Acevedo, 2012). These industries have helped Cambodia to be one of the fastest growing garments export countries in the world since 2000 (the United Nations Conference on Trade and Development [UNCTAD], 2013).

Based on the estimation of Cambodian economic performance (ADB, 2019) the GDP grow by 7.0 percent in 2019. The industry is growing by 10.8 percent while the service sector is slightly increasing to 6.9 percent. The agriculture sector is assumed to rise by 1.8 percent with good weather conditions. This continual GDP growth over the past two decades has been reliable much on the garment, tourism, rice and construction, which all these sectors are easily fragile (ADB, 2015: De Carteret, 2013). Since this shallow economic foundation is not sustainable (ADB, 2015), seeking to diversify its manufacturing sector with high-value-added activities needs the right mix of governmental policies (De Carteret, 2013). However, there remains a significant challenge for developing a responsive and holistic policy approach to suit the changing needs of high-skilled labor, competitive transportation and logistics system, and other needs of those industries to grow (De Carteret, 2013).

Table 1 shows the share the of the population aged 15 or above employed in three primary sectors of the Cambodian economy. During the 1990s, the agriculture was the largest proportion of the economy, accounting for 56.5% of GDP (Hatsukano, 2010). The service sector employed more people (41.5%) while the agriculture did 33.3%. This trend reflects a shift from agriculture-

based production to the service sector while the industry remains crucial for the overall economy.

Table 4. 2: Employed Population (15+) by Main Sector and Sex

	Total		Male		Female	
	Number	(%)	Number	(%)	Number	(%)
Agriculture	2,393,164	33.3	1,281,547	33.7	1,111,617	32.7
Industry	1,816,498	25.2	935,143	24.6	881,355	25.9
Services	2,987,754	41.5	1,581,016	41.7	1,406,738	41.4
Total employed	7,197,416	100.0	3,797,706	100.0	3,399,710	100.0

Source: Cambodia Labor Force and Child Labor Survey, 2012, NIS (2013)

Like many countries, since unskilled labor force has come less competitive under globalization and global competition in the global value chains, employers in Cambodia are now looking for high-skilled workers and skilled workers for the fulfillment of competitiveness and productivity in their companies (HRINC, 2010). The labor-intensive industries such as textile and footwear are currently using many low-skilled and unskilled workers. However, the job creation remains limited since those cheap labor-intensive workers have become less effective than skilled workers who can gain more impact on their working life. Now the changing needs in the labor market and workplaces require well-educated and well-trained workers.

Table 4.2: Share of Employed Population aged 15 or Older, by Industry and Education Level (%)

	Level of education completion					
	Total	None	Primary	Secondary	Vocational	University
Agriculture	33.3	54.6	40.0	22.9	7.6	2.5
Industry	25.2	18.8	25.9	28.1	14.7	8.8
Services	41.5	26.5	33.1	49.0	77.7	88.7

Source: Cambodia Labor Force and Child Labor Survey, 2012, NIS (2013), p. 41

Workers without education were 54.6% in agriculture, 18.8% in industry, and 26.5% in services. People who completed primary education were 40.9% in agriculture, 26.9% in industry, and 33.1% in services. This share of employed people suggests that any sector of the economy does not require high-skilled people, and it tends to use more unskilled persons with low wages. Sometimes, it can be poor working conditions in the informal sector of the economy. Approximately 89% of university graduates are working in the service sector, which usually needs low-skills requirements for most job vacancies. Table 2 reflects that most people, regardless of educational attainment, tend to work in the service sector, leading to the skills mismatch in the labor market.

As Table 3 shows, in 2012, the high number of people (5,845,356) work in informal enterprises. It can be predicted that the informal sector enjoys absorbing low-skilled and unskilled people while this sector does not seem to provide job security or adequate job benefits to workers.

Table 4.3: Employed Population Aged 15 or Older, by Formal/Informal Sector, Sex and Area

Sector	Cambodia			Urban			Rural		
	Total	Male	Female	Total	Male	Female	Total	Male	Female
Formal sector enterprises	1,276,331	733,571	542,760	5,523,378	359,779	192,559	723,993	373,791	350,202
Informal sector enterprises	5,845,356	3,046,084	2,799,272	1,210,281	571,415	638,866	4,635,075	2,474,669	2,160,406
Households	75,729	18,051	57,678	21,027	2,129	18,898	54,702	15,922	38,780
Total	7,197,416	3,797,706	3,399,710	6,754,686	933,323	850,323	5,413,770	2,864,382	2,549,388

Source: Cambodia Labor Force and Child Labor Survey, 2012, NIS (2013), p. 45

4.2 Policy on Socio-Economic Development and Employment

According to Riboud et al. (2007), policies have been developed in Asian nations for the challenges and opportunities in the education and training system, in response to the demand in the national socio-economic development. Similarly, the RGC has developed different national development plans and policies to tackle the socio-economic development problems since 1986 (Hatsukano, 2010). The government has formulated the Rectangular Strategies phase I, II, III and IV to focus on growth, employment, equity, and efficiency. Other national development plan such as the National Strategic Development Plan (NSDP) (2014-2018), the NSDP Update (2019-2023)⁰, and the National TVET Development Plan has been formulated to support the Rectangular Strategies by the national legislation. These national policies and plans show high commitments of the government to skills development for industrial needs and the labor market (ADB, 2009).

Although successful in the implementation of the Rectangular Strategies I, and II for the socio-economic development, Cambodia is still facing central issues and challenges, which need more effort and attention (RGC, 2017). The RGC has embarked on the NSDP (2014-2018) to support the Rectangular Strategy III. Keeping the same focus on growth, employment, equity, and efficiency but also responding to the remaining challenges of the former development plans, the RGC is aware of the importance of economic growth and poverty reduction (Ministry of Planning, 2013).

Under the national development context, the new Education Strategic Plan (ESP) 2014-2018 was developed to strengthen the Cambodian education system to responsively develop skilled workforce and professionals for the Cambodia's and the regional labor markets (MoEYS, 2014). This ESP intends

to expand access to quality education. In particular, post-secondary education, and TVET are the mainstream of intellectual and innovation development and skills development.

While the number of universities keeps increasing every year, skills shortage remains constraints for employers in Cambodia (HRINC, 2010). Besides efforts from the Royal Government of Cambodia (RGC), the critical issue of skills shortage needs relevant stakeholders to help deal with, especially the private sectors. The quality of current higher and the mismatch between higher education and the labor market have oversupplied poorly trained graduates recently (Sen & Ros, 2013).

4.3 Education and Skill Attainment

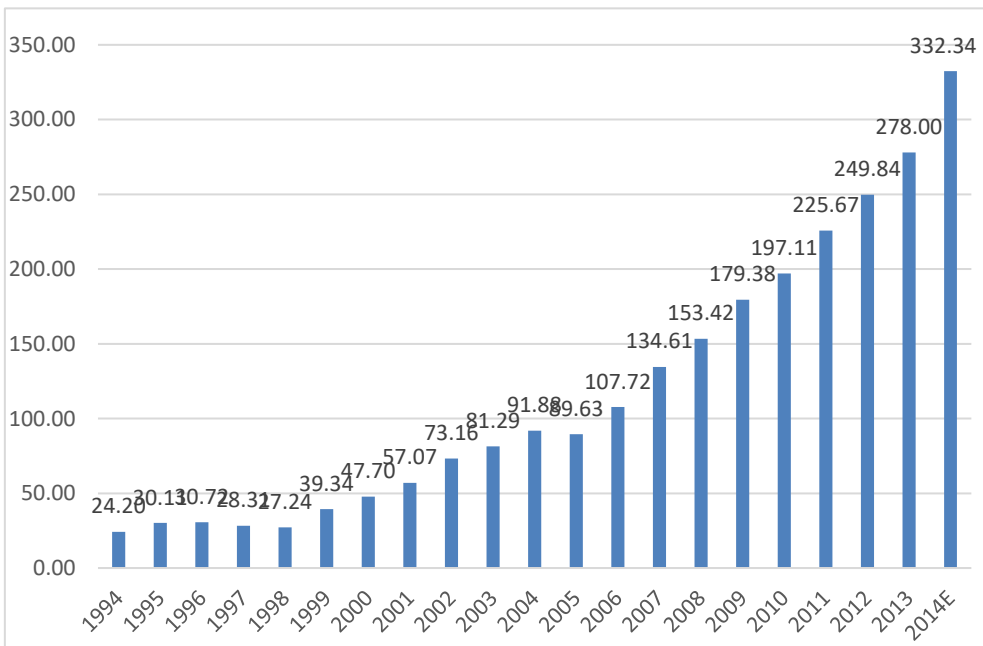
Based on the human capital theories, education plays a vital role in transforming human potentials that will produce a long-term return on personal, social, economic, and cultural aspects (Keeley, 2007). Investment in human capital will pay off when knowledge, skills, and attributes are developed and embodied in humans of a nation. The human capital such as skills, learning, talents, and attributes is one of the individuals' utmost values to survive and expand their economic growth through the educational channel in order to realize their inner potentials. Therefore, the national budget for the educational expenditure should be increased.

Recently, some noticeable indicators show the improvements in the Cambodian education and training system in terms of increased budget, strict examinations, and enrollment rates at all level (Hang, 2015). Having seen the importance of quality education, the Ministry of Education, Youth and Sports (MoEYS) has started a deep reform in the education and training system, for example, by making the secondary education stricter through the introduction of State Examination in 2013-2014. Before this reform, more than 90 percent of

students could pass the exit examination. During 2013-2014, less than 50 percent of students passed the exam. This reflects some quality improvements in the education system.

The educational budget has increase dramatically from 24.20 million US Dollar in 1994 to 332.34 million US Dollar in 2014 (Hang, 2015). This budget is only for educational expenditure under the supervision of the MoEYS. This increased budget resulted from the increase in teacher’s salary at all levels. This may be an incentive for teachers to improve their teaching and learning.

Figure 4.2: Annual Budget for MoEYS (in million US Dollars)



Source: (Hang, 2015)

Note: This calculation is based on average annual exchange rates of Cambodian currency relative to US currency from 1994 to 2014. For example, 1 USD = 2,545 riel (1994), 1 USD = 2,451 riel (1995), and 1 USD = 4,038 riel. E means Estimated

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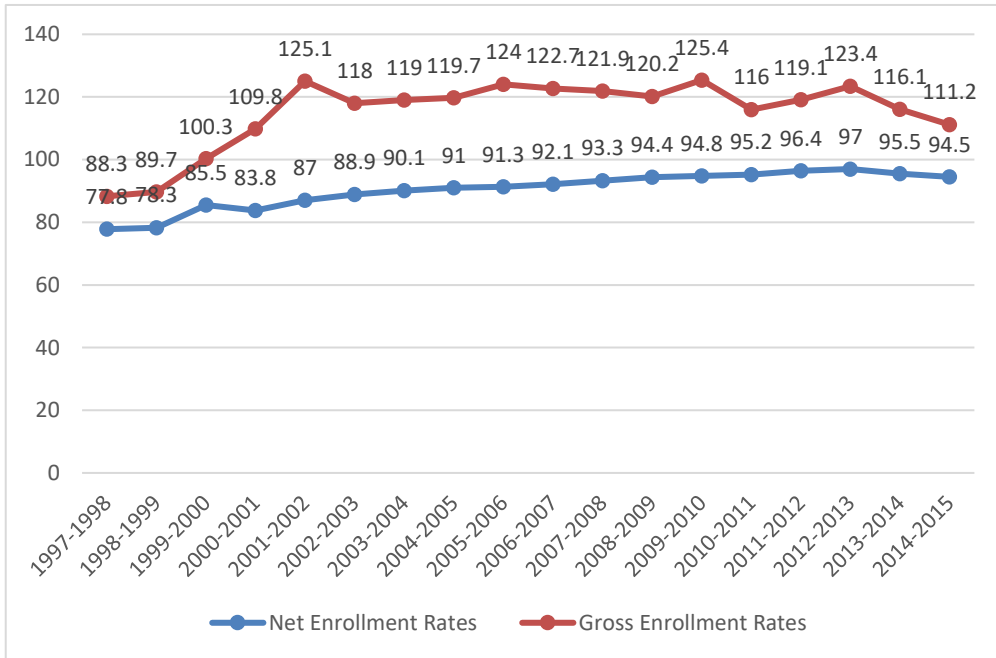
4.3.1 General Education

Net enrollment rates in primary education, lower secondary and upper secondary education have noticeable increased, for example, from 85.5%, 14.4% and 9.3% in 1999-2000 to 95.5%, 38.6% and 18.2% in 2017, respectively (see Figure 4, Figure 5, and Figure 6) (Hang, 2017). Despite this progress, there are still young school leavers, who need access to quality and market-relevant technical training and other types of non-formal education to enhance the employability and productivity of the country's young workforce. Wide variations in terms of educational quality, efficiency and coverage remain challenging. The gaps between urban and rural areas and between the poorest and richest quintiles have widened (the United Nations in Cambodia, 2010).

4.3.2 Higher Education

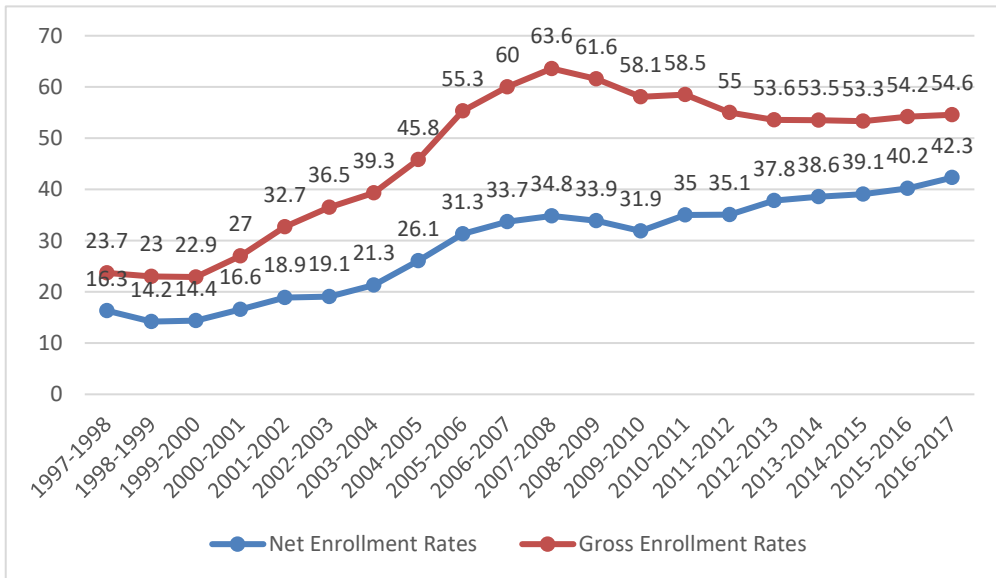
Access to higher education is now widened, while tuition fees tend to be low, due to competition among or between the public and private sectors. Thus, many students can afford to have higher education while a majority of high school graduates passed national exams. This has led to a massive increase in university enrollment rates. The number of college students rose from 94,708 in years 2005-2006 to 245,329 in 2011-2012 (You, 2012 as cited in Sen, 2013; MoEYS, 2013 as cited in Kuoch, 2015). Furthermore, as Table 4 shows, the number of female students increased notably by 38.3 percent (93,950) of total students in 2011-2012 (Kuoch, 2015).

Figure 4.4: Primary Education Enrollment Rates (%)



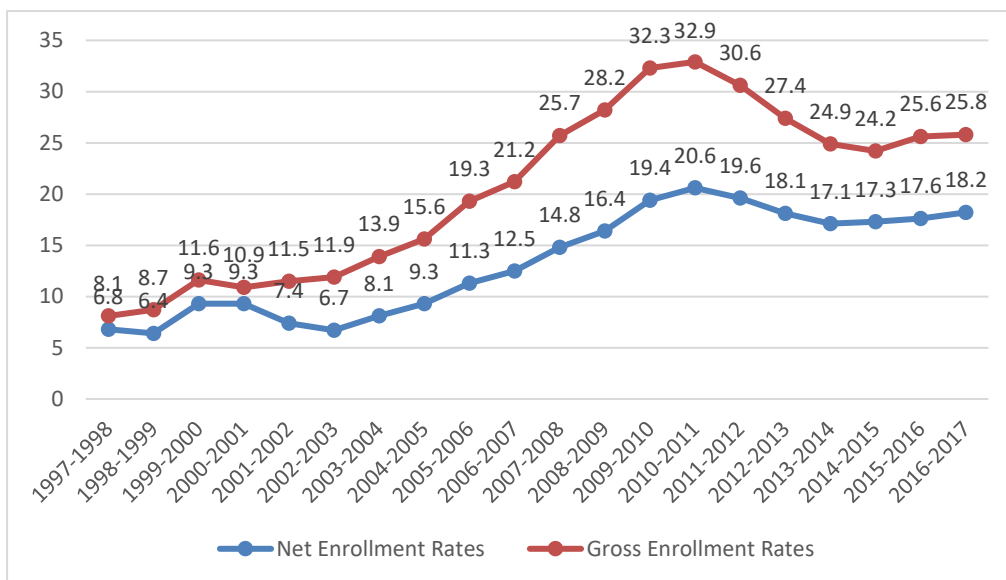
Source: Hang (2015)

Figure 4.5: Lower Secondary Enrollment Rates (%)



Source: Cambodia Socio-Economic Survey, 2017

Figure 4.6: Upper Secondary Enrollment Rates (%)



Source: Cambodia Socio-Economic Survey, 2017

While it has strikingly improved in terms of enrollment rates at various educational levels, the current education and training system is still facing a number of critical issues and problems at large. For instance, the quantity and quality of educational outputs (graduates) depend mainly on adequate financial support, access to formal training on a national basis, industry linkage, entrepreneurial focus, quality control, sufficient institutional financing, availability of ICT usage, and capacity of teacher have limited for years (ADB, 2009). Without these, the education and training system cannot produce qualified human resources for the labor market. As a result, most graduates will end up working in a low-skilled labor market or being unemployed for a long time.

4.4 Educational and Skills Attainment of Workforce

The progress in education and training has made Cambodians more literate. Table 4.4 estimates that about 82.5 percent of the population aged 15 or above was literate. The literacy rate was higher in urban areas at 88.2% than in rural

areas at 79.3%. It also reflects a wider gap between male and female literacy rates. The literacy rate for males was 87.3% higher than that of female (78.1%). The highest literacy rate was in the age group of 15-24 at 94.6%, which indicates a signal for socio-economic development in Cambodia. However, the lower literacy rate for the group of 25-64 is also a concern for the government since this group is currently involved in economic activities across the country.

Table 4.4: Literacy Rate of Population Aged 15 or Older, by Sex, Age Group and Area

Age Group	Cambodia			Urban			Rural		
	Total	Male	Female	Total	Male	Female	Total	Male	Female
15+ Total	9,236,437	4,684,228	4,552,209	2,687,172	1,318,219	1,368,953	6,549,264	3,366,010	3,183,254
15-24	3,233,111	1,640,914	1,592,197	991,904	457,221	534,683	2,241,207	1,316,761	1,382,942
25-64	5,573,691	2,796,822	2,776,869	1,585,923	800,392	785,531	3,987,768	1,833,724	1,695,547
65+	429,635	246,494	183,141	109,345	60,606	48,739	320,290	215,525	104,765
Rate (% of Total Population)									
15+ Total	82.5	87.3	78.1	88.2	92.6	84.4	79.3	84.6	74.4
15-24	94.6	93.5	95.7	96.9	97.3	96.6	89.6	90.0	89.2
25-64	77.5	65.3	72.4	91.8	94.7	89.0	72.5	80.7	65.4
65+	55.1	79.5	39.0	61.20	83.2	46.0	45.9	72.3	25.4

Source: Cambodia Socio-Economic Survey 2017

A larger number of people aged 15 or older (15.9%) never attended school but working in different sectors of the economy. As shown in Table 4.5, 11.8% of the working-age population was currently in education. Approximately 40% of people completed primary education, and 28.8% completed secondary education. The lowest share of working-age people who completed vocational education was one percent while 2.1% completed university education. The education attainment for female was relatively lower than males. For example, 34.1% of males completed secondary education, whereas 23.9% of females

completed secondary education. Women in higher education were even lower than men. Although the education attainment is progressive among the working-age population, a big challenge is concerned with the quality and responsive of education to the labor market demand.

Table 4.5: Working-Age Population (15+) by Educational Attainment and Sex

Levels of Educational Attainment	Total		Male		Female	
	Number	(%)	Number	(%)	Number	(%)
Currently attending school	1,270,719	11.8	698,450	13.6	572,269	10.2
Never attended school	1,707,651	15.9	560,454	10.9	1,147,197	20.5
Not completed any levels	1,467	0.0	113	0.0	1,354	0.0
Completed primary	4,340,355	40.4	1,907,307	37.0	2,433,048	43.5
Completed secondary	3,091,298	28.8	1,755,201	34.1	1,336,097	23.9
Completed vocational	111,978	1.0	77,450	1.5	34,528	0.6
Completed university	224,017	2.1	152,350	3.0	71,667	1.3
Don't know level completed	2,463	0.0	910	0.0	1,552	0.0
Total population (15+)	10,749,946	100	5,152,234	100	5,297,712	100

Source: Cambodia Socio-Economic Survey, 2017

4.5 Chapter Summary

The Cambodian economy has grown at remarkable annual GDP rates, for example, from 1.2% in 1990 to 7% in 2018. However, the foundation of this economic growth largely depends on the agriculture, service, and labor-intensive industry, which are usually small and fragile. There is a need to diversify the manufacturing sector with high value added, with a right mix of development policies such as the Rectangular Strategy, the National Strategic Development Plan, the National TVET Development Plan, the Industrial Development Plan, and the Education Strategic Plan.

There is a recent progress in education and training in terms of increased budget, strict examination and enrollment rates at all levels. The number of university students has doubled since 2005 while TVET enrollment has improved. However, the enrollment rates were higher in business related fields (more than 60%) than other fields such as agriculture, engineering, medicine and sciences, causing the mismatch in the labor market (HRINC, 2010).

The Royal Government of Cambodia sees TVET education as a corner stone of economic growth and social development and principles means of improving the welfare of individuals that will in turn help in the country in the long run. However, the government's budget to support TVET development is still limited. With the current state of TVET education infrastructure and the growing demand for TVET education, the government has requested the Development Partners to increase their support to TVET and to align with the government priorities as set out in National TVET Policy and Industrial Development Plan.

Chapter V: RESEARCH ANALYSIS AND FINDINGS

This chapter is divided into two parts. Part one gives an overview of the state of TVET education in Cambodia. The second part discusses the Development Partners aid and then continues to analysis results. The analysis is done on DP aid to TVET institutions in the study area. Also, the analysis attempts to show how and what influences the distribution patterns of the DP aid in the study area.

5.1 Technical and Vocational Education and Training in Cambodia

Besides investment in general and higher education, TVET is now getting more emphasis than ever since the purpose of TVET is to provide knowledge and skills required in the world of work. An effective TVET policy must, therefore, be embedded in the socio-economic context, encompass various policy areas and be sufficiently flexible to ensure graduate's successful transition from school to work. TVET is not only for the acquisition of skills for work (employment and employability), but also for citizenship and sustainable development (Hollander, Mar & UNESCO, 2009, 2006)(Hollander & Mar, 2009; UNESCO, 2006).

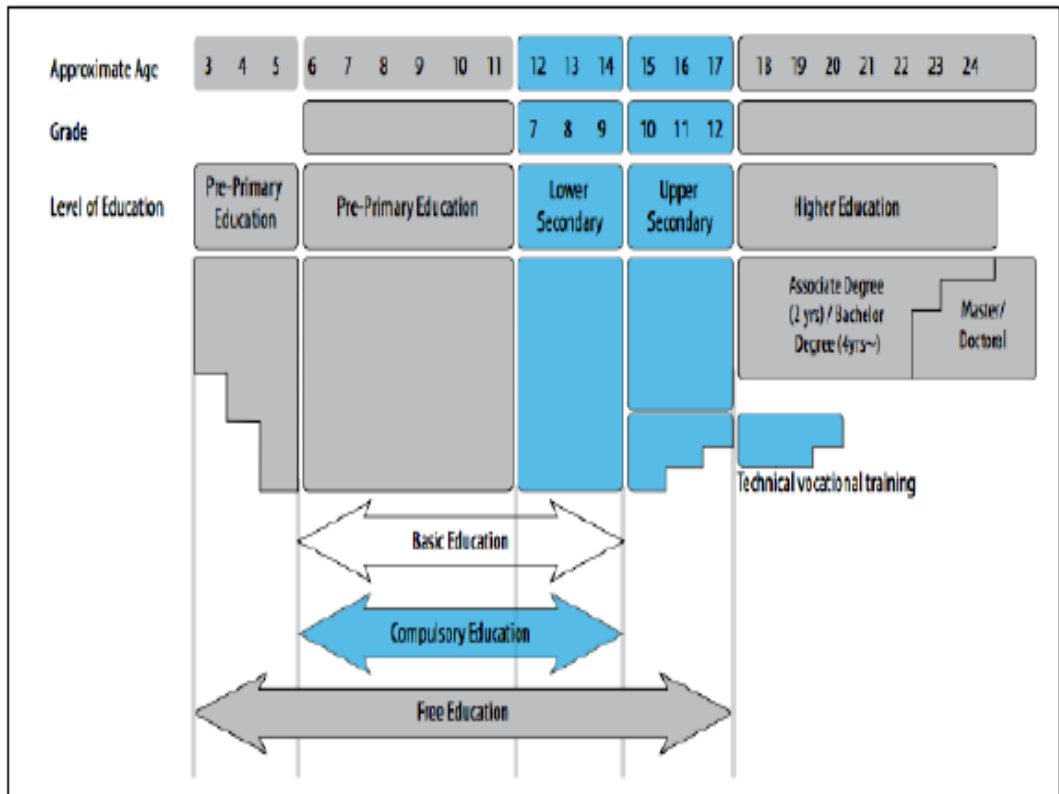
5.1.1 TVET System

In Cambodia, the TVET system consists of four level, certificate, diploma, higher diploma and higher education (graduate and post-graduate).

These institutions are providing TVET Programs with different sectors such as electronics, construction, mechanic, business and ICT, electricity, manufacturing and so on. Most of these TVET institution, especially located in provinces, provide short course training to students while few of these TVET schools offer Certificates I, II and III; and High Diploma levels. Unlike TVET

schools in provinces, six TVET institutions located in Phnom Penh tend to provide all courses from short course training to Higher Education levels (graduate and post-graduate) (See Figure 5.1).

Figure 5.1: Education System and Training in Cambodia



Source: UNESCO, 2013

5.1.2 Cambodia Qualification Framework

Cambodia Qualification Framework (CQF) was approved by sub-degree No. 153 dated on March 28, 2014. It is intended to ensure equivalency comparison within the Kingdom in the standards of national qualifications and regional qualification. It also provides a comprehensive, nationally consistent yet flexible framework for the TVET system. The framework provides for both technical and vocational training for higher education, two systems of post-secondary education and training that have some common characteristics and

some important differences that it is the most important to recognize and preserve. There are eight level of qualifications for Technical and Vocational Education and Training. The first four of these levels leading to vocational certificate and technical and vocational certificate I, II and III are regarded as equivalent to secondary education in standard. The remaining four levels are considered post-secondary education (See Table 5.1).

Table 5.1: Cambodian Qualification Framework

CQF Level	General Education System	TVET System	Higher Education System	Minimum Credit Hours
8		Doctoral Degree of Technology/Business Education		
7		Master Degree of Technology/Business Education		
6		Bachelor of Technology/Business Education		
5		Higher Diploma / Associate Degree of Technology / Business Education		
4	Upper Secondary School Certificate	Technical and Vocational Certificate 3		
3	Upper Secondary School Certificate	Technical and Vocational Certificate 2		
2	Upper Secondary School Certificate	Technical and Vocational Certificate 1		
1	Lower Secondary School Certificate	Vocational Certificate		

Source: MoLVT, 2015

5.1.3 Institution and Location

There are currently 305 TVET institutions through-out the country which include 64 public institutions (only 39 institutions are under the supervision of MoLVT), 188 private institutions, and 53 NGOs training institutions (MoLVT, 2019). Among these 64 institutions, some under supervision of Directorate General of Technical and Vocational Education and Training (DGTVET) while some others are under control of other ministries like Ministry of Education, Youth and Sport, Ministry of Women’s Affairs, Ministry of Economic and Finance, etc. Moreover, many private and NGOs training institutions are also

not controlled by MoLVT (See Table 5.2). There are a few large reputable NGOs training providers in Cambodia such like Pour un Sourire d’Enfant (PSE) in Phnom Penh and Paul Dubrule and Sala Bai in Siem Reap.

Table 5.2: Number of TVET Institutions and Locations

TVET Institution	Total Number	Under MoLVT/Sign MoU with MoLVT
Public	64*	39 (Under MoLVT)
Private	188	16 (Signed MoU with MoLVT)
NGOs	53	13 (Signed MoU with MoLVT)
Total	305	68

*25 Institutions are provincial centers, and 11 institutions are Polytechnic Institutions

Source: Ministry of Labor and Vocational Training, 2019

5.1.4 TVET Enrollment

It can be surprising that the number of short course enrollments is the largest share (27,135) in TVET enrollments while the total enrollments (3,215) of vocational training certificate level I, II and III are lower than those of high diploma (5,638) and bachelor (8,791) (see Table 5.3). The vocational training certificate level I, II and III are alternatives to general education. When students finish their nine-year education, they have two options whether they intend to study in grade 10 in general education, or they can choose certificate I. However, TVET schools are not many across the country. Moreover, most of TVET schools are mainly located in urban areas such as Phnom Penh, Battambang Province and so on.

Table 5.3: Number of TVET Student Enrollments by Training Level and Sex, 2017-2018

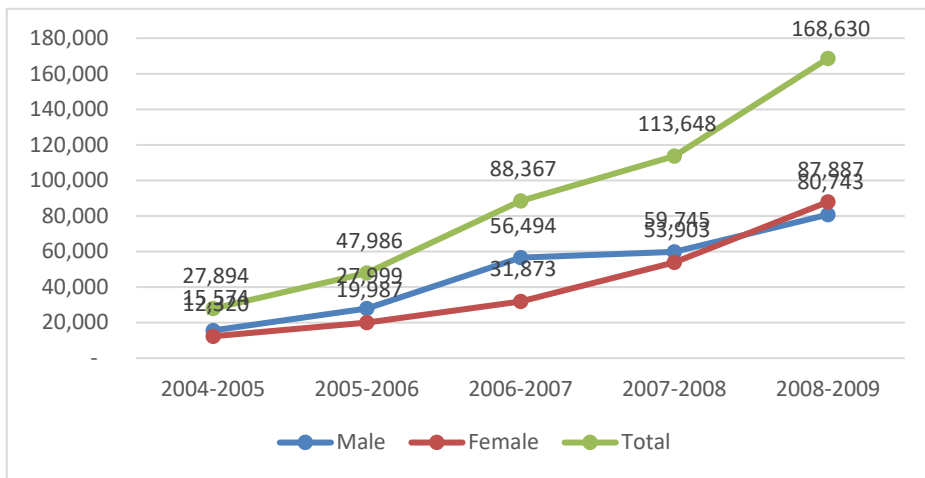
Level	Male	Female	Total
Short Course	11,203	15,932	27,135
Certificate I	1,703	623	2,326
Certificate II	484	85	569
Certificate III	262	58	320
High Diploma	4,232	1,406	5,638
Bachelor	6,026	2,765	8,791
Total	23,910	20,869	44,779

Source: Technical and Vocational Education and Training Statistics, 2019

Note: Short courses refer to training programmes that last less than one year, certificate I, II, and III are one-year training programmes, high diploma programmes last two years of study, and Bachelor degrees last four to five years. In fact, the certificate I, II and III are alternatives to the upper secondary education channel (grade 10, 11 and 12).

The number of TVET trainees dramatically increased from 27,894 in 2004-2005 to 168,630 in 2008-2009 (see Figure 5.2 below). A larger number of trainees completed short course training in particular in the agriculture while a small share of students completed formal vocational training certificate levels and high diploma. Furthermore, it seems evident that formal TVET training program are provided in a very few fields of study, which limits the development of qualified human resources for the labor market.

Figure 5.2: Number of TVET Graduates, 2004-2005 to 2008-2009



Source: Tep (2011)

Note: The Statistics is for the TVET related institutions, including public, private and NGOs, under the Directorate General for TVET, MoLVT. It is challenging to present the statistics here since many short courses were included in this figure, which makes the student enrollments grow dramatically

Highly valued TVET for work and economic growth is obviously seen in most countries. TVET is an alternative to general education. It helps reduce unemployment and poverty when general education or higher education is not responsive to the market demand. However, the importance of TVET for skills development is perceived poorly in Cambodia (Pich, 2010) because the public attitude towards TVET seems unaware of how TVET can contribute to the world of work and socio-economic development. The low TVET enrollment rates and poor quality of TVET system have made it even difficult to attract more students to enroll in TVET. As a result, the Cambodian labor market has become worse to match supply and demand.

5.1.5 Number of Trainers

Trainer and student's materials are very important to enhance effective learning. Directorate General of Technical and Vocational Education and Training (DGTVET) under Ministry of Labor and Vocational Training (MoLVT) was

mandated in designing and producing the curriculum materials for the institutions. Within 39 institutions during the academic years 2017-2018, there were a total of 2,094 teaching staffs where the total enrollment was 44,779 at the same year. This means that one instructor was responsible for 21 students per year (MoLVT, 2014). The quality of trainer in the TVET Institutions depends upon the number of trainers that are trained.

Table 5.4: Institution Staff by Education Qualification and Pedagogical Training, 2017-2018

Particular	Number of institutions	Teaching Staff					
		Total	None	Junior		Senior	
				Male	Female	Male	Female
Whole Country	39	2,094	1,098	211	86	423	276
By Institution category							
Institute	16	889	429	143	163	176	128
PTC/VTC	23	1,205	669	144	94	198	100
NGO & Private	N/A	N/A	N/A	N/A	N/A	N/A	N/A
By Location							
Phnom Penh	8	313	86	74	80	78	70
Provinces	31	1,781	1,012	285	121	248	134

Source: Technical and Vocational Education and Training Statistics, 2019

Note: PTC-Provincial Training Center / VTC-Vocational Training Center

Staff Pedagogy -None = No pedagogical training / Junior = with basic pedagogical training and qualified to teach Diploma level and below / Senior = with Advance pedagogical training and qualified to teach Bachelor level and below

Table 9 shows that among 2,094 teaching staffs, there are only 996 trainer got Education Qualification and Pedagogical Training. In this regard, institutions in Phnom Penh, had the largest proportion of trained teaching staffs, with 227 among 313. There existed a higher gender imbalance in term of proportions of male and female trained teaching staffs in the provinces. There were more male

trained teaching staffs, 1,781 compared to 684 of female trained teaching staffs. In Phnom Penh has a better scenario in terms of proportion of male and female trained teaching staffs as compared to other institutions in Provinces.

5.1.6 Challenges of Current TVET in Cambodia

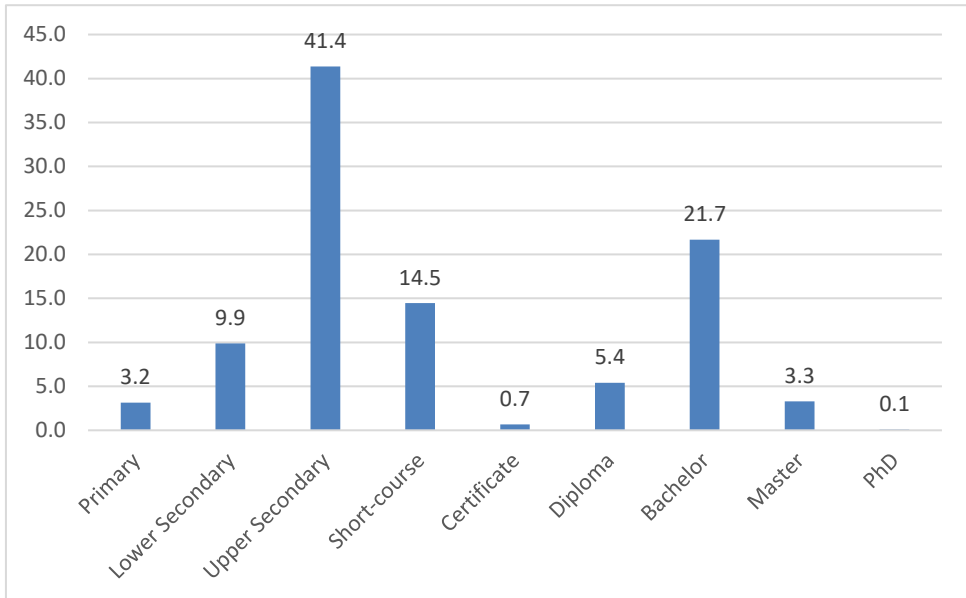
While there has been quite significant progress in the development of TVET in Cambodia over the past decade, the RGC recognize that this sector is still lagging behind when compared with some countries in the Asia-Pacific region as the government continue to deal with the following challenges:

First, low access to TVET Education. As mentioned in the previous section, there are only 23 PTCs/VTCs throughout the country and only a few of these institutions are in the communities. Most of the people who are living in the rural area do not know whereabouts of these training centers as they cannot access to any information regarding the vocation training program in the rural communities. Furthermore, the high opportunity cost of schooling for poor students remains a major constraint to TVET enrollment and completion.

Second, lack of qualified teachers. A shortage in qualified trainers impedes improvements in TVET Education outcomes. Despite notable in-service instructors training improvements, gaps persist in TVET trainers' content mastery and knowledge of effective pedagogy to improve students learning. The teaching profession attracts few top graduates, which partly explains the lack of qualified instructors. Trainers have limited opportunities to upgrade their pedagogical content knowledge. Based on Technical and Vocational Education Training Statistics report from Ministry of Labor and Vocational Training, in the academic year 2017-2018, there were 41.4% of instructors who had completed Upper Secondary Education, which are the majority, while there were only 9.9% completed Lower Secondary Education. Also, the statistics

report showed that there were 21.7% holding Bachelor Degree while 3.3% of instructor got Master Degree and only 0.1% got PhD. (See Figure 5.3).

Figure 5.3: Training Staff by Education Qualification



Source: Technical and Vocational Education and Training Statistics, MoLVT, 2018

With the limited qualified instructors, it is a big challenge in TVET sector in Cambodian since the new curriculums which have been developed. The instructors are required new skills and knowledge related to workforce to fit with these new updated curriculums. As mentioned earlier in Table 5.4, more than half (1,098) of all the instructors have not received any pedagogical training at all while 297 and 699 of them received basic and advance training. Furthermore, instructor deployment is also a challenge and has resulted in few qualified instructors, especially women in disadvantaged areas. The proportion of women instructors in TVET remains low at 42.6% overall, with 38% in provinces while the majority of instructors (66%) in urban areas are women.

Third, low quality and relevance of standards, curriculum, and assessment. Teaching and learning specialized skilled require minimum service standards for basic inputs such as laboratories, workshops, and equipment. Lacking these

standards exacerbates inequities in teaching and learning quality across Cambodia's TVET Education. Limited innovative teaching strategies, and infrequent review and alignment of curriculum content to the skills needs of students. The absence of a clear learner assessment framework to measure student learning, identify least learned skills and analyze underlying factors affecting poor learning outcomes precludes improvements in content and pedagogy. The TVET system has no strong links to private sector partners that could improve labor market relevance. Additionally, TVET students have limited access to opportunities for experiential learning, career guidance, and additional learning resources. The Ministry of Education, Youth and Sport (MoEYS) and Ministry of Labor and Vocational Training recognizes the need to use ICT in teaching and learning, but the government has yet to prepare a clear implementation plan to inform related investment and training.

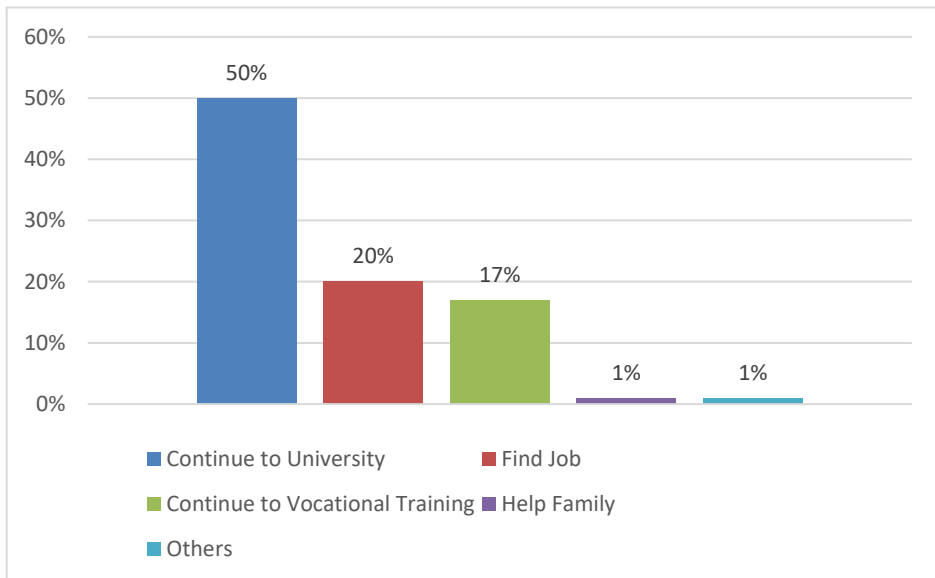
Fourth, lacks of skill level of labor force. The problem of skills has become apparent (ADB, 2015; Sothy et al., 2015) According to two Employers Skills Need Surveys, are of which one was conducted in 2012 and the other in 2014, employers have shown that they face the problem of skills shortages and skills gaps. Skill shortages happen when there is lack of applicants with the right skills for the job and it causes difficulties in recruiting staff; whereas, skills gap happens when the existing workforce lacks skills at the required level for completing the job or task (Bruni et a., 2013). From the two surveys, there are four main skills among first-time job seekers reported to be lacking among workers by the employers: (1) technical and practical skills, (2) job-specific skills, (3) foreign language skills, and (4) basic computer literacy. Skills gaps are found mainly in some occupations including plant and machine operations, technician and associate professionals, elementary occupations, and services and sales workers. Hence, skills that need to be improved reported by the employers include job-specific tasks, foreign language skills, teamwork and

oral communication, problem solving, and manual dexterity. The employers perceived a variety of negative impacts caused by this skills problem. The major four are: delays in developing new products or services, increase in workload for other staff, loss of business to competitors, and difficulty in meeting customer service objectives.

Last but not least, lack of value attributed to TVET. Some people value only higher education (university) which causes the low enrollment in TVET. Up to the present, a number of educational institutions have not yet widely provided guidance to students on choice of learning as well as the promotion of importance of TVET. The negative perception which is common throughout ASEAN viewed TVET as “second chance” and/or “second rank” education for the poor, marginalized group, and school dropped out youth. This also poses a big challenge on TVET enrollment to train workforces for existing and new growing industries.

According to the result of a research which was done by Korea Research Institute for Vocational Education & Training (KRIVET) in 2010, there were 17% of respondents who planned to choose Vocational Training Institution while 50% and 30% continued to universities and find jobs respectively (see Figure 5.4). This research was done by asking students about their future plan after finishing high school.

Figure 5.4: Student's Future Plan after High School



Source: KRIVET, 2010

5.3 Official Development Cooperation in Cambodia

Since the early 1990s, the major source of external finance has been in form of Official Development Assistance (ODA), which has made a significant contribution in supporting national development as well as transformed the country's human and national capacity, business environment, and social welfare. Since 2008, actual disbursements have risen from USD 979 million to USD 1.35 billion in 2017 (see Figure 5.5 below). Despite constraints on public resource availability in donor countries, disbursements in 2017 for Cambodia show an increase of 9% compared to a year earlier. As shown in Figure 10 below, there was steady growth in annual disbursement since 2010. In 2012, the total disbursement peaked at USD 1.5 billion. Later, the disbursement gradually fell to USD 1.45 billion in 2014 and USD 1.21 billion in 2016. However, according to estimated disbursement, the total ODA disbursement bounds back to USD 1.35 billion in 2017.

Figure 5.5: Total ODA Disbursement 2008-2018 (in USD Million)

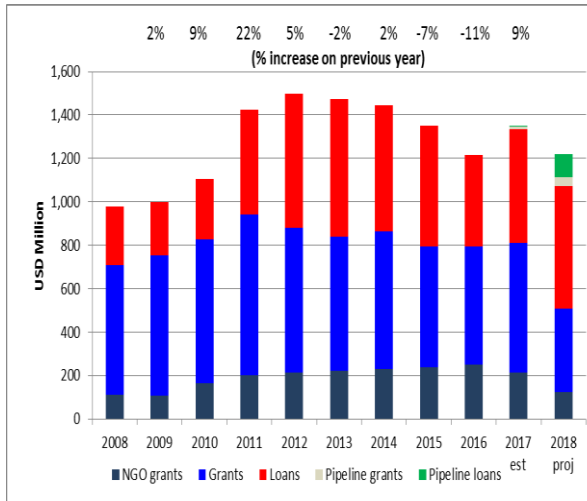
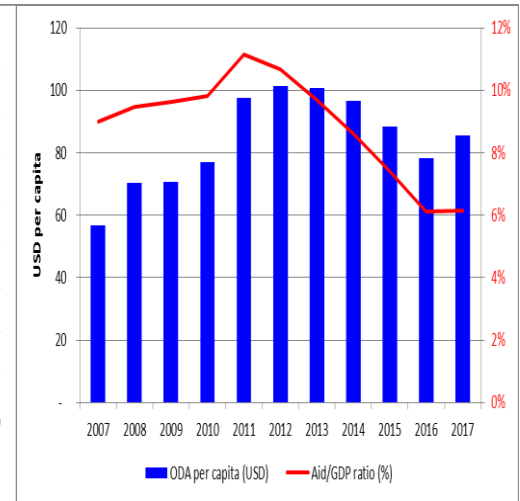


Figure 5.6: ODA per capita and Aid/GDP ratio 2007-2017 (in USD per capita)



Source: Development Cooperation and Partnership Report, 2018

The initial growth of total ODA disbursement in 2010 was driven by grants, but later, there was uptick in loan proportion that elevated the disbursement to peak in 2012. Loan disbursements continued to rise until 2013, were greater than ODA grants for the first time, and then subsequently decreased from USD 583 million in 2014 to USD 420 million in 2016. Event though, there was no sharp fluctuation in disbursement of grant (DP and NGO) in the period 2012-2017 while DP grants surges by USD 50 million in 2017, leading to expansion of grant proportion in total ODA disbursement by 10% compared to a year earlier.

Figure 5.6 reveals the broad trends of development cooperation provision and the relative importance of these resources in contributing to national development. The aid per capita ratios had increased from 2007, reaching over 1 billion per capita in 2012. However, the ODA/GDP ratio has fallen from 10% in 2013 to 6% in 2017, as GDP growth has remained robust while development cooperation has leveled off. The broad downward trend in the ODA/GDP ratio highlights, however, that, as Cambodia moves towards middle-income status, aid dependency is likely to be reduced as ODA's relative share of financing in

national development declines even as actual aid volumes may remain stable or even increase. Although, the downward trend in aid delivery to Cambodia, shown in Figure 10, there is a strong and continued commitment of the international community to support Cambodia's development priorities.

5.3.1 ODA Disbursement by Development Partners

To further explore the growth of total ODA disbursement to Cambodia, Table 10 lists the total disbursement figure of all development partners between 2008 and 2018.

Out of USD 1.21 billion provided by the Development Partners in 2016, USD 224 million was provided by China, which has been Cambodia's single largest provider of external cooperation since 2010 despite a sharp drop in 2017 disbursement (associated with large capital project implementation). Disbursement by UN agencies and NGOs (core funds) is completely grant (except for IFAD's loan to Agriculture sector), and in 2017, disbursement by UN agencies increases by USD 13 million. International Financial Institutions (IFIs) indicate substantial growth as disbursement between 2016 and 2018 increases by USD 110 million.

There were fluctuations in disbursement among European partners as some donors have reduced and ceased their disbursement totally. Nonetheless, active donors like EC, France, Germany and Sweden are disbursing more money in 2017. Japan continues to be a major provider of support, trending upward over the period to disburse USD 126.4 million in 2017 while Korea has also increased markedly in the period from USD 33 million in 2008 to USD 51.2 million by 2017. Increases from these partners, as well as from ADB, are mainly in the form of soft loans, which explains the share of loans rising to over 50% of external funding.

Table 5.5: Total ODA Disbursement by Development Partners 2008-2018 (in USD Million)

Development Partners	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017 (Est.)	2018 (Proj.)
UN AGENCIES											
Total Programmes Delivered	118.8	148.9	114.0	89.5	88.1	-	107.2	93.7	93.4	-	-
Total Own Funds Disbursed	73.2	101.8	73.9	56.5	53.7	49.8	53.9	47.2	63.2	76.3	57.0
Multilaterals											
World Bank	41.7	60.4	56.9	73.8	66.0	35.5	50.6	17.6	20.1	39.7	54.2
Asian Development Bank	145.7	89.4	75.4	126.9	82.0	171.4	129.8	137.2	109.9	146.0	181.2
GAVI Alliance	-	1.7	3.6	6.7	4.9	10.7	5.5	19.0	10.2	10.9	9.2
Global Fund	38.6	46.5	61.2	60.2	20.1	45.4	54.6	33.3	28.2	71.7	-
Sub-Total UN & Multilaterals	299.2	299.7	270.9	324.1	226.8	312.8	294.4	254.3	231.5	344.6	301.6
EUROPEAN UNION											
European Commission	48.4	49.4	32.9	61.0	41.6	36.6	70.3	55.8	56.0	59.8	26.7
Czech Republic	0.0	-	-	-	-	-	1.2	1.2	1.3	1.2	-
France	29.8	25.4	22.4	19.5	24.8	17.8	59.5	63.3	31.9	103.3	40.6
Germany	36.6	27.9	35.3	43.7	44.6	34.3	29.8	25.8	48.4	36.5	29.7
Ireland		0.7	0.7	0.7	0.3	1.2	0.7	0.6	0.6	1.3	1.3
Sweden	15.9	22.8	24.7	28.6	30.2	33.8	33.0	21.8	30.1	20.3	13.0
United Kingdom	29.6	32.6	24.7	34.2	28.2	13.7	0.1	0.2	1.6	2.3	0.3
Other EU Member States	30.7	41.9	52.0	48.3	18.2	9.9	6.0				
Sub-Total: EU partners	191.0	200.7	192.7	236.1	187.9	147.3	200.6	168.7	169.8	224.6	111.6
Other Bilateral Donors											
Australia	49.1	47.8	63.4	78.2	79.5	59.3	64.9	55.9	51.9	56.3	41.3

Canada	11.5	16.7	12.8	18.5	20.5	11.8	5.7	3.8	3.0	1.6	0.7
China	95.4	114.7	154.1	332.0	460.7	436.6	347.8	339.4	265.3	223.5	251.4
Japan	126.4	134.0	140.0	114.4	172.3	130.8	111.4	110.4	119.7	126.4	168.0
New Zealand	2.8	2.3	5.2	4.4	3.8	3.2	6.0	4.9	4.0	5.3	5.5
Republic of Korea	33.0	15.8	35.2	45.3	46.2	50.1	80.3	61.7	31.9	51.2	24.6
Switzerland	3.9	3.0	3.1	4.5	4.3	7.8	11.8	13.0	15.8	13.8	10.0
United States of America	55.7	56.9	63.3	64.4	85.0	93.5	91.6	101.0	71.1	76.0	35.7
Sub-Total: Other	377.6	391.3	477.2	661.8	872.3	793.1	719.6	690.0	562.6	554.2	537.2
NGOs (core funds)	110.8	108.5	165.0	200.7	212.3	220.8	230.7	237.7	250.3	211.3	122.7
Pipeline Projects										14.2	147.2
Grand total	978.5	1000.2	1105.8	1422.6	1499.2	1473.9	1445.2	1350.7	1214.2	1348.9	1220.3

Source: Development Cooperation and Partnership Report, 2018

Most other major development partners maintained a relatively flat trend in their support with the exception of ADB, which was more volatile due to the nature of the large infrastructure projects that it has funded. By 2013, the programmes of development partners that had discontinued their bilateral cooperation with Cambodia – Canada, Denmark, UK with Spain to follow – began to close.

5.3.2 ODA Disbursement by Sector

In terms of long-term trends in sector support, Social Sector received the biggest share with USD 469.7 million, accounting for 39% of total ODA disbursement, followed by Infrastructure Sector around 29% while Economic and Cross-cutting Sector received 19% and 13% share, respectively. Social sector support traditionally commanded the greatest share of development cooperation, peaking at USD 567.5 million in 2011 before declining to USD 459.4 million in 2013.

A review of sector trends (Table 11) shows that the most significant increase in recent years has been to the infrastructure sector, notably to the transportation sub-sector (principally roads, also rail, water and air). External support to transportation has increase from USD 161.9 million in 2008 to 216.6 in 2017. China, Japan, ADB and Korea are the main partners supporting this sub-sector. Elsewhere, the share of support to economic sector expands significantly from USD 235 million in 2016 to USD 302 million in 2017. The increase is due to more funds disbursed to support agriculture (which has more than doubled from USD 46.1 million in 2008 to USD 181.7 million in 2017), banking service, and urban management. The increase in aid to this sector is well aligned to support the Royal Government Policy on the Promotion of Paddy Production and Rice export.

Table 5.6: Total ODA Disbursement by Sectors 2008-2018 (in USD Million)

Sectors	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017 (Est.)	2018 (Proj.)
Social Sectors											
Health	136.7	161.8	211.4	205.3	203.0	203.2	204.8	203.7	209.3	213.8	102.0
Education	100.5	95.5	115.6	154.6	135.3	140.4	167.1	174.9	171.3	148.2	90.3
HIV/AIDS	57.9	56.3	46.4	69.4	33.5	34.7	45.8	30.2	23.2	32.2	6.4
Community & Social Welfare	51.7	54.5	58.9	138.2	136.4	81.1	84.8	98.6	65.9	53.9	36.5
Sub-Total	346.8	368.1	432.3	567.5	508.2	459.4	502.5	507.4	469.7	448.1	235.2
Economic Sectors											
Agriculture	46.1	80.9	90.4	144.9	185.4	184.4	218.1	171.0	142.0	181.7	173.9
Rural Development	56.8	64.4	67.8	48.6	81.3	77.0	85.5	93.6	67.6	74.8	73.9
Manufacturing, Mining & Trade	24.5	11.1	9.0	13.4	11.4	11.1	3.2	4.5	5.3	18.3	1.3
Banking and Business Services	44.9	12.8	30.9	73.1	4.0	43.8	14.3	27.0	14.0	14.8	4.5

Urban Planning Management	4.5	16.1	10.9	2.7	11.9	0.3	6.6	7.4	6.0	12.1	24.1
Sub-Total	176.8	185.3	209.0	282.7	294.0	316.6	327.7	303.5	234.9	301.7	277.7
Infrastructure Sectors											
Sectors	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017 (Est.)	2018 (Proj.)
Transportation	161.9	180.3	184.7	271.2	383.6	379.0	309.4	286.8	164.3	216.6	226.3
Water and Sanitation	25.5	17.3	24.4	36.1	52.3	59.3	63.7	37.8	39.0	75.7	37.5
Energy, Power and Electricity	32.8	21.7	41.5	57.3	66.7	59.9	66.5	54.8	138.8	88.6	136.1
Information and Communication	7.1	7.5	1.8	0.2	1.3	3.0	10.8	5.0	12.5	0.9	-
Sub-Total	227.3	226.8	252.4	364.8	503.9	501.2	450.4	384.4	354.6	381.8	399.9
Cross-cutting Sectors											
Gender	5.5	5.2	6.0	6.4	8.7	9.8	8.5	6.1	6.4	3.8	2.3
Tourism	5.0	6.0	4.0	2.2	0.8	0.7	0.6	1.8	1.4	17.2	9.8
Environment and Conservation	16.7	11.5	36.8	18.1	14.2	24.3	26.8	33.1	29.5	19.0	16.5
Climate Change	-	9.1	5.3	5.9	7.3	8.8	7.0	7.7	8.1	11.3	14.5
Culture and Arts	6.3	5.9	6.2	4.3	4.6	4.6	5.5	6.2	3.8	4.6	39.7
Governance and Administration	118.5	126.0	113.5	111.9	100.7	117.7	84.3	77.8	101.7	83.1	53.1
Budget and BoP Support	21.9	20.5	0.3	0.3	14.8	-	-	-	-	-	-
Emergency and Food Aid	16.0	11.1	14.8	25.5	25.0	19.3	25.2	14.8	1.3	0.3	-
Sub-Total	189.9	195.3	186.9	174.6	176.1	185.2	157.9	147.5	152.2	139.3	135.9
Others	37.5	24.6	25.1	32.9	17.0	11.6	6.9	7.8	2.9	63.8	24.5
Pipeline Projects										14.2	147.2
Grand Total	978.3	1,000.1	1,105.7	1,422.5	1,499.2	1,474.0	1,445.4	1,350.6	1,214.3	1,348.9	1,220.4

Source: Development Cooperation and Partnership Report, 2018

From 2015 to 2006, total disbursement fell by 10%, and there was reduced disbursement in all sectors. However, as total disbursement recovers in 2017, the growth does not appear in social and cross-cutting sectors. Instead, projected disbursement in 2018 illustrates deeper reductions in these sectors.

5.3.3 ODA Supports to TVET and Higher Education in Cambodia

The education sector has also received increased support and its share of total ODA increased from USD 100.5 million in 2006 to USD 171.3 million in 2016. The portfolio of on-going TVET and higher education projects (including scholarships and technical volunteers), as shown in Table 12, amount of USD 288.74 million with an annual disbursement ranging between USD 26-32 million in the period 2015-2017. Resource devoted to TVET as perhaps rather low, only USD 7.9 million in 2017, with Japan and ADB being the most active development partners. More encouraging is that 9 partners are active in the TVET field and, with an increased coordination and mobilization by responsible ministries, there is some potential to increase collaboration in this important area.

Table 5.7: Development Partner funding to TVET and Higher Education (in USD Million)

	Total Budget	2015	2016	2017
Higher education				
Czech Republic	0.21	0.04	0.12	-
France	10.69	0.82	0.68	0.41
Japan	14.04	3.51	0.64	0.67
Republic of Korea	5.28	-	0.58	4.13
Sweden	0.13	0.01	0.04	0.04
UK	0.31	-	-	0.20
UNESCO	0.03	0.02	-	-

World Bank	11.50	1.79	-	-
Total Higher education	42.18	6.20	2.06	5.45
Scholarships				
Australia	70.74	6.15	5.53	5.67
Canada	0.98	0.09	0.16	0.16
France	8.31	0.39	0.52	0.40
Japan	21.98	1.99	3.00	1.68
New Zealand	24.45	2.61	1.95	3.14
Total Scholarships	126.47	11.23	11.16	11.06
Technical volunteers				
Japan	17.74	2.77	2.28	2.41
Total Technical volunteers	17.74	2.77	2.28	2.41
TVET				
ADB	55.95	5.67	1.18	2.83
EU/EC	1.86	0.42	0.31	0.20
France	3.26	-	2.91	-
	Total Budget	2015	2016	2017
ILO	1.28	0.28	0.41	0.58
Japan	24.81	3.45	3.84	3.35
Sweden	6.25	1.08	1.05	1.37
Switzerland	10.70	0.66	1.48	2.17
UK	0.06	-	0.01	0.03
USA	1.00	0.40	0.20	0.20
Total TVET	105.17	11.95	11.39	10.72
Grand total	291.57	32.14	26.89	29.64

Source: Development Cooperation and Partnership Report, 2018

In recognition of the importance of promoting technical and vocational education at training (TVET), Ministry of Labor and Vocational Training has approved a National TVET Policy (2017-2025) in June 2017 that elaborates a

strategic framework within which the TVET system will be improved and long-term development programs would be designed. It establishes the priorities and action plans to improve the TVET system as well as provides a platform to engage key stakeholders. The support to TVET has been well aligned with the government priorities that has been set out in Industrial Development Policy (IDP).

5.3.4 Utilization Patterns of Aid in the TVET Education

The tranches of Development Partner support have allowed an expansion of the TVET education expenditures in respect of instructional materials, TVET institution operations, facilities, rehabilitation and maintenance and instructors deployment, production and development. The completed tracking study (funded by ADB) and other analytical work supported by the Japan, is helping to build confidence about the established financial management arrangements for the sector. In recent years, a further consideration was given to the learner assessment, competency-based assessment and certification system and the involvement of private sector. These considerations have been visualized by Development Partners in different project over the past years as shown in Table 5.8.

Table 5.8: Development Partners funding to TVET

Development Partners	Project Title	Years
ADB	Technical and Vocational Education and Training Sector Development Program	2015-2018
	Skills for Competitiveness Project	2019-2025
Canada	Partnerships for Community Development	2015-2020
Czech Republic	Fostering transition to employment for youth	2019-2021
EU/EC	Breaking the Cycle of Youth Marginalization and Vulnerability in Rural Communities in Cambodia	2015-2018
ILO	Scaling-up STED: Skills for Trade and Economic Diversification	2015-2017

	Enhanced employability of men and women through improved skills development and public employment services	2018-2019
Japan	Project for Improving TVET Quality to Meet the Needs of Industries	2015-2019
	The Project for Strengthening Engineering Education and Research for Industrial Development in Cambodia	2018-2024
Republic of Korea	Establish of Industry-Academia links-based Business Incubating System in Cambodia	2019-2023
	Science & Technology Support Program: Institute Cooperation	2009-2017
Sweden	Academy of Culinary Arts Vocational Training	2015-2018
	Academy of Culinary Arts Vocational Training phase II	2018-2020
	Skills Development & Employment for Youth	2017-2019
Switzerland	Poverty Reduction through Skills Development for Safe and Regular Migration in Cambodia (Lao PDR, Myanmar, Thailand and Vietnam) Inception phase	2017-2021
	Research, Policy Dialogue and Capacity Building Program on Technical and Vocational Education and Training	2017-2020
	Skills Development Programme Cambodia	2016-2020
	UN Joint Program on Youth Employment	2017-2019
UK	Discovering STEM careers through TVET: Promoting TVET paths to STEM careers through a publication, mentoring program and events.	2019-2020
	Promoting and increasing the understanding of TVET (Technical and Vocational Education & Training)	2018-2019
World Bank	Higher Education Institutions Capacity Improvement Project - IDA Credit No. 62210	2018-2024

Source: CDC ODA Database

These projects are designed to contribute to the RGC's strategies and other development partners' willingness in reducing poverty and achieving socio-economic development for Cambodia. These include (1) promotion of vocational and skill training to ensure continuing improvement in national productivity; (2) creation of jobs in the formal and non-formal sectors; (3) an increase in agricultural productivity to create jobs in rural areas; (4) the establishment of technical vocational education and training networks to assist

both men and women, especially the poor, disabled and vulnerable, to respond to labor market needs.

5.4 Survey Responses to Development Cooperation Aid Program

The section analyses the institution director and instructor’s responses to the Development Program in their institutions. The discussion focuses from the beginning of the years when the institutions started receiving the supports.

5.4.1 Form of Development Cooperation Aid to TVET Institutions

Most of the TVET Institutions in the study area received the Development Cooperation aid in the form of grants while there are some under the support in the form as loan. Five of the eight institutions in the study area namely, National Polytechnic Institute of Cambodia, Preah Kossamak Polytechnique Institute, Cambodia-India Entrepreneurship Development Institute, Cambodian-Thai Skill Development Center and JVC Technical School & Workshop had received curriculum materials under the aid program. Three schools such as Regional Polytechnic Institute Techo Sen in Kampot, in Battambang and in Siem Reap also received the infrastructure materials and had built their double stories building that catering to the needs for staff room, storage, library and classrooms (Table 5.9).

Table 5.9: Forms of Aid Program received by the Institutions in the Study Area

Form of Aid	No. of Institutions received	% Schools
Grants	8	100.0
Curriculum Materials	5	62.5
Infrastructure Provisions	3	37.5

Source: Researcher’s TVET Institutions Survey, 2019

The distribution patterns of the aid raised some concerns for the institutions in the province. The criteria used by the Ministry of Labor and Vocational Training regarding the supervision and the distribution of the aid to TVET Institutions were questioned by the instructors. Many opined that it would have been meaningful if the priority for the aid would have been given to the institute in the provinces since they lack of infrastructure facilities such as classroom, dormitory, workshop, storage facility and library.

As one director from one of the institutions in the study area mentioned:

“We’ve heard of the support from JICA but we have not yet received it. I’ve heard that some institutions in Siem Reap Province have received many supports while our school haven’t received it yet. Those school are much better than us since they have received assistance from not only Japan but also AUSAID. We are unfortunate since we did not receive much of these assistances. We are still left out and this was a drawback in terms of education development in our province.”

This reflects the concern over the aid distribution patterns in the TVET Institutions.

5.4.2 Responses from TVET Institutions

This section deals with various responses received from the institutions on the aid on TVET Education.

5.4.2.1 State of the Institutions

There is wide disparity in the institutions in the study area. The table 5.10 below shows the educational disparities in the study areas.

Table 5.10: Selected Educational Indicators in the Study Areas

Institutions	Gender of Institution Director	Student Enrollment	Total Instructors	Instructor-Student Ration	Total Trained Instructors	Trained Instructors – Students Ration
National Polytechnic Institute of Cambodia	M	1,406	66	1:21.3	43	1:32.6
Preah Kossamak Polytechnique Institute	F	4,180	105	1:39.8	56	1:74.6
Cambodia-India Entrepreneurship Development Institution	M	1,309	53	1:24.7	29	1:45.1
JVC Technical School & Workshop	M	309	15	1:20.6	6	1:51.5
Cambodian-Thai Skill Development Center	M	666	29	1:22.9	16	1:41.6
Regional Polytechnic Institute Techo Sen in Kampot	M	1,886	26	1:72.5	20	1:94.3
Regional Polytechnic Institute Techo Sen in Battambang	M	2,802	94	1:29.8	67	1:41.8
Regional Polytechnic Institute Techo Sen in Siem Reap	M	1,956	58	1:33.7	36	1:54.33
Total Number of Institution received		14,514	446	1:32.5	268	1:54.1

Source: Technical and Vocational Education and Training Statistic, 2018

As mentioned earlier, eight TVET institutions were taken for the study. Indicators such as genders disparity, instructor – student ratio were taken to have a comparative analysis among the institutions. In terms of gender of principle in institutions only one school was female – headed institution while the other institutions in the area had male director. In five institutions namely, National Polytechnic Institute of Cambodia, Cambodia-India Entrepreneurship Development Institution, JVC Technical School & Workshop, Cambodian-Thai Skill Development Center, and Regional Polytechnic Institute Techo Sen in Battambang, the instructor and student ratios were low, suggesting that they

were better off in terms of staffing compared to other institutions in the study area. The staffing situation was worse in Regional Polytechnic Institute Techo Sen in Kampot where the instructor student ratio value was as high as 1:72.5. Similarly, in terms of trained instructor – student ratio, the institutions such as National Polytechnic Institute of Cambodia, Cambodian-Thai Skill Development Center, Regional Polytechnic Institute Techo Sen in Battambang and Cambodia-India Entrepreneurship Development Institution were better off. Regional Polytechnic Institute Techo Sen in Kampot, JVC Technical School & Workshop, Preah Kossamak Polytechnique Institute and Regional Polytechnic Institute Techo Sen in Siem Reap were worse – off in terms of availability of trained instructors.

5.4.2.2 Awareness of the Aid Program in the Institutions

The study found greater public knowledge or awareness by the institution directors and instructors on the Development Aid to the institutions. The obvious reason of the awareness was that some of them were signatories to schools account to which the school grants were deposited into. Many acknowledge the aid program during the staff meetings in which they were briefed of their schools' meeting and financial reports. As shown in Table 5.11, of all the total respondents, 92.8% percent had indicated that they were aware of the aid for the schools. A small proportion of respondents were unaware of the aid package because they did not participate in the aid project and inaccessibility to modern communication.

Table 5.11: Awareness of the Development Aid

Category of respondents	No. of respondents	Yes	% Yes	No	% No
Institution Director	9	9	100	0	0
Instructor	74	68	93.2	6	6.8
Total	83	77	92.8	14	7.2

Source: Researcher's TVET Institutions Survey, 2019

In some school, the instructors did a great job. They undertook the supervision work on the infrastructure construction in their institutions. This was noticed in Regional Polytechnic Institute Techo Sen in Battambang and in Siem Reap. These three institutions are fortunate to received infrastructure grants from the aid. While in some institutions class instructors are already using the newly produced standard curriculum materials that were produced under the TVET Development Projects.

5.4.2.3 Institutions Director Response on School Improvement

The response of the Director and Deputy Director on the improvement in the institutions widely varied. Six out of eight of the institution directors responded that they have seen improvement in the curriculum materials in their institutions while 37.5 percent of the directors said there was improved infrastructure in their institutions (Table 5.12). Only 12.5 percent said that there was an improvement in the Internship Programs. This show that, most of the institutions area does not have any Internship Program which are very important to strengthen and improve the involvement of the employers in TVET delivery.

Table 5.12: Response of Institution Directors towards institution improvement

Institutions	Curriculum Materials	Better Physical Infrastructure	Internship Program
National Polytechnic Institute of Cambodia	✓	-	✓
Preah Kossamak Polytechnique Institute	✓	-	✓
Cambodia-India Entrepreneurship Development Institution	-	-	-
JVC Technical School & Workshop	✓	-	-
Cambodian-Thai Skill Development Center	✓	-	-
Regional Polytechnic Institute Techo Sen in Kampot	-	✓	-
Regional Polytechnic Institute Techo Sen in Battambang	✓	✓	-
Regional Polytechnic Institute Techo Sen in Siem Reap	✓	✓	-
Total Number of Institution received	6	5	1
% Institution Received	75	37.5	12.5

Source: Researcher's TVET Institutions Survey, 2019

5.4.2.4 Level of Difficulties in Accessing Development Aid

The Institution Director of eight institutions responded differently to questions how they access the aid for their respective institution. Nearly 62.5 percent of the institution directors responded that it was difficult in accessing the development aid while the other 37.5 percent stated that they found easy to access for their schools (Researcher interview, 2019). They also stated that access to aid was a time-consuming process.

5.4.2.5 Level of Community Support and Participation

Although the need for primary education is high in the communities or provinces, their support and participation are institutions development in the study area is crucial. This needs to be looked at by both the institutions administration and the community leaders. Of eight institutions in the study area, 62.5 percent of the institution director stated that there was weak participation by the community. Another 12.5 percent had indicated that there was a medium level of community participation in their institutions. Only one-third of the institution directors responded a very strong support from the community towards their institution. According to the Ministry of Labor and Vocational Training (Researcher interview, 2019) the study area has done well as compared to other areas in terms of community participation. Overall there is poor community support and participation in school development.

Table 5.13: Institutions Director’s Response to Level of Community to the Institutions

Category	% of responses
Strong	25
Medium	12.5
Weak	62.5
Total	100.0

Source: Researcher’s TVET Institutions Survey, 2019

There are several reasons for the poor community participation in the study area. One instructor observed that the poor community participation was due to lack of trust and confidence on the institution administration. According the him, the institution administration lack of accountability and transparency in handling institutions affairs. As a result, there is withdrawal of community

support from the institutions development. In another institution, an instructor responded that there is lack of coordination, and consultation between the institution director and the community.

In some areas, the communities have wrong notion and perception toward development aid. The communities think that aid is nothing else but just money. So, if there is aid, there is money to pay for people to do their jobs required by the institutions. So, to them, there should be no free labor. They think that someone would be contracted to do the job on their behalf because there is money coming from the aid program. This creates the dependency mentality and attitude of replying on others and money for a job to be done. This attitude also contributes to low level of community participation in some areas.

5.4.3 Problems in Development Aid to Institutions

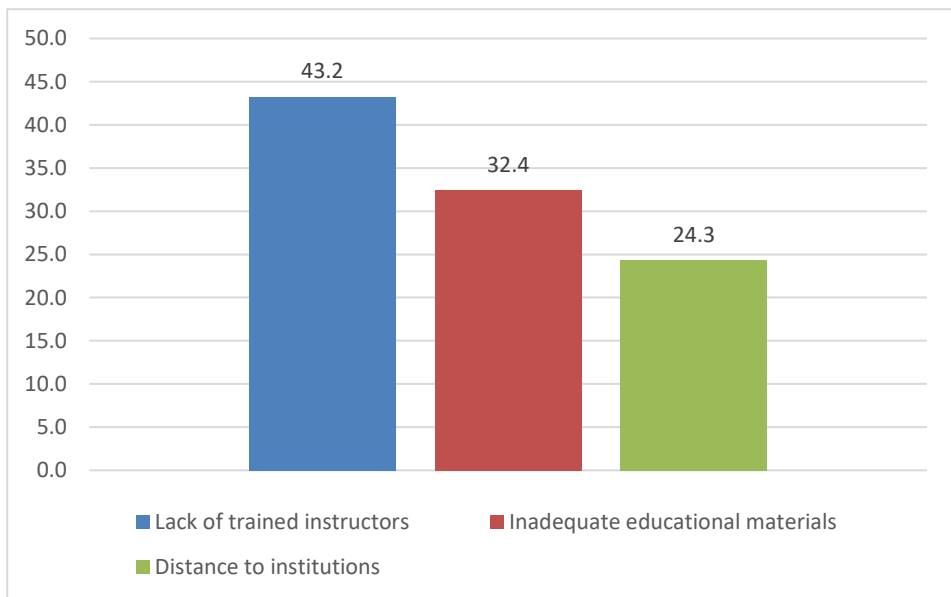
The development aid has improved the infrastructure facilities and curriculums materials in some institutions. However, there are some institutions still face many problems. The responses from the instructors give a picture of the problems that they see still exist in the institutions.

The instructor perspective on the problems encountered was very interesting. Inadequate educational resources and lack of trained instructors in the institutions and the distance from rural areas to the institutions are some of the problem observed by the instructors. Of total respondents, 43.2 percent indicated that there are still inadequate educational materials exist in the institutions. Some institution directors stated that one of the contributing factors to this problem was the undercounting of student number in the institutions by the staff of Provincial Department of Labor and Vocational Training. Another factor is that two of the institutions in the study area had not received the curriculum materials (Table 5.12). The other issue was the distance traveled by the students to and back from institutions. About 32.4 percent of the instructors

indicated that the distance from village to institutions was a major concern. This means that the institutions are located far away from the villages and it makes accessibility to TVET education a problem for the rural students. Another 24.3 percent of the respondents stated that the lack of trained instructors was a problem in the institutions (See Figure 5.7).

The issue of instructors training is critical for TVET development. Although one of the components of the Development Partners Aid was to improve the TVET instructors training, there is still inadequate trained instructor in the TVET institutions. In this respect the development aid has been ineffective and not achieving its intended goals. Instructor training in fact takes two or three years to meet the necessary requirements for someone to be a qualified-instructors.

Figure 5.7: Instructor Response to Problems in Development Aid



Source: Researcher's TVET Institutions Survey, 2019

5.4.4 Positive Impacts of Development Aid on TVET Education

An assessment of impacts of aid is difficult because nature of the projects differs from place to place in Cambodia. The effectiveness of development cooperation in TVET, however, was measured in terms of timing of supports, distributions, improvement in infrastructure and availability of educational resources including new curriculum materials in institutions. Enrollment pattern also reflects aid impacts. The study finds that despite failure in some fronts, the development aid has contributed significantly to the development of TVET education in Cambodia. This was evident from respondents' responses. About 56.6 percent of all respondents had indicated that the Development Aid was effective in addressing the education needs of the community while 43.4 percent responded negatively (See Table 5.14).

Table 5.14: Response towards effectiveness of Development Aid in TVET Education

Category	No. of respondents	Response YES	%	Response NO	%
Institution Director	8	5	62.5	3	37.5
Instructor	74	42	56.8	32	43.2
Total	83	47	56.6	35	43.4

Source: Researcher's TVET Institutions Survey, 2019

5.4.4.1 Institutions Infrastructure Improvement

There is a mixed response to the issue of infrastructure improvement. Out of eight institutions studied, only three have actually received the materials for the infrastructure improvement. These institutions include Regional Polytechnic Institute Techo Sen in Kompot, in Battambang and in Siem Reap Province. The other five institutions are yet to received their share of aid for the infrastructure

development. Nearly, 54.1 percent respondents said that the institution infrastructure has not been improved under the aid program (see Table 5.15).

Table 5.15: Response Towards Institution Infrastructure Improvement

Category	No. of respondents	% of respondents
Improved	34	35.9
Not Improved	40	54.1
Total	74	100.0

Source: Researchers' TVET Institutions Survey, 2019

5.4.4.2 Improvement in Course Materials

The instructor's responses on the improvement student's course materials in institutions under the development aid varies. About 64.9 percent of the respondents stated that there was improvement on the learning materials while 35.1 percent said that were not improvements at all. (Table 5.16).

Table 5.16: Response Towards Improvement of Course's Materials in Institutions

Category	No. of respondents	% of respondents
Yes	48	64.9
No	26	35.1
Total	74	100.0

Source: Researchers' TVET Institutions Survey, 2019

5.4.4.3 Student Enrollment

The student enrollment patterns also indicate the effectiveness of aid program. According to the institution directors of the eight institutions, there was a steady increase in the female student enrollment in the institution. The institution directors acknowledge that this increase in female students' enrollment was attributed to the commitment made by MoLVT and development partners for

TVET Education. The correct record of enrolment was however difficult to obtain from many institutions. Access to specific data on the female enrollment patterns before and after the development aid implementation was more difficult. Another factor obtained by the institution director was that the annual staff movement according to posting. It further hinders keeping of proper records in some institutions.

5.4.5 Negative Impacts of Development Aid

While there were some positive impacts of the ODA on TVET development in the study area, there were some negative impacts as well. One of the negative impacts of aid was that it creates a dependency mentality in the rural areas and at the national level. Some stated that there is money coming from overseas to get people to do the work required in the schools so people should be paid for their labor. At the national level, relying heavily on aid funding for TVET development is more dependent creating an ad hoc arrangement. The question remains how will the government continue to maintain and run the TVET Institutions when the aid is lapsed? Another area of failure is the development of educational resources particularly the curriculum materials. The Ministry of Labor and Vocational Training and the development partners need to look at more closely on curriculum development. The current TVET curriculum is giving more attention on some skills only like construction, electronics, mechanic and so on. The curriculum development under the aid program should be more need based and to be matched with the labor market.

5.5 Chapter Summary

The study has given some interesting but not surprising results on the state of TVET in Cambodia. There exist gender inequalities in the TVET Education sector throughout the country. The inequality exists in TVET institution headship, the ratio of male and female instructors and trained instructor –

student ratio. There are more male trained instructors compared to female instructors. There also existed high instructor – student ratios. The high instructor student ratios affect the quality of TVET education to a great extent.

The development aid on TVET education has been an integral part of education that promotes human resources development in Cambodia. It has taken a new shift. It has now focused on providing skilled to match with the labor market. The improvement in TVET education in Cambodia was one of the major objectives of the Development Partner’s assistance to TVET by supporting the Ministry of Labor and Vocational Training with immediate goal of re-establishing and maintaining the delivery of skilled to youth.

The survey responses of the Development Partner have shared some points to consider. While there are new infrastructure and new curriculum for TVET Institutions, the distribution patterns of aid raised some concerns for the remote schools. These schools felt deprived of having equal access to the aid program. The issue of access to education is critical as some schools were built away from communities and bad road conditions that hinder easy access for the youth. The Ministry of Education and the donor partners need to look at more closely on curriculum development which are to be more needed – based and also labor market.

Chapter VI: CONCLUSION AND RECOMMENDATION

The final chapter presents the discussion of core findings and policy implications drawn for this study. It ends with the recommendations for further research.

6.1 Discussion on Core Findings

TVET is essential and a major concern in human resources development. It empowers people to require more technical skills capable to access to employment. Most of the developing countries are unable to mobilize their own resources to fully cope with the growing demand for TVET. These countries use “development aid as an instrument in meeting growing educational resources demands. Like any other countries, Cambodia depend on the external sources of financing for meeting its education needs.

This study focused on the TVET Education and role of aid in its development in Cambodia. The objective of study was to assess the impact of ODA in supporting TVET sector in Cambodia.

With the support from development partners and related stakeholders, Cambodia has made impressive achievements towards national socio-economic development. However, development aid is still vital for Cambodia and the country continues to rely on aid to help in creating provision and further development of TVET for its citizens. Development aid is well defined as the aid given by bilateral government and multilateral agencies to support the socio-economic development. The most common type of foreign aid is ODA, which is assistance given to promote development and to combat poverty. However, the motives for giving aid vary widely. The main purpose of aid is development of the recipient country. Some donor countries often provide

foreign aid to enhance their own security while some for diplomatic recognition. Some donor countries however, provide aid to relieve suffering caused by natural or man-made disasters such as famine, disease, and war, to promote economic development, to help establish or strengthen political institutions, and to address a variety of transnational problem including disease, terrorism and other crimes, and destruction of the environment.

According to the Development Cooperation and Partnership Report (2018), aid from all donors to Cambodia was USD 1.34 billion, higher than a year before. This increase of ODA disbursement in 2017 is driven by growth in disbursement from UN agencies, IFIs, EUs, and Japan. ADB and France are major donor among their groups with combine disbursement accounting for 19% of total fund. Japan's disbursement was one tenth of total disbursement. Despite a sharp drop in 2017 disbursement, China remains the top external development partners, providing USD 224 million and representing 17% of total ODA disbursement in 2017.

Three levels of assessment were done to assess the impacts of Development Aid program in Cambodia. The assessment was done on the national level, provincial level, and at the TVET institutions level in the study area. Some of the indicators used in the study are state of TVET development, gender equality, instructor-students rations and quality teaching staff available in the institutions.

At, the national level, the study showed that there existed wide gender inequalities in TVET Education sector in the study area. Firstly, in terms of director in institutions, the data for male to female director ratio in the institute was nearly 7:1, which mean seven male directors to one female director. The trained instructor – student ratio in Cambodia as whole was 1:21. The trained instructor student – ration in the area was as high as 1:34. In the study area, has a higher ratio (1:32.5) suggesting an inadequacy in teaching staff available. The

proportion of trained and untrained instructors in the study area by gender gives a picture for gender imbalance in quality teaching staff. The study shows that among 44,806 there are only 996 instructors were trained. There were more male trained instructors (741 instructors) as compared to female trained instructors (255 instructors).

Disparities also existed at the TVET institution in the study area. In terms of gender of director in the institutions only one school was a female director. Among eight institutions, the instructor – student ratio in Regional Polytechnic Institute Techo Sen in Kampot were high as 1:72.5, suggesting that this school was worse while the other seven were better off. This suggests that one instructor is training 72 students in the institution. Similarly, in terms of trained instructor – student ratio, the institutions such as Regional Polytechnic Institute Techo Sen in Kompot and in Siem Reap, and Preak Kossomak Polytechnique Institute were worse off in terms of availability of trained instructors.

The development partners focused its policy in improving the TVET education sector in Cambodia. The volume of development cooperation aid from 2015-2017 ranged from USD 26-32 million. The support was provided in the funding for institutions, instructor training and development program, curriculum review and reform program and national infrastructure development program.

Institute responses from the study have raised mixed feeling on the development aid program. The study revealed that there was high public awareness of the aid program. All the institutions in the study areas received aid in the form of grants. Six out of eight institutions in study area had received curriculum materials under the aid program. Five institutions also received infrastructure material and had built new building catering the needs for classroom, staff room, workshop, library and storage. Although there is some aid received by the institutions in the study area, the distribution patterns of the

aid raised some concerns for the school in the province. These institutions lack infrastructure facilities such as classrooms, strong facility, library, educational materials and other learning resources as compared to the other schools.

Institution directors' response on school improvement under the aid program varied widely. Six of the institution directors responded that they have seen improvement in the curriculum material in their institutions while another 37.5 percent of them said there was improved infrastructure in their institutions. Only 12.5 percent said that there was an improvement in the Internship Programs. These differences are primarily due to the pattern of dissemination of different tranche of development partners to TVET institutions. The institution directors responded differently to questions – how they access the aid for their respective institutions. Nearly 62.5 percent of institutions director responded that it was difficult in accessing the development aid while 37.5 percent stated that they found easy to access the development aid for their institutions.

The study analyzed the extent of community participation in institution development. The level of community support and participation to educational development in the study area varied widely. Of the eight institutions in the study area, 62.5 percent of the institution directors stated that there was weak participation from the community. Another 12.5 percent had indicated that there was a medium level of community participation while 25 percent of the institution's directors responded a very strong support from the community toward their institution development

The development aid has improved the infrastructure facilities and curriculum materials in some institutions. However, other schools still face problems such as inadequate educational resources, and lack of trained instructors.

The effectiveness of development aid in TVET education was measured in terms of timing of grants, distribution, improvement in infrastructure and availability of educational resources including new curriculum materials and internship programs in the institutions. Enrollment patterns also reflected the impact of the aid program. The study shows that despite some failures, development cooperation has contributed significantly to the development of TVET education in Cambodia. About 56.6 percent of respondents had indicated that the development aid was effective in addressing the TVET education needs of the community while 43.4 percent responded negatively.

There is a mixture of responses from the instructors to the issues of infrastructure. 52.1 percent of respondents said that the institution infrastructure has not been improved under the aid program.

Regarding the course materials in the institutions under development aid program, the responses are greatly improved. About 64.9 percent of the respondents stated that there was improvement on the learning materials while 35.1 percent said that there was no improvement at all.

The student enrollment patterns also indicate the effectiveness of the aid program, according to all the institution directors. They observed that there was a steady increase in female enrollment in their institutions. The directors acknowledged that the increase in the female student enrollment was attributed to the commitment made by the government and development partners.

The state of TVET education in the study area could be assumed in other provinces as well. The impacts of the development aid projects on education development especially on TVET education are clearly noticeable. On the positive side, there were new infrastructure development, new curriculum materials production and increase in the enrollment in the institutions. On the other side, there exists inequality in terms of distribution of aid to TVET

institution in the study area. Aid dependency is worrying concern in the study area. The government needs to relook at the curriculum development that is used in the institutions to address the needs of the society and not just keeping the institutions temporarily. Community participation is critical. The study shows it is limited or lacking in the study area. For the effectiveness of aid programme, the community participation is most needed. Awareness campaigns are required for community involvement and the role of NGOs, government and private sector in this regard is crucial.

6.2 Recommendations

For aid to continue effectively in providing quality education that would in turn empower people to contribute effectively to the process of development, some issues are to be addressed. There us need for policy intervention by the government.

6.2.1 For the Government

The following are some issues for the government to consider in improving the TVET education needs of the people in Cambodia.

Firstly, there is a need addressing the inadequate staffing and providing adequately trained instructors in improving the quality TVET education in the provinces in Cambodia. By doing so, the government to focus on strengthening and improving the National Technical Training Institute (NTTI) to introduce competency-based, pre- and in-service TVET instructor training and instructor assessment. This could provide inclusive assessment tools for understanding, deliver and evaluation the training.

Secondly, the instructor education policy in the TVET institutions needs to be re-looked at. It seems that while the TVET education infrastructure and curriculum materials have been improved through the support from

development partners, the availability of trained instructors still remains inadequate. The lack of trained instructors affects overall quality education in the country.

Thirdly, the government, development partners and NGOs should encourage TVET education through the media on the issues relating aid and education. Specific references should be made known to the public on the aims, objectives and the expected outcomes and benefits of education to the individuals, families and community at large. Part of the TVET education should include the areas where aid programme needs community's input and participation.

Fourthly, the government and private sector should work together to strengthen the TVET education through internship programs. DGTVET need to develop and implement an Internship Policy in coordination with Sector Skills Councils (SSC) to guide the reform of existing internship program provided Public TVET Institutions. Furthermore, DGTVET should coordinate with SSC to develop a revised framework and guidelines for the internship programs.

Fifthly, the government need to strengthen the financing of public TVET institutions. By doing so, the government would need to start financing start-up TVET institutions, in particular RTCs and PTCs. This would help both RTCs and PTCs to identify eligible expenditures such as staff training, teaching materials and equipment, stationery, utilities, transport, industry liaison, marketing, tracer studies of certificate graduates, monitoring and evaluation and cluster development.

6.2.2 For the Development Partners

The following recommendations are made to the development partners in order to make aid more meaningful and effective:

Firstly, the issues aid availability to geographically remote institutions need to be looked at. It would be more effective and meaningful if they identify and addresses the needs of the remote institutions. As the present study shows institutions in the province are lagging behind in terms of curriculum materials. There exist inequity conditions in aid distribution and utilization in which some institutions are better off than others. Many institutions also receive assistances from the development partners such as EU, AUSAID, Sweden and Japan Government. However, many institutions receive no aid and survive from their limited resources. There is a greater need for distributional justice and the aid distribution to be need – based and given to priority schools and areas. The distributional equity is an essential component of sustainable education development.

Secondly, community participation in TVET education development projects is key to success. Incentives by the development partners may be given to communities who have shown greater commitment and participation in TVET education development. This will in turn encourage more community participation and lead to successful TVET development.

Thirdly, there is a need for greater involvement of national level NGOs and civil society organizations in identification of priority institutions and areas needing aid and in helping distribution of aid, implementation and evaluation of aid programs for its greater effectiveness.

6.3 Future Research

First of all, there is necessary for a systematic country -wide study on the impact of the ODA for TVET education. This is to identify both the positive and negative impacts and also constraints of the aid program Secondly, an in-depth study is required focusing on how aid projects can be sustained in the long run.

Secondly, there is a need to investigate in detail the instructor-training programmes in the country. It is also important to investigate the potential of Skill Bridging Program. Studies should focus on how staff development programs are developed and how can they conducted more effectively in order to improve quality education.

Thirdly, the current study revealed that community participation is lacking in some areas. However, an in-depth study is required for focusing more on nature of community participation in TVET development in Cambodia.

Last but not least, the current development programmes has introduced a new locally designed and produced curriculum materials. A study should be done to check the relevancy and level of student's literacy on this. This would certainly help in the future planning and designing of course for a sustained TVET education development in Cambodia.

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Abstract in Korean

캄보디아 기술 및 직업 교육훈련에서의 공적개발원조(ODA) 역할:

SUY Sovannara

서울대학교 행정대학원

글로벌행정전공

본 연구는 캄보디아 기술 및 직업 교육 훈련(TVET)의 개발을 촉진하고 지원하는 데 있어 ODA(공식 개발 지원)의 역할과 관행을 검토한다. 이 연구는 심층 인터뷰와 반구조화 면접을 이용한 질적 접근 방식을 채택했으며, 소규모 설문 조사로 보완되었다. 본 연구에서는 교육청, 청소년체육부, 노동부, 직업훈련개발파트너(KOICA, JICA, ADB, 세계은행 등) 등 16개의 기관에서 정보를 수집했으며, 반구조화 면접에는 8대 연구소장이 선정되었다. 또한 60명의 응답자가 이 설문조사에 선택되었다. 본 연구의 결과는 ODA가 강의실, 저장시설, 직원 사무실, 인턴십 프로그램 및 교육과정 개발 등 새로운 교육 인프라를 구축하여 TVET를 홍보하고 지원하는 데 중요한 역할을 수행했음을 보여준다. 이러한 지원은 TVET 기관에 보조금, 커리큘럼 자료 및 교육 인프라 개발을 위한 형태로 제공되었다. 그러나 부처들은 TVET 홍보 관행에 있어 몇 가지 문제점과 도전에 직면해 있다. 여기에는 원조 분배, 교육 자료, 커리큘럼과 인프라 개발 및 교사 훈련이 해당된다. 연구 대상 8개 기관 중 모든 기관이 지원금을 받았고, 그 중 5개 기관은 커리큘럼 자료를 받았으며, 2개 기관은 인프라 개발을 위한 보조금을 받았고, 1개 기관만이 인턴십 프로그램에 대한 보조금을 받았다. 일부 측면에서는 실패한 부분이 있지만 공적개발원조는 캄보디아 TVET 교육 발전에 크게 기여했다.

주제어: 공적개발원조, 기술 및 직업 교육훈련, 수업자료, 인프라 개발, 공동체 참여

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The Role of Official Development Assistance (ODA) in Supporting Technical and Vocational Education and Training (TVET) for Industrial Development in Cambodia

Academic Advisor Lee, Suk Won

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**Graduate School of Public Administration
Seoul National University
Global Public Administration Major**

Sovannara Suy

**Confirming the master's thesis written by
Sovannara Suy**

June 2020

Chair

Kwon, Huck-Ju



Vice Chair

Lee, Soo Young



Examiner

Lee, Suk Won



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**캄보디아 기술 및 직업 교육훈련에서의
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**Graduate School of Public Administration
Seoul National University
Global Public Administration Major**

Sovannara Suy

Abstract

The Role of Official Development Assistance (ODA) in Supporting Technical and Vocational Education and Training (TVET) for Industrial Development in Cambodia

Sovannara Suy

Global Public Administration Major

The Graduate School of Public Administration

Seoul National University

This study examines the roles and practices of Official Development Assistance (ODA) in promoting and supporting the development of Technical and Vocational Education and Training (TVET) in Cambodia. The study employed a qualitative approach, using in-depth interviews and semi-structured interviews, supplemented by a small-scale questionnaire survey. In this study, 16 key informants were from Ministry of Education, Youth and Sport, Ministry of Labour and Vocational Training and Development Partners such like KOICA, JICA, ADB, World Bank and so on, while eight institute directors were selected for the semi-structured interviews. Also 60 respondents were chosen for the survey. The findings of this study indicate that ODA have played crucial roles in promoting and supporting TVET by creating new educational infrastructures such as class rooms, storage facilities, staff rooms, and internship program and curriculum development in the study area. These supports were provided to TVET institutions in the

form of grants, curriculum materials and for educational infrastructure development. However, some problems and challenges usually the ministries face in their practices of TVET promotion. These include disparities in terms of aid distribution, educational materials, curriculum and infrastructural development and teachers training. Of eight institutions studied, all institutions received aid in terms of grants, five of them received curriculum materials, two institutions received grants for infrastructure development and only one institution received grants for internship programs. Despite failure in some fronts, the ODA has contributed significantly to the development of TVET education in Cambodia.

Keywords: Official Development Assistance (ODA), Technical and Vocational Education and Training (TVET), Educational Materials, Infrastructure Development, Community Participation

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Chapter I: INTRODUCTION

This thesis aims to examine the role of ODA in supporting TVET development in Cambodia. This study is based on the information from in-depth interviews with two ministries, six major development partners. Semi-structured interviews were also conducted with ten TVET Institute Directors and a questionnaires survey with seventy-five instructors. This study consists of six chapters. This chapter introduces the background of the study, problem statement, research objective, research questions, the significant of the study, and details of research methodology. At the very end of this chapter is the overall organization of the study.

1.1 Background

In the aftermath of WWII, many developing countries have opted to develop policies aimed at promoting their new infant industries to increase the productivity. The growth in industries productivity is to determinant of a country's living standards as well as its ability to complete in the world market (Lall S, 2000). As an example, some countries from Latin American would advocate import substitution policies, whereby local industries would more fully benefit from domestic demand and some countries from East Asian like Korea or Japan, would favor export promotion policies rather than advocating import substitution policies, which in turn would be achieved partly through tariffs and nontariff barriers and partly through maintaining undervalued exchange rates.

Since the level of productivity and its potential for growth are vary across activities of the developing countries, a country's ability to catch up with develop countries is largely dependent on what it produces and sells in the world market. Economic development implies structural transformation,

typically from how low productivity to high productivity activities, from agriculture and simple manufacturing activities to modern industry.

In Cambodia, the four main industrial sectors (i.e., agriculture, garment, tourism, and construction) play a lead role in economic development. The growth rate of the Cambodian economy was one of the highest among the ASEAN member nations before the Global Financial Crisis (GFC) occurred in 2008. On the other hand, the economy is over dependent on the above-mentioned sectors as proven by their large share in GDP as compared with other sectors.

According to the Rectangular Strategy Phase IV (2018), the Royal Government of Cambodia (RGC) views private sector as the ‘engine growth’. Therefore, the government adopted its first Industrial Development Policy (IDP) 2015-2025 to maintain the high rate of the economic growth through economic diversification, strengthened competitiveness and increased productivity (IDP, 2015). However, industrial sector in Cambodia still remains weak and confronts a number of challenges such as the lack of leadership and coordination, poor infrastructure and technology, and especially lack of skilled labor (IDP, 2015).

The IDP role of Official Development Assistance (ODA) is to increase an enabling environment for supporting private investment, to serve as a catalyst for mobilizing other forms of development finance as well as to provide a direct source of funding for IDP-related public goods and services. According to the Development Cooperation and Partnership Report (DCPR), Development Partners (DP) have been providing supports to USD 228.74 million with an annual disbursement ranging between USD 26-32 million in the period 2015-17. Resources devoted to TVET are rather low, only USD 7.9 million in 2017, with Japan and Switzerland being the most active development partners (DCPR, 2018). Furthermore, 9 partners are active in the TVET field and, with an

increased coordination and mobilization by responsible ministries, there is some potential to increase collaboration in this important area.

ODA has an important role in creating an enabling environment for mobilizing private investment such as supporting to infrastructure development, institution building and human resource development, mainly skilled labor development (CDC, 2015). Hence, ODA is significant to promote human capital development in Cambodia, particularly skilled labor through Technical and Vocational Education and Training (TVET). The skilled workforce is essential for the competitiveness and productivity of a country.

1.2 Objective of the Study

The main purpose of this research is to provide a whole picture of how ODA can contribute to the development of TVET system in Cambodia. Firstly, this paper will look at what foreign aid does and what it potentially could achieve, especially in relation to its contribution to improvement in TVET quality. Secondly, the research aims to study about the challenges facing TVET promotion and provide policy recommendations to the government to address those challenges. This research will try to put forward some recommendations for the RGC on how to mobilize external development cooperation resources for Cambodia's TVET promotion.

1.3 Problem Statements

TVET is a crucial component for Cambodia's socio-economic development as it is a key factor to promote skilled labor, which helps Cambodia's industries transit from labor-intensive to high-tech or innovation-led ones (Laov, 2013). TVET is also significant to support government's new initiated policies including the Industrial Development Policy 2015-2025. In addition, in the context of ASEAN Economic Community (AEC), Cambodia needs to put a strong focus on high quality of workforce to boost country's productivity and

competitiveness in order to competitively cooperate with the other ASEAN member states (Aring, 2015).

Despite its significance over the past decade, TVET in Cambodia is still lagging comparing to other countries in Asia-Pacific region and facing several challenges. First of all, TVET has received insufficient budget support from the RGC to meet the huge amount of capital investment needed to build competitive workforce for the nation and the region as AEC allows free flows of skilled labor (National TVET Policy, 2017). Secondly, although many agencies (including government and non-government actors) have been working on skills development in Cambodia, there is poor coordination mechanism among those agencies, and the assistance to TVET is fragmented (Fin Church Aid Cambodia, 2017). These include identification, skill needs, provision and supervision of informal TVET, and communication between TVET and secondary education, as well as the design and delivery of professional guidance (UNESCO, 2013). Thirdly, the quality of TVET has not yet fully responsive to demands of labor market. Due to unskilled labor, low salaries, and labor costs, Cambodia is attracting low-tech industries and labor-intensive industries, affecting its long-term growth strategy. These trends, coupled with a weak base of human resources in Cambodia, make it difficult for Cambodia to shift from agriculture, technology, agribusiness, light industry and tourism to the modern based industries. Finally, the government is not capable of creating effective policies and mechanisms to promote quality TVET in Cambodia (CDRI, 2013).

1.4 Research Question

Specific research questions are as follows:

1. What are the impacts of Official Development Assistance on Technical and Vocational Education and Training in Cambodia?

2. How effective can TVET in Cambodia prepare its graduates for the labor market in Cambodia and ASEAN nations?
3. What are the key challenges facing TVET promotion in Cambodia?

1.5 Rationale

TVET Education is important for the socio-economic in Cambodia especially for the country's industrialization. It is also provided the labor force, especially the youth, with a livelihood and future career path that would contribute to higher levels of welfare and human development. Increasingly there has been a significant flow of educational aid to USD 171 million in 2016. A systematic study to reflect on the impacts of ODA on TVET development in Cambodia is lacking. So, there is a greater need for a systematic study to assess the impact of ODA on TVET Education and this study intends to bridge up the knowledge gap and deal with Development Partner aid in TVET education in Cambodia.

1.6 Significance of the study

This study will provide added values to the TVET development in Cambodia, which is a crucial component for its industrial development and economic growth. First of all, it will provide a better understanding of the current development of TVET system in Cambodia, which includes the efforts of the RGC and other stakeholders in strengthening Cambodia's TVET system. Secondly, this research will seek to highlight key challenges facing TVET promotion in Cambodia and propose solutions to the RGC to deal with those issues. Thirdly, this research will provide recommendations to the Government of Cambodia on how to effectively mobilize ODA for TVET promotion in Cambodia. It will also suggest how the government and development partners can improve the governance and management of TVET system in Cambodia. Furthermore, this study will identify new key strategic areas in TVET sector for improvement through the effective use of Official Development Assistance

in the future. Thus, these strategic areas can be made to justify the need for continued ODA support for the development of the TVET sector in Cambodia. Finally, this research will significantly contribute to the industrial development in Cambodia because now Cambodia desperately needs skilled workforce to attract Foreign Direct Investment (FDI) and support domestic investment. The investments will then create more jobs for Cambodia's growing number of working populations in this demographic bonus period. Therefore, skilled workforce, industrial development and employment creation go hand in hand.

1.7 Organization of the study

This thesis consists of six chapters. Chapter I is already introduced above which deals with the general context regarding ODA, objective of the study, problem statement, research questions and significance of the study. Below are the five remaining chapters.

The second chapter presents the conceptual framework and theoretical discussion on aid. It also includes the review of inter-linkage of basic concepts with educational aid. The chapter also provides a detailed review of literature on works done previously on the education aid, particularly in the context of Cambodia.

The third chapter describes the research methodological approaches and details the methodologies employed in carrying out the study. This chapter is also included the study area, and the selection of the study area, time period and the limitation of the study.

Chapter four describes the current situation and issues in the Cambodian labor market. This chapter provides an overview of the Cambodian macroeconomic context, policies on socio-economic development and employment, and

education and skill attainment. It also depicts the trend in Development Cooperation as well as the support to TVET and Higher Education in Cambodia.

Chapter five presents the research findings on the role of ODA in supporting and promoting TVET Development in Cambodia based on in-depth interviews, semi-structured interviews and questionnaires.

Finally, chapter six primarily discuss the findings of the study, followed by the policy implications and suggestions for further research.

Chapter II: LITERATURE REVIEW

This chapter focuses on the conceptual framework. It provides a review of literature and discussion on aid and education development. It also discusses on framework for the idea of aid by exploring the linkages with development and education. Furthermore, it attempts to explain how aid is used as development strategy in developing countries in general. It ends with the conceptual framework for this study which set to be analyzed.

2.1 Concept of Aid Allocation

On the first point, by and large, the term “**foreign assistance/aid**” has been widely used by scholars and researchers (e.g. Alestina, 2000; Ear, 2006, 2013; Mertha, 2014) in their studies about the impacts or relationship between foreign assistance/aid and politics, economics and socio-culture of both donors and recipient countries in general. Based on the Development Assistance Committee (DAC) of the Organization for Economic Cooperation and Development (OECD), **Official Development Assistance (ODA)** is defined as “those flows to countries and territories on the DAC List of ODA Recipients and to multilateral institution” which are provided by official agencies of donors; and each transaction is for the promotion of the economic development and welfare of developing countries (OEC, 2014). Literature on ODA generally follows three sets of variables: recipient country need, recipient country merit and donor country interest. These variables reflect fundamentals on economic, social and political conditions that pull or stimulate donor countries to allocate ODA to the recipient countries. Although donor countries tend to pursue either of the goals or combinations of them or may sometimes be indifferent to how recipient utilize their aid resources (Radelet 2006). For instance, on recipient need, Berthelemy (2005) assessed different donor approaches to aid allocation using the Heckman and two-part approach and concluded that most donors largely consider the need of developing countries. In addition, the study

observed that donors tend to target recipient countries with good performance indicators on governance. Further, in a study that employed a two-part selection model to study British bilateral aid allocation between 1980 to 1987, McGillivray and Oczkowski (1992) concluded that British ODA seeks recipient welfare and donor interest.

Recipient need motive of ODA was further fortified by Alesina and Dollar (2000) in their studies on the pattern of aid allocation by many donors and concluded that allocations are influenced by commercial considerations of the donor and the recipient's economic need consideration. They employed an empirical study to investigate the patterns of foreign aid allocation by various donors to poor countries. Their study revealed that political and strategic factors, rather than the economic and policy performance of recipient countries, were the main determinants of foreign aid allocation. Donor countries tended to give more aid to their former colonies with which the former had close economic and political links. Despite poor economic and policy performance of these former colonies, a substantial amount of aid was still being distributed to them. In contrast, the poor countries without colonial, political, and economic links with donors did not receive much aid, regardless of how good the former's economic and policy performance was. This study further revealed that democratized countries which were in strategic geographic locations beneficial to donors' interests also tended to receive more aid. In other words, donors therefore respond to recipient developmental need and merit with respect to democracy and institutions that could facilitate the effective utilization of aid.

Subsequently, Mc.Gillivray, Leavy, and White conducted a quantitative analysis of the determinants of foreign aid distribution. In this study, commercial and political factors were also found to have high influence on the distribution of foreign aid by donors. In other words, donor countries were more likely to distribute a substantial amount of aid to their former colonies, the

countries located in strategic geographical regions beneficial to the former's interests, and the countries having close economic ties with the former.

Maizel and Nissanke investigated the principles of aid allocation by major bilateral and multilateral aid agencies during two periods, 1969-70 and 1978-80, using recipient need and donor interest models. In this study, they found that donors' political, economic and security interests were the main determinants of bilateral aid distribution. In other words, donor provided aid with the intention of maintaining and strengthening close political ties with their allied states, maintaining and expanding their sphere of interests in strategic geographical regions, ensuring favorable business environment and business profitability for their investors, and guaranteeing the smooth flow of trade with recipient countries (particularly the flow of products from donors to recipients and the flow of natural resources from recipients to donors). However, multilateral agencies including the UN bodies and international financial institutions such as the International Monetary Fund (IMF), the World Bank, the Asian Development Bank, and other regional banks tended to distribute their aid in response to the needs of the recipients, that is, the reduction of poverty and the promotion of economic development in recipient countries.

Another research study on ODA was conducted by Younas to examine the motivations of bilateral aid allocation by Organization for Economic Cooperation and Development (OECD) countries. Through this study, Younas found that aid donors tended to provide more aid for those recipient countries which imported goods from the former, which had a comparative advantage in the production of those goods. Also, foreign aid donors, with regards to the distribution of their foreign aid, tended to pay more attention to the alleviation of physical miseries (infant mortality) and the promotion of human rights than the eradication of economic hardship (poverty). Finally, Younas asserted that

political and strategic factors remained the main determinants of aid allocation in the post-Cold War era.

2.2 Aid and Development

The flow of money or resources transferred from one country or a funding institution to another is not a new phenomenon. International development emerged as one of the strategies employed to achieve equal rights between men and women and between prosperous nations and poor countries. It was actively promoted with the framework of democratic principles of individual self-determination and equal rights and opportunities. In the 1950s, and the post-world war II period of reconstruction, the western economic development planners were convinced that aid based strategic planning would enable developing countries to bridge up the gap that separate them from the industrial world. Developed nations committed themselves to monetary and technical aid channeled through the United Nations (UN) agencies, and later through direct and bilateral programs, based on the theory that this aid would foster economic growth that would trickle down to the masses. Neoclassical economic theorist and planners argued that this strategy would ultimately benefit the poor and transform the economies of developing countries (Taufe'ulunaki, 2002:7).

2.3 Development and Development Model

The contemporary idea of “development” has become a topical and important only in the post-World War II period. It was a result of the growing awareness of the differences in the quality of live and degree of “development” or modernization between the nations of the world. This awareness gave rise to theories such as modernization theory, which measures development in terms of comparison, and in this case a nation becomes developed depending on how similar to or different it is from the industrialized nations of the Western Europe and North America. This was associated with the rise in the 1960s and 1970s

of the linear theory of development as advanced by Rostow (1960 cited in Kabutaulaka, 1993).

This school of thought views development as progression of growth from traditional society to that of a high mass consumption society found in the Western and North America. Today the development debate has taken many twists and turns (Kabutaulaka 1993:3). So, we could interpret that, development should be understood as a process, not a product. Societies are always changing, some improve, while others fail. Development theories aim at explaining both the processes. Development practice intends to provide tools that can be applied to entire societies or specific communities.

The idea of progress is nearly as old as human history. Human beings had always tried to improve technologically, psychologically and even physically. These improvements were catered for both human innovations as depicted in Darwin's theory of human evolution, the "survival of the fittest" (Cambell 1985, cited in Kabutaulaka, 1993). However, simple progression or change cannot be equated with development because the concept of development is much more complicated than a mere change (Kabutaulaka 1993). The modernization theory represents several perspectives: the belief that societies undergo economic development in phases and development is linked to aspects of culture or values (Rostow, 1960, McCland, 1993: and Khan, 1993 cited in Kabutaulaka, 1993). Whatever the variation, central to the modernization theory is the task of transforming traditional societies.

According to Isbister (cited in Kabutaulaka, 1993), the basic assumption of modernization theory is that developing countries are "traditional" with values that are spiritual, stagnant, and not progressive. Consequently, the modernization theory emphasizes changes in personal attitudes and behaviors. Kabutaulaka (1993) says that a traditional life is not necessarily negative and

that “from an economic viewpoint, however, it is a poor, subsistence life, a life that has no hope of accumulation, income and wealth”. The strategy to alleviate this situation, proponents of modernization theory argue, is for Third World societies to change their traditional values to modern ones. This can be achieved through education (Sanga, 2005:26). However, the developing countries are faced with the problems of high population growth, inaccessibility to education services. Aid is therefore needed by many Third World countries to help alleviate these difficulties. Education is closely linked to economic growth. As it is now widely accepted that it is the human resources of a nation, and not its raw materials or capital, that determine and ultimately shape the pattern, and character of its economic, social and political development (Schumacher, 1976, Simmons, 1979, Psacharopoulos & Woodall, 1995 cited in Luteru, 1991). Aid is used as catalyst to economic growth as well. It was assumed that once economic growth was achieved, the benefits would trickle down to the masses and therefore, poverty would be alleviated. This idea was the basis of America’s foreign aid in the 1950 (Martinussen & Pederesen, 2003:26). However, critics argued that inequality persist and that modernization theorist failed to acknowledge that it was the lack of resources and not modernity that holds back many of the less developed countries.

The dependency theory was dominant in the 1970s. Economists like Andre Gunder Frank was one of the leading proponents of this theory. Dependency theorists argued that aid creates conditions of its failure by the way it was delivered. For example, when aid is tied, it is a requirement that capital, technology and expertise from the donor country must be used to implement the projects. While this approach might produce the desired output, it undermines local population for the purpose of self-reliance. This gave rise to aid dependency, which has deepened the development problems more than simple lack of resources (Edgreen, 2002 cited in Lenga, 2006).

Since the 1980s onward – the approach of foreign aid has oriented to Structural Adjustment Programs (SAP). The focus was on transforming national and economic structures and institutions by reducing the role of the state whilst increasing the role of the private sector as a producer and supplier of goods and services. It was a means of increasing the efficiency of state-owned enterprises to deliver efficient and effective services to the public. By the 1990s, democratization and good governance became the explicit goals of foreign aid. It was argued that democracy and good governance were the necessary preconditions for achieving economic growth and development (Martinussen & Pedersen, 2003:28). There are many ways the development theories and approaches shaped the way aid is conceptualized (Lenga, 2006: 39).

2.4 Aid Effectiveness

Aid effectiveness refers to the degree to which development aid works, and is a subject of significant disagreement.

The average amount of foreign aid transferred to developing countries is small compared with the size of their economies – 2 percent to 3 percent of their gross national product. The international standard is set for the developed countries to reach ODA target of 0.7 percent of Gross National Income. In individual cases, that figure can exceed 60 percent in a given year. However, more assistance is not always more effective. Receiving too much foreign aid may overwhelm a country's absorptive capacity and thereby undermine the overall effectiveness of aid. A small quantity can be useful in achieving results, depending on its purpose and how it is spent (Wikipedia, 2007).

Foreign Aid has at times been a spectacular success. Botswana and the republic of Korea in the 1960s, Indonesia in the 1970s, and Bolivia and Ghana in the late 1980s and Uganda and Vietnam in the 1990s are examples of countries

where aid has contributed significantly and uplifted these countries from crisis to rapid development (World Bank, 1998:1).

On the flip side, foreign aid has also been seen at times, as unmitigated failure. While the former Zaire's Mobutu Se Seko was reported amassing one of the world's largest personal fortunes (invested, naturally, outside his country), decades of large – scale foreign assistance left not a stress of progress (World Bank, 1998:1) Zaire is just one of several examples where steady flow of aid ignored, if not encouraged, incompetence, corruption and misguided policies. Consider Tanzania, where donors poured a colossal USD 2 billion into building roads, over 20 years. Roads were built but due to the lack of maintenance, roads deteriorated faster than they could be built (World Bank, 1998:1). This indicates that the aid assistance was not a success.

2.5 Aid, Education and Development

Although the overarching development assumption that aid leads to reduction in poverty has remained, understanding about how this should happen have shifted considerably over time (Rinddell, 1997:454 cited in Coxon and Tolley, 2005). Development theory and practice have been considered to uphold the importance of the relationship between them, that has changed (Coxon and Tolley, 2005:31).

The modernization and development theory states that one way forward for the developing countries is to quickly go through the five stages of development. Development interventions are intended to move societies in which they are believed to be worse off to better off. Education is seen as the catalyst to fast track development. This idea was further supported by Buchert (1995) by identifying that it is one of the obvious common attentions and features for the agencies is on the believe that human resource development is crucial potential resources in achieving economic growth, provision of environmental protection,

increasing political participation, and mitigation of gender and other social inequalities.

Although the underlying motives of aid are debatable and sometimes questionable, aid is likely to remain critical in most contexts as one of the ways forward for financing education in many countries.

2.5.1 Education and Development

Education is the key to unlocking human potential. The acquisition of skills and knowledge enables people to overcome poverty. Education enables people to come out of oppression and alienation and take control of their lives. Education empowers communities and gives nations the confidence to shape their own future.

Education helps alleviate poverty and advances economic and social development. A diverse body of literature demonstrate that adults in the developing countries who have higher levels of educational attainment have more pain employment, higher earnings, greater agriculture productivity, low fertility, better health and nutritional status and more modern attitudes than adults who have lower educational attainment (Lockheed and Verspoor, 1991). They are also more likely to send their children to schools. These characteristics are dimensions of development. Education forges national unity and social cohesion by teaching common mores, ideologies, and languages. It also improves income distribution, increases saving and encourages more rational consumption, enhances the status of women, and promotes to technological change.

2.5.2 Education and Economic Development

Research and experience demonstrate that an educated labor force is necessary, albeit, condition for economic development (Schultz, 1961: Denison, 1962:

McMahon, 1984). The correlation between national investment in education and economic growth is striking. The industrialized economies of the late nineteenth and early twentieth centuries were based on relatively well educated and skilled labor force. Zouliatou examined the relationship between growth in TVET enrollment and national Gross National Product (GNP) per capita. He found that none had achieved significant economic growth before attaining the education.

2.5.3 Education and Productivity

Investment in education has become an important driving force of economic competitiveness in the knowledge-based society (OECD, 2010). As stated in the Global Competitiveness Report 2013-2014, the fifth of 12 competitiveness pillars highlights that it is crucial to have a quality higher education and training for a country to nurture well educated workers who will be able to perform complex jobs under the changing world and in the changing production chains (the World Economic Forum [WEF], 2013).

Now that the advancement of new information technologies has made it possible to create new demands for higher-level cognitive skills and for lifelong learning over lifetime work. Thus, this technological progress reveals that the knowledge and skills from school and at the workplace may turn obsolete rapidly. Moreover, new, complicating knowledge and skills that workers must acquire need to respond to rapid changes in technology at workplaces. Therefore, the education and training system plays a vital role in response to these changes and obstacles. That is, skills training and skills upgrading are necessary instruments for each nation to remain competitive in terms of national development (Riboud, Savchenko, & Tan, 2007).

According to the study findings of the World Bank (2010), higher education holders could earn 67 percent higher than workers without education, Workers

with primary and secondary schools can find jobs but lower wages. Undeniably speaking, in accordance with the human capital theories, investing in human resources crucially brings high rates of return in terms of individual productivity and societal advancement, accelerating each country's socio-economic development. It also means that individuals with higher education can gain more employment opportunities while firms can make more profits when hiring educated people (World Bank, 2010).

This rate of return reflects a relationship between education, economic growth and employment for individuals and social development (Fagerlind & Saha, 1983). The strong relationship is usually seen in developed countries where significant expenditure is spent on education. The expansion of higher education exists ubiquitously in hope that educational attainment will largely contribute to national productivity and competitiveness (Douglass, 2010) However, developing countries have limited resources to expand their education to meet the societal needs.

Despite the change in human demographics and technology advancement keeping business competitive, an imminent threat of having not enough qualified workers to fill positions available in the labor market is emerging (Fitz-Enz, 2009). In the developing world, skills have become high pressure under globalization for most South Asian countries. At the same time, employers in those countries regard skills shortage as a crucial issue in their businesses. As a result, many initiatives are being undertaken by the governments to promote education and training system to be more responsive to the skill needs of the labor market and the industrial development process (Riboud et al., 2007).

At individual levels, education and training system is an imperative channel for young people to obtain their qualification resources. These vital resources from

education are varied in terms of market values and effectiveness in helping youth move from school to work (Müller & Gangl, 2003). The educational qualifications are usually key assets available for young people in obtaining jobs in the labor market (Gangl, 2003). Although a level of educational attainment does not guarantee young job seekers to be employed stable, it remains one viable and available resource for job vacancies in most cases (Ashton & Sung, 1992; Elder, 2014; Heang et al., 2013).

Despite the promising idea of investment in education, price competitions among job seekers set a mixture of opportunities. A few highly competent individuals tend to continue to enjoy a plethora of employment benefits, but many others with less education and competence seem left behind in the labor market (Brown et al., 2011).

In the real world of work, employers need more than just educational qualifications generated by educational systems. The relevance of education and training to the working world is always a concern for employers they recruit new employees. How employers reach educational provider and policymakers is in questions.

2.6 International Trend in TVET Assistance

In recent years, TVET has ceased to belong to the mainstream of educational development assistance, but in the 1960s and 1970s it had been one sector, along with tertiary education, where aid was highly concentrated. For example, in 1963 the World Bank started a grand scale lending program for vocational education geared toward developing countries, and from 1964 to 1969 secondary vocational education comprised 20% of the World Bank's lending in the education sector, thus ranking as the second largest sub-sector of all. From 1963 to 1976, expenses relating to technical and vocational education continued to decrease until, by 2002, the ration had dropped to no more than

9% of the World Bank's gross education sector assistance. Conversely, with every year, the proportion of primary education assistance grew at an inversely proportional rate, from no more than 6% during the 1963-76 period to 39% in 2002. The trend towards emphasizing primary education becomes clearer when including other donors as well. Figure 1-2 shows all education assistance going to Least among Less Developed Countries (LLDC) as classified by sub-sector. One can see from this diagram that nearly 60% of aid in education goes to primary education. However, when analyzing policy and finance in TVET sector, it is important to note that sub-sectors maybe classified in different ways and the way of sub-dividing TVET in particular tends to be inconsistent. Unlike primary education and other sub-sector where the dividing lines are evident, TVET consists of secondary, post-secondary and non-formal sub-sector – while stretching as far as teacher training as well. Consequently, it is not uncommon for elements of TVET to be found scattered throughout other sub-sectors, and the fact that Figure 1-2 includes no category for “Technical and Vocational Education” reflects these conditions. Meanwhile, even where a category for technical and vocational education may be indicated, often it is still impossible to determine with any certainty what is meant to be included therein. As a result, it is better to consider the fact that only a general current can be grasped from education statistics and financial indicators relating to this sub-sector.

World Bank has taken the form of promoting efforts to improve the quality of training and reduce the burden of costs shouldered by the government by forming a competitive training market and actively involving private training institutions in that market, in addition to both clarifying the government's role in TVET and preventing TVET operations from becoming scattered. Also, other international organization beside World Bank has announced their own comprehensive TVET assistance policies including International Labor Organization (ILO), United Nations Educational, Scientific and Cultural

Organization (UNESCO), etc. ILO is an organization whose major concerns are labor issues, and its policy paper examines the efficiency and effectiveness of TVET within the global economy. According to ILO, within modern-day international economic settings characterized by the high turnover technology and product cycles, to development human resource effectively, certain measures should be adopted by the government, such as 1) setting the standards for technical skills and developing a skill qualification system which corresponds to the standards, so as to enable employers to more objectively grasp the capability of workers, 2) reinforcing collaboration with the private sector, and 3) offering incentives to encourage the private sector to share the burden of human resources training costs with the government (ILO, 2000 pp.3-15). In contrast with ILO and World Bank, UNESCO approaches TVET from the perspective of ideals in education. UNESCO has stated that every person must have the chance to learn life skills and vocational skills as a part of his or her right to lifelong study, and for the sake of sustainable development (UNESCO-IIEP, 2001 – p.45). But there is not much different between these aid agencies in terms of fundamental policy for the promotion of TVET, seeing themselves as advocates that the government should focus on preparing guiding laws, regulations and framework while it keeps its own implementation of trainings to a minimum and utilizes the private training institution for the rest.

2.7 Chapter Summary

Development aid especially educational aid is important for developing countries to meet the resource gaps in the education sector. Development aid is aimed at alleviating poverty and to improve quality of life. In developing countries where there is a trend of fast-growing population brings the problem of having limited or access to education. So, the need for international education aid is required to improve the situation. Education plays a major role in the development process. It is said to be the cornerstone for social and

economic development. The knowledge and skills acquisition enable people to alleviate poverty; it empowers people to take control of their lives. The challenge is for both the donor and the recipients of aid to assess the needs of the society and design workable mechanisms where aid reaches and touches the lives of people whom aid is tailored for. The success of any aid program depends on the commitment of the donor, the recipient country and other stakeholders.

Chapter III: RESEARCH METHODOLOGY

As William Zikmund (1984) stated in Business Research Methods 9th Edition, “the degree of uncertainty about the research problem determines the research methodology.” In other words, the methodology of a research paper is defined by the nature and characteristics of the problem.

3.1 Research Design

This research mainly uses qualitative approach of analysis. The qualitative method by theoretical and literature analysis is conducted to have more deep analysis the problems and challenges that TVET faces in Cambodia. This study will be developed based on in-depth interviews with but not limiting to, the government officials, donor representatives and technical staffs, etc. With these approaches, the findings of this research can provide a comprehensive picture of the key roles and the impact of ODA in supporting education especially TVET Education in Cambodia.

3.2 Research Data Collection Tool

The data collection tool will be carefully chosen due to the research objective and research questions. It should be noted that the time frame for this fieldwork in Phnom Penh city and 3 provinces is conducted in 20 days. The following are the data collection tool that will be applied in this study.

3.2.1 Individual Interviews

I developed an in-depth interview tool to examine the roles and current policy of Development Partners regarding the skill development in Cambodia. The interview will be conducted with key Development Partners that have been provided their supports to the government of Cambodia, high-level government officer and technical staffs from Ministry of Education Youth and Sport

(MoEYS), Ministry of Labor and Vocational Training and NGOs. It is difficult to conduct this interview, but the process needs to be more flexible.

In order to make this in-depth interview to be more responsive, the questions will be sent to the key informants after they agreed to participate in the study. There are three sets of interview questions since the participants work in different field. The first set is for in-depth interview with the Development Partners. The second set is for the key high-level government officials. And the third set of questions is for the technical staff who are involve in the TVET projects and institutions.

3.2.2 Secondary Data

The study also uses secondary data in order to describe and analyze Cambodia TVET sector ODA and compare TVET sector ODA disbursement with other sectors. The total amount of ODA to the TVET sector from donor countries to recipient country by commitment and disbursement will extract from Cambodia ODA Database which manage by the Cambodian Rehabilitation and Development Board CRDB) in Cambodia. This database is well recognized from all development partners in Cambodia since CRDB asked all DPs to update their projects and their disbursement twice a year. In addition, information beside Cambodia ODA Database, Internet source were also consulted.

The country specific data, information and government policies and strategies were retrieved from annual report (Development Cooperation and Partnership Report), the Ministry of Labor and Vocational Training (MoLVT) and Ministry of Education, Youth and Sport (MoEYS). Also, donor policies or country partnership strategies, RGC-Development Partner ODA agreements, research publications and mass media-newspaper were used in this research. The

information from these sources fundamentally serves as a basis for the study of the roles of ODA in supporting TVET in Cambodia.

3.3 Research Sample

Eight TVET Education institutions were selected in the study area for this study. These institutions include: National Polytechnic Institute of Cambodia, Preah Kossamak Polytechnique Institute, Cambodia-India Entrepreneurship Development Institute, JVC Technical Schools & Workshop, Cambodia-Thai Skill Development Center, Regional Polytechnic Institute Techo Sen in Kampot, in Battambang and in Siem Reap. The criterion used for the selection of informants was on their direct involvement with the Development Partner's educational aid. The researcher selected two groups of informants: (i) institution directors and deputy directors and the instructors of the selected institute. A total number of eighty-three people were selected, as primary informants in this study, of whom, eight were principle and seventy-five were trainers.

The first group were institution principle. They work closely regarding the aid that come under the development partner aid package. They were the link between the community and the Ministry of Education on all aid. The second group was the class instructors. They were important since they were the one actually instructing and using the curriculum materials produced under the education aid package.

3.4 Study Area

The study was conducted in Phnom Penh, Kompot Province, Battambang Province and Siem Reap Province. The reason these sites were chosen because of the concentration of the aid institutions in this area. Another reason was that the schedule for the interview would be more flexible with the respondents during the filed work with limited time. They are convenient location since

most institutions and ministries are located. With these justifications, these locations were appropriate for conducting this study and for selecting for research sample.

3.5 Ethical Consideration

When deal with people, treating then with respect is vital. This treatment reflects how to deal with key informants and respondents before, during and after the research. Since the people from DPs, Government and NGOs are in high positions, the interview will be conducted in a very formal manner. All the interviews and questionnaires will be made due to their agreements without power enforcement but base on the understanding of the importance of the research.

To avoid ethical problems, the researcher will explain the process and asked the permission from the respondent to voluntarily participate in answering the questions in the questionnaire forms and interview questions. The participant can deny participating thus all the confidential information will be kept properly.

Chapter IV: COUNTRY OVERVIEW

This chapter presents the overview of Cambodian socioeconomic development, policies on socio-economic development, education and skills attainment, and the situation of the Cambodian labor market. It provides general characteristics of the labor market supply and demand.

4.1 Cambodia's Socio Economic

Cambodia has experienced a profound structural change as the effect of integration of the global economy, which shifts from the agriculture sector to the service sector, and human movements from rural areas to urban areas since 1991 (the United Nations in Cambodia, 2010). With an export-oriented and opened trade policy (Kuoch, 2015), the Cambodian economy grew at remarkable rates from 1.2 percent in 1990 up to 13.3 percent in 2005, but sharply decreased to 0.1 percent in 2009 after the effect of economic downturn in 2008. Before the economic crisis (1998-2008), the average annual GDP growth rate was 9.1 percent, driven by the high average annual growth rates in the industry sector (14.4 percent) and service sector (9.9 percent), followed by agriculture (4.6 percent). After the crisis, however, the economic growth recovered from 0.1 percent 2009 to 7.9 percent in 2013.

The country's socio-economic performance has been internationally recognized as an example of good practice for several reasons. The IMF has noted that, "Cambodia has achieved a remarkable average annual growth rate of 7.7% in the last two decades". The 2014 World Bank Economic Update acknowledges that "Cambodia has joined the Olympians of growth" and is the sixth fastest growing economy in the world. Cambodia is also one of the largest recipients of Foreign Direct Investment (FDI) and a top exporter of textiles. This strong growth has been accompanied by a significant decline in poverty from around 53.2% in 2004 to 13.5% of the population in 2014. Cambodia is also one of a

few countries that have outperformed the United Nations' Millennium Development Goals (MDGs) on poverty reduction and other social indicators before its 2015 deadline.

As the steady economic growth rate keeps increasing, the Southeast Asian emerging economies have gained their competitive advantages in attracting Foreign Direct Investment (FDI). Therefore, the substantial FDI inflows into the region and domestic investment growth are still in good position (OECD, 2013). Cambodia, for example, has attractiveness for labor-intensive manufacturing to gain more FDI inflows (OECD, 2013). The FDI investors have come to invest in construction, financial sector, apparel and footwear industries, hospitality, telecommunication, farming, and other sectors across the country. According to the Asian Development Bank, the acute increased FDI from 900 million US dollars in 2011 to 1.3-1.5 billion US dollars in 2012 has also coexisted with the increased investment in higher-valued-added manufacturing industries such as automotive parts and electronics. The big inflow of FDI has contributed to the Cambodian economic growth, reduction in poverty rate and generation of employment.

Figure 4. 2: Trend of Cambodian Real GDP Growth Rates from 1990 to 2017(%)



Source: Key Indicators for Asia and the Pacific 2009 & 2018, ADB (2009, 2018)

According to the Garment Manufacturers Association in Cambodia (GMAC, 2013), the garment and footwear industries have absorbed about 300,000 new workers in the labor market every year. Actually, the apparel industry has been a major source of export generation and employment, and this industry has employed a great deal of low-skilled and unskilled workers, which comprises 70-80 percent of women (Savchenko & Lopez-Acevedo, 2012). These industries have helped Cambodia to be one of the fastest growing garments export countries in the world since 2000 (the United Nations Conference on Trade and Development [UNCTAD], 2013).

Based on the estimation of Cambodian economic performance (ADB, 2019) the GDP grow by 7.0 percent in 2019. The industry is growing by 10.8 percent while the service sector is slightly increasing to 6.9 percent. The agriculture sector is assumed to rise by 1.8 percent with good weather conditions. This continual GDP growth over the past two decades has been reliable much on the garment, tourism, rice and construction, which all these sectors are easily fragile (ADB, 2015: De Carteret, 2013). Since this shallow economic foundation is not sustainable (ADB, 2015), seeking to diversify its manufacturing sector with high-value-added activities needs the right mix of governmental policies (De Carteret, 2013). However, there remains a significant challenge for developing a responsive and holistic policy approach to suit the changing needs of high-skilled labor, competitive transportation and logistics system, and other needs of those industries to grow (De Carteret, 2013).

Table 1 shows the share the of the population aged 15 or above employed in three primary sectors of the Cambodian economy. During the 1990s, the agriculture was the largest proportion of the economy, accounting for 56.5% of GDP (Hatsukano, 2010). The service sector employed more people (41.5%) while the agriculture did 33.3%. This trend reflects a shift from agriculture-

based production to the service sector while the industry remains crucial for the overall economy.

Table 4. 2: Employed Population (15+) by Main Sector and Sex

	Total		Male		Female	
	Number	(%)	Number	(%)	Number	(%)
Agriculture	2,393,164	33.3	1,281,547	33.7	1,111,617	32.7
Industry	1,816,498	25.2	935,143	24.6	881,355	25.9
Services	2,987,754	41.5	1,581,016	41.7	1,406,738	41.4
Total employed	7,197,416	100.0	3,797,706	100.0	3,399,710	100.0

Source: Cambodia Labor Force and Child Labor Survey, 2012, NIS (2013)

Like many countries, since unskilled labor force has come less competitive under globalization and global competition in the global value chains, employers in Cambodia are now looking for high-skilled workers and skilled workers for the fulfillment of competitiveness and productivity in their companies (HRINC, 2010). The labor-intensive industries such as textile and footwear are currently using many low-skilled and unskilled workers. However, the job creation remains limited since those cheap labor-intensive workers have become less effective than skilled workers who can gain more impact on their working life. Now the changing needs in the labor market and workplaces require well-educated and well-trained workers.

Table 4.2: Share of Employed Population aged 15 or Older, by Industry and Education Level (%)

	Level of education completion					
	Total	None	Primary	Secondary	Vocational	University
Agriculture	33.3	54.6	40.0	22.9	7.6	2.5
Industry	25.2	18.8	25.9	28.1	14.7	8.8
Services	41.5	26.5	33.1	49.0	77.7	88.7

Source: Cambodia Labor Force and Child Labor Survey, 2012, NIS (2013), p. 41

Workers without education were 54.6% in agriculture, 18.8% in industry, and 26.5% in services. People who completed primary education were 40.9% in agriculture, 26.9% in industry, and 33.1% in services. This share of employed people suggests that any sector of the economy does not require high-skilled people, and it tends to use more unskilled persons with low wages. Sometimes, it can be poor working conditions in the informal sector of the economy. Approximately 89% of university graduates are working in the service sector, which usually needs low-skills requirements for most job vacancies. Table 2 reflects that most people, regardless of educational attainment, tend to work in the service sector, leading to the skills mismatch in the labor market.

As Table 3 shows, in 2012, the high number of people (5,845,356) work in informal enterprises. It can be predicted that the informal sector enjoys absorbing low-skilled and unskilled people while this sector does not seem to provide job security or adequate job benefits to workers.

Table 4.3: Employed Population Aged 15 or Older, by Formal/Informal Sector, Sex and Area

Sector	Cambodia			Urban			Rural		
	Total	Male	Female	Total	Male	Female	Total	Male	Female
Formal sector enterprises	1,276,331	733,571	542,760	5,523,378	359,779	192,559	723,993	373,791	350,202
Informal sector enterprises	5,845,356	3,046,084	2,799,272	1,210,281	571,415	638,866	4,635,075	2,474,669	2,160,406
Households	75,729	18,051	57,678	21,027	2,129	18,898	54,702	15,922	38,780
Total	7,197,416	3,797,706	3,399,710	6,754,686	933,323	850,323	5,413,770	2,864,382	2,549,388

Source: Cambodia Labor Force and Child Labor Survey, 2012, NIS (2013), p. 45

4.2 Policy on Socio-Economic Development and Employment

According to Riboud et al. (2007), policies have been developed in Asian nations for the challenges and opportunities in the education and training system, in response to the demand in the national socio-economic development. Similarly, the RGC has developed different national development plans and policies to tackle the socio-economic development problems since 1986 (Hatsukano, 2010). The government has formulated the Rectangular Strategies phase I, II, III and IV to focus on growth, employment, equity, and efficiency. Other national development plan such as the National Strategic Development Plan (NSDP) (2014-2018), the NSDP Update (2019-2023)0, and the National TVET Development Plan has been formulated to support the Rectangular Strategies by the national legislation. These national policies and plans show high commitments of the government to skills development for industrial needs and the labor market (ADB, 2009).

Although successful in the implementation of the Rectangular Strategies I, and II for the socio-economic development, Cambodia is still facing central issues and challenges, which need more effort and attention (RGC, 2017). The RGC has embarked on the NSDP (2014-2018) to support the Rectangular Strategy III. Keeping the same focus on growth, employment, equity, and efficiency but also responding to the remaining challenges of the former development plans, the RGC is aware of the importance of economic growth and poverty reduction (Ministry of Planning, 2013).

Under the national development context, the new Education Strategic Plan (ESP) 2014-2018 was developed to strengthen the Cambodian education system to responsively develop skilled workforce and professionals for the Cambodia's and the regional labor markets (MoEYS, 2014). This ESP intends

to expand access to quality education. In particular, post-secondary education, and TVET are the mainstream of intellectual and innovation development and skills development.

While the number of universities keeps increasing every year, skills shortage remains constraints for employers in Cambodia (HRINC, 2010). Besides efforts from the Royal Government of Cambodia (RGC), the critical issue of skills shortage needs relevant stakeholders to help deal with, especially the private sectors. The quality of current higher and the mismatch between higher education and the labor market have oversupplied poorly trained graduates recently (Sen & Ros, 2013).

4.3 Education and Skill Attainment

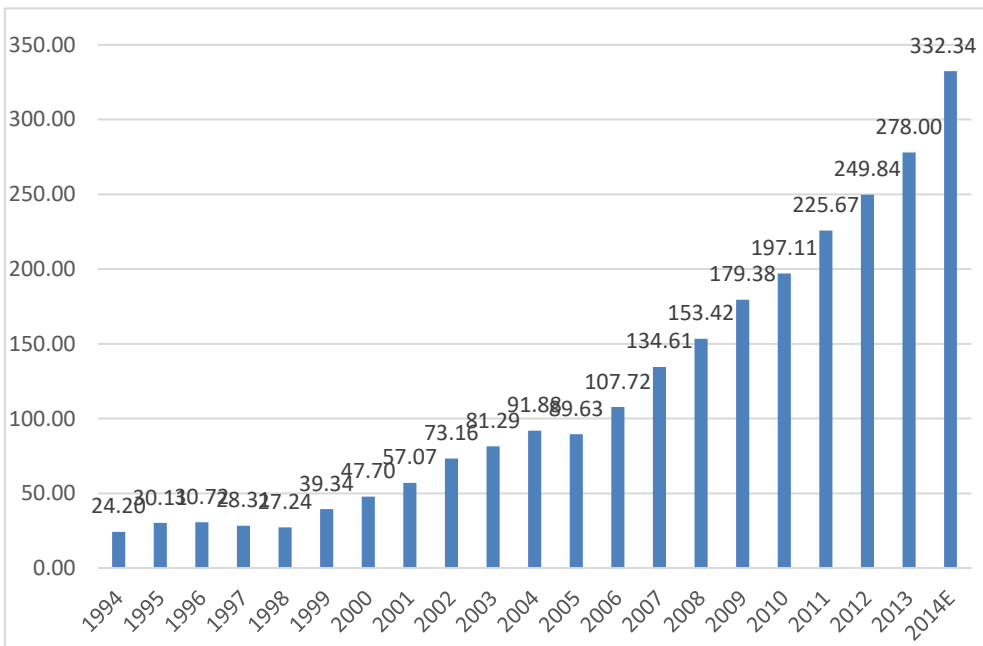
Based on the human capital theories, education plays a vital role in transforming human potentials that will produce a long-term return on personal, social, economic, and cultural aspects (Keeley, 2007). Investment in human capital will pay off when knowledge, skills, and attributes are developed and embodied in humans of a nation. The human capital such as skills, learning, talents, and attributes is one of the individuals' utmost values to survive and expand their economic growth through the educational channel in order to realize their inner potentials. Therefore, the national budget for the educational expenditure should be increased.

Recently, some noticeable indicators show the improvements in the Cambodian education and training system in terms of increased budget, strict examinations, and enrollment rates at all level (Hang, 2015). Having seen the importance of quality education, the Ministry of Education, Youth and Sports (MoEYS) has started a deep reform in the education and training system, for example, by making the secondary education stricter through the introduction of State Examination in 2013-2014. Before this reform, more than 90 percent of

students could pass the exit examination. During 2013-2014, less than 50 percent of students passed the exam. This reflects some quality improvements in the education system.

The educational budget has increase dramatically from 24.20 million US Dollar in 1994 to 332.34 million US Dollar in 2014 (Hang, 2015). This budget is only for educational expenditure under the supervision of the MoEYS. This increased budget resulted from the increase in teacher’s salary at all levels. This may be an incentive for teachers to improve their teaching and learning.

Figure 4.2: Annual Budget for MoEYS (in million US Dollars)



Source: (Hang, 2015)

Note: This calculation is based on average annual exchange rates of Cambodian currency relative to US currency from 1994 to 2014. For example, 1 USD = 2,545 riel (1994), 1 USD = 2,451 riel (1995), and 1 USD = 4,038 riel. E means Estimated

Recently, some noticeable indicators show the improvements in the Cambodian education and training system in terms of increased budget, strict examinations, and enrollment rates at all levels (Hang, 2015). Having seen the importance of

quality education, the MoEYS has started a deep reform in the education and training system, for example, by making the secondary education stricter through the introduction of State Examination in 2013-2014. Before this reform, more than 90 percent of students could pass the exit examination. This reflects some quality improvement in the education system.

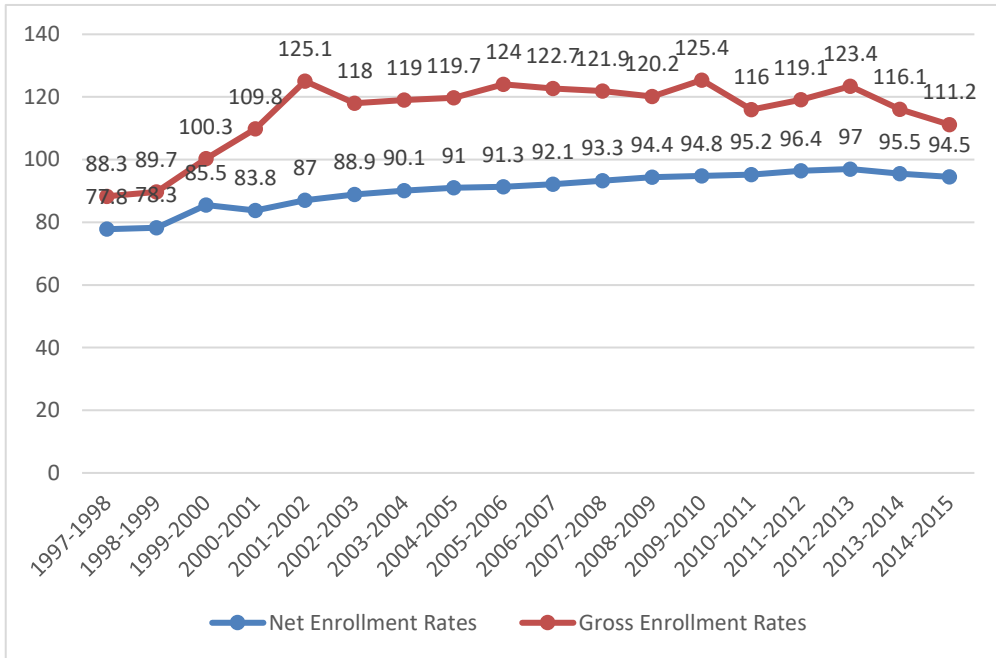
4.3.1 General Education

Net enrollment rates in primary education, lower secondary and upper secondary education have noticeably increased, for example, from 85.5%, 14.4% and 9.3% in 1999-2000 to 95.5%, 38.6% and 18.2% in 2017, respectively (see Figure 4, Figure 5, and Figure 6) (Hang, 2017). Despite this progress, there are still young school leavers, who need access to quality and market-relevant technical training and other types of non-formal education to enhance the employability and productivity of the country's young workforce. Wide variations in terms of educational quality, efficiency and coverage remain challenging. The gaps between urban and rural areas and between the poorest and richest quintiles have widened (the United Nations in Cambodia, 2010).

4.3.2 Higher Education

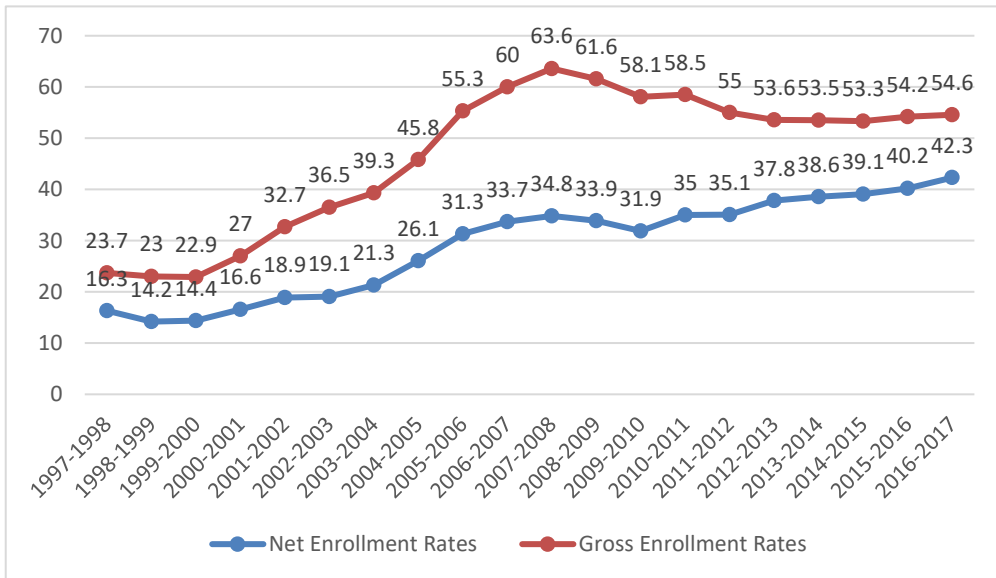
Access to higher education is now widened, while tuition fees tend to be low, due to competition among or between the public and private sectors. Thus, many students can afford to have higher education while a majority of high school graduates passed national exams. This has led to a massive increase in university enrollment rates. The number of college students rose from 94,708 in years 2005-2006 to 245,329 in 2011-2012 (You, 2012 as cited in Sen, 2013; MoEYS, 2013 as cited in Kuoch, 2015). Furthermore, as Table 4 shows, the number of female students increased notably by 38.3 percent (93,950) of total students in 2011-2012 (Kuoch, 2015).

Figure 4.4: Primary Education Enrollment Rates (%)



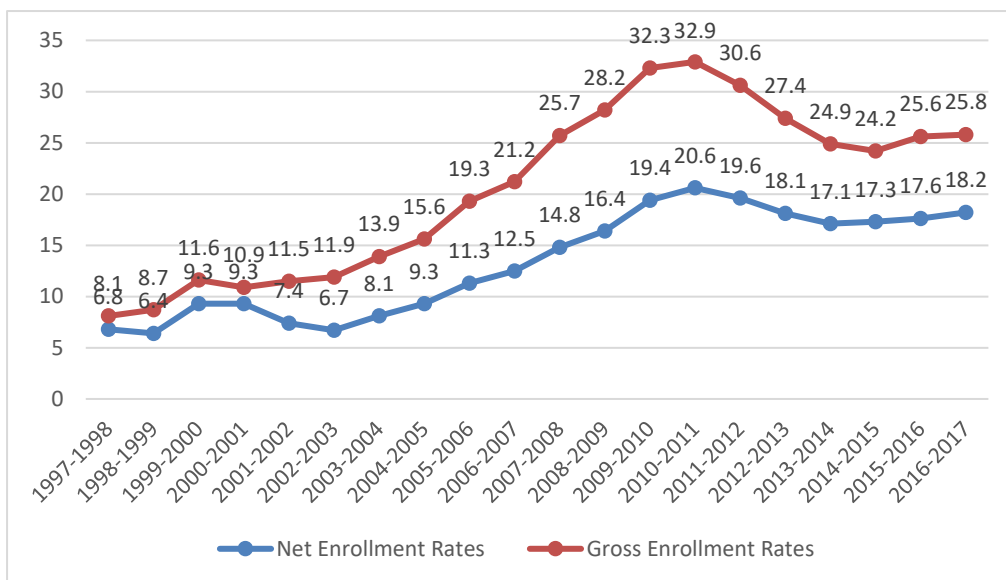
Source: Hang (2015)

Figure 4.5: Lower Secondary Enrollment Rates (%)



Source: Cambodia Socio-Economic Survey, 2017

Figure 4.6: Upper Secondary Enrollment Rates (%)



Source: Cambodia Socio-Economic Survey, 2017

While it has strikingly improved in terms of enrollment rates at various educational levels, the current education and training system is still facing a number of critical issues and problems at large. For instance, the quantity and quality of educational outputs (graduates) depend mainly on adequate financial support, access to formal training on a national basis, industry linkage, entrepreneurial focus, quality control, sufficient institutional financing, availability of ICT usage, and capacity of teacher have limited for years (ADB, 2009). Without these, the education and training system cannot produce qualified human resources for the labor market. As a result, most graduates will end up working in a low-skilled labor market or being unemployed for a long time.

4.4 Educational and Skills Attainment of Workforce

The progress in education and training has made Cambodians more literate. Table 4.4 estimates that about 82.5 percent of the population aged 15 or above was literate. The literacy rate was higher in urban areas at 88.2% than in rural

areas at 79.3%. It also reflects a wider gap between male and female literacy rates. The literacy rate for males was 87.3% higher than that of female (78.1%). The highest literacy rate was in the age group of 15-24 at 94.6%, which indicates a signal for socio-economic development in Cambodia. However, the lower literacy rate for the group of 25-64 is also a concern for the government since this group is currently involved in economic activities across the country.

Table 4.4: Literacy Rate of Population Aged 15 or Older, by Sex, Age Group and Area

Age Group	Cambodia			Urban			Rural		
	Total	Male	Female	Total	Male	Female	Total	Male	Female
15+ Total	9,236,437	4,684,228	4,552,209	2,687,172	1,318,219	1,368,953	6,549,264	3,366,010	3,183,254
15-24	3,233,111	1,640,914	1,592,197	991,904	457,221	534,683	2,241,207	1,316,761	1,382,942
25-64	5,573,691	2,796,822	2,776,869	1,585,923	800,392	785,531	3,987,768	1,833,724	1,695,547
65+	429,635	246,494	183,141	109,345	60,606	48,739	320,290	215,525	104,765
Rate (% of Total Population)									
15+ Total	82.5	87.3	78.1	88.2	92.6	84.4	79.3	84.6	74.4
15-24	94.6	93.5	95.7	96.9	97.3	96.6	89.6	90.0	89.2
25-64	77.5	65.3	72.4	91.8	94.7	89.0	72.5	80.7	65.4
65+	55.1	79.5	39.0	61.20	83.2	46.0	45.9	72.3	25.4

Source: Cambodia Socio-Economic Survey 2017

A larger number of people aged 15 or older (15.9%) never attended school but working in different sectors of the economy. As shown in Table 4.5, 11.8% of the working-age population was currently in education. Approximately 40% of people completed primary education, and 28.8% completed secondary education. The lowest share of working-age people who completed vocational education was one percent while 2.1% completed university education. The education attainment for female was relatively lower than males. For example, 34.1% of males completed secondary education, whereas 23.9% of females

completed secondary education. Women in higher education were even lower than men. Although the education attainment is progressive among the working-age population, a big challenge is concerned with the quality and responsive of education to the labor market demand.

Table 4.5: Working-Age Population (15+) by Educational Attainment and Sex

Levels of Educational Attainment	Total		Male		Female	
	Number	(%)	Number	(%)	Number	(%)
Currently attending school	1,270,719	11.8	698,450	13.6	572,269	10.2
Never attended school	1,707,651	15.9	560,454	10.9	1,147,197	20.5
Not completed any levels	1,467	0.0	113	0.0	1,354	0.0
Completed primary	4,340,355	40.4	1,907,307	37.0	2,433,048	43.5
Completed secondary	3,091,298	28.8	1,755,201	34.1	1,336,097	23.9
Completed vocational	111,978	1.0	77,450	1.5	34,528	0.6
Completed university	224,017	2.1	152,350	3.0	71,667	1.3
Don't know level completed	2,463	0.0	910	0.0	1,552	0.0
Total population (15+)	10,749,946	100	5,152,234	100	5,297,712	100

Source: Cambodia Socio-Economic Survey, 2017

4.5 Chapter Summary

The Cambodian economy has grown at remarkable annual GDP rates, for example, from 1.2% in 1990 to 7% in 2018. However, the foundation of this economic growth largely depends on the agriculture, service, and labor-intensive industry, which are usually small and fragile. There is a need to diversify the manufacturing sector with high value added, with a right mix of development policies such as the Rectangular Strategy, the National Strategic Development Plan, the National TVET Development Plan, the Industrial Development Plan, and the Education Strategic Plan.

There is a recent progress in education and training in terms of increased budget, strict examination and enrollment rates at all levels. The number of university students has doubled since 2005 while TVET enrollment has improved. However, the enrollment rates were higher in business related fields (more than 60%) than other fields such as agriculture, engineering, medicine and sciences, causing the mismatch in the labor market (HRINC, 2010).

The Royal Government of Cambodia sees TVET education as a corner stone of economic growth and social development and principles means of improving the welfare of individuals that will in turn help in the country in the long run. However, the government's budget to support TVET development is still limited. With the current state of TVET education infrastructure and the growing demand for TVET education, the government has requested the Development Partners to increase their support to TVET and to align with the government priorities as set out in National TVET Policy and Industrial Development Plan.

Chapter V: RESEARCH ANALYSIS AND FINDINGS

This chapter is divided into two parts. Part one gives an overview of the state of TVET education in Cambodia. The second part discusses the Development Partners aid and then continues to analysis results. The analysis is done on DP aid to TVET institutions in the study area. Also, the analysis attempts to show how and what influences the distribution patterns of the DP aid in the study area.

5.1 Technical and Vocational Education and Training in Cambodia

Besides investment in general and higher education, TVET is now getting more emphasis than ever since the purpose of TVET is to provide knowledge and skills required in the world of work. An effective TVET policy must, therefore, be embedded in the socio-economic context, encompass various policy areas and be sufficiently flexible to ensure graduate's successful transition from school to work. TVET is not only for the acquisition of skills for work (employment and employability), but also for citizenship and sustainable development (Hollander, Mar & UNESCO, 2009, 2006)(Hollander & Mar, 2009; UNESCO, 2006).

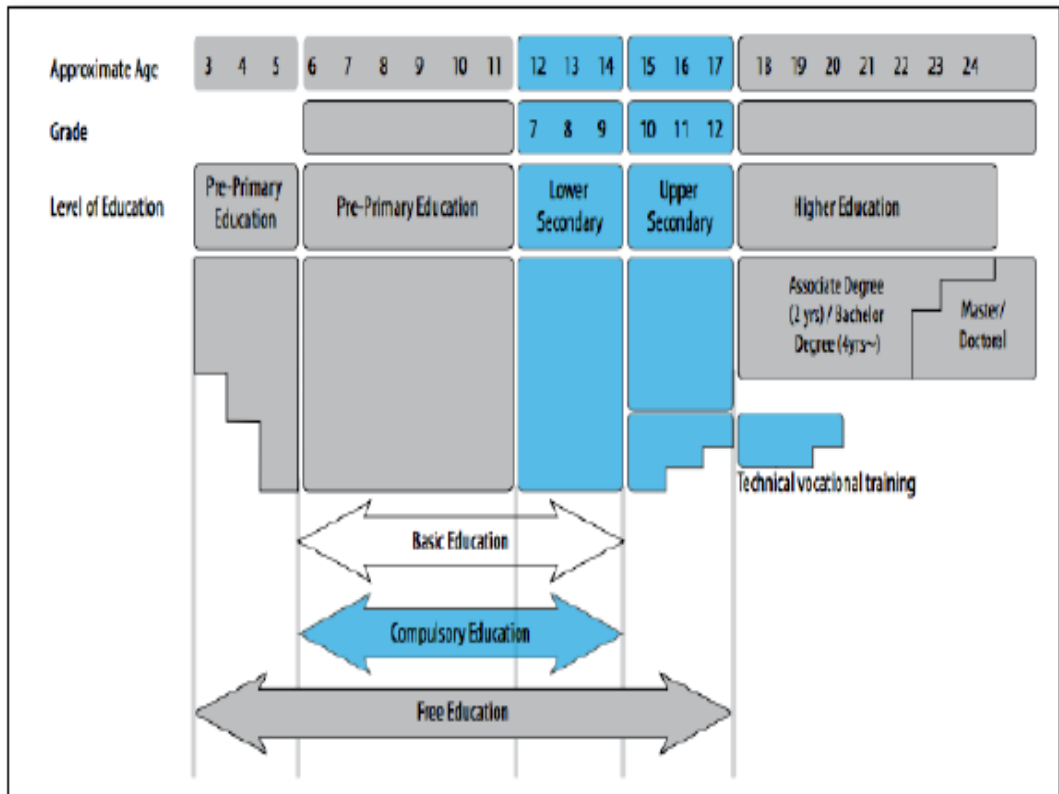
5.1.1 TVET System

In Cambodia, the TVET system consists of four level, certificate, diploma, higher diploma and higher education (graduate and post-graduate).

These institutions are providing TVET Programs with different sectors such as electronics, construction, mechanic, business and ICT, electricity, manufacturing and so on. Most of these TVET institution, especially located in provinces, provide short course training to students while few of these TVET schools offer Certificates I, II and III; and High Diploma levels. Unlike TVET

schools in provinces, six TVET institutions located in Phnom Penh tend to provide all courses from short course training to Higher Education levels (graduate and post-graduate) (See Figure 5.1).

Figure 5.1: Education System and Training in Cambodia



Source: UNESCO, 2013

5.1.2 Cambodia Qualification Framework

Cambodia Qualification Framework (CQF) was approved by sub-degree No. 153 dated on March 28, 2014. It is intended to ensure equivalency comparison within the Kingdom in the standards of national qualifications and regional qualification. It also provides a comprehensive, nationally consistent yet flexible framework for the TVET system. The framework provides for both technical and vocational training for higher education, two systems of post-secondary education and training that have some common characteristics and

some important differences that it is the most important to recognize and preserve. There are eight level of qualifications for Technical and Vocational Education and Training. The first four of these levels leading to vocational certificate and technical and vocational certificate I, II and III are regarded as equivalent to secondary education in standard. The remaining four levels are considered post-secondary education (See Table 5.1).

Table 5.1: Cambodian Qualification Framework

CQF Level	General Education System	TVET System	Higher Education System	Minimum Credit Hours
8		Doctoral Degree of Technology/Business Education		
7		Master Degree of Technology/Business Education		
6		Bachelor of Technology/Business Education		
5		Higher Diploma / Associate Degree of Technology / Business Education		
4	Upper Secondary School Certificate	Technical and Vocational Certificate 3		
3	Upper Secondary School Certificate	Technical and Vocational Certificate 2		
2	Upper Secondary School Certificate	Technical and Vocational Certificate 1		
1	Lower Secondary School Certificate	Vocational Certificate		

Source: MoLVT, 2015

5.1.3 Institution and Location

There are currently 305 TVET institutions through-out the country which include 64 public institutions (only 39 institutions are under the supervision of MoLVT), 188 private institutions, and 53 NGOs training institutions (MoLVT, 2019). Among these 64 institutions, some under supervision of Directorate General of Technical and Vocational Education and Training (DGTVET) while some others are under control of other ministries like Ministry of Education, Youth and Sport, Ministry of Women’s Affairs, Ministry of Economic and Finance, etc. Moreover, many private and NGOs training institutions are also

not controlled by MoLVT (See Table 5.2). There are a few large reputable NGOs training providers in Cambodia such like Pour un Sourire d’Enfant (PSE) in Phnom Penh and Paul Dubrule and Sala Bai in Siem Reap.

Table 5.2: Number of TVET Institutions and Locations

TVET Institution	Total Number	Under MoLVT/Sign MoU with MoLVT
Public	64*	39 (Under MoLVT)
Private	188	16 (Signed MoU with MoLVT)
NGOs	53	13 (Signed MoU with MoLVT)
Total	305	68

*25 Institutions are provincial centers, and 11 institutions are Polytechnic Institutions

Source: Ministry of Labor and Vocational Training, 2019

5.1.4 TVET Enrollment

It can be surprising that the number of short course enrollments is the largest share (27,135) in TVET enrollments while the total enrollments (3,215) of vocational training certificate level I, II and III are lower than those of high diploma (5,638) and bachelor (8,791) (see Table 5.3). The vocational training certificate level I, II and III are alternatives to general education. When students finish their nine-year education, they have two options whether they intend to study in grade 10 in general education, or they can choose certificate I. However, TVET schools are not many across the country. Moreover, most of TVET schools are mainly located in urban areas such as Phnom Penh, Battambang Province and so on.

Table 5.3: Number of TVET Student Enrollments by Training Level and Sex, 2017-2018

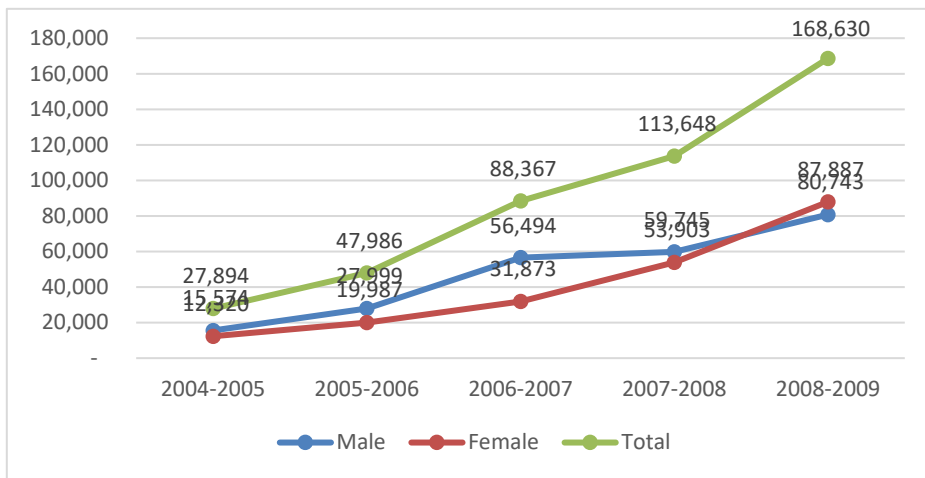
Level	Male	Female	Total
Short Course	11,203	15,932	27,135
Certificate I	1,703	623	2,326
Certificate II	484	85	569
Certificate III	262	58	320
High Diploma	4,232	1,406	5,638
Bachelor	6,026	2,765	8,791
Total	23,910	20,869	44,779

Source: Technical and Vocational Education and Training Statistics, 2019

Note: Short courses refer to training programmes that last less than one year, certificate I, II, and III are one-year training programmes, high diploma programmes last two years of study, and Bachelor degrees last four to five years. In fact, the certificate I, II and III are alternatives to the upper secondary education channel (grade 10, 11 and 12).

The number of TVET trainees dramatically increased from 27,894 in 2004-2005 to 168,630 in 2008-2009 (see Figure 5.2 below). A larger number of trainees completed short course training in particular in the agriculture while a small share of students completed formal vocational training certificate levels and high diploma. Furthermore, it seems evident that formal TVET training program are provided in a very few fields of study, which limits the development of qualified human resources for the labor market.

Figure 5.2: Number of TVET Graduates, 2004-2005 to 2008-2009



Source: Tep (2011)

Note: The Statistics is for the TVET related institutions, including public, private and NGOs, under the Directorate General for TVET, MoLVT. It is challenging to present the statistics here since many short courses were included in this figure, which makes the student enrollments grow dramatically

Highly valued TVET for work and economic growth is obviously seen in most countries. TVET is an alternative to general education. It helps reduce unemployment and poverty when general education or higher education is not responsive to the market demand. However, the importance of TVET for skills development is perceived poorly in Cambodia (Pich, 2010) because the public attitude towards TVET seems unaware of how TVET can contribute to the world of work and socio-economic development. The low TVET enrollment rates and poor quality of TVET system have made it even difficult to attract more students to enroll in TVET. As a result, the Cambodian labor market has become worse to match supply and demand.

5.1.5 Number of Trainers

Trainer and student's materials are very important to enhance effective learning. Directorate General of Technical and Vocational Education and Training (DGTVET) under Ministry of Labor and Vocational Training (MoLVT) was

mandated in designing and producing the curriculum materials for the institutions. Within 39 institutions during the academic years 2017-2018, there were a total of 2,094 teaching staffs where the total enrollment was 44,779 at the same year. This means that one instructor was responsible for 21 students per year (MoLVT, 2014). The quality of trainer in the TVET Institutions depends upon the number of trainers that are trained.

Table 5.4: Institution Staff by Education Qualification and Pedagogical Training, 2017-2018

Particular	Number of institutions	Teaching Staff					
		Total	None	Junior		Senior	
				Male	Female	Male	Female
Whole Country	39	2,094	1,098	211	86	423	276
By Institution category							
Institute	16	889	429	143	163	176	128
PTC/VTC	23	1,205	669	144	94	198	100
NGO & Private	N/A	N/A	N/A	N/A	N/A	N/A	N/A
By Location							
Phnom Penh	8	313	86	74	80	78	70
Provinces	31	1,781	1,012	285	121	248	134

Source: Technical and Vocational Education and Training Statistics, 2019

Note: PTC-Provincial Training Center / VTC-Vocational Training Center

Staff Pedagogy -None = No pedagogical training / Junior = with basic pedagogical training and qualified to teach Diploma level and below / Senior = with Advance pedagogical training and qualified to teach Bachelor level and below

Table 9 shows that among 2,094 teaching staffs, there are only 996 trainer got Education Qualification and Pedagogical Training. In this regard, institutions in Phnom Penh, had the largest proportion of trained teaching staffs, with 227 among 313. There existed a higher gender imbalance in term of proportions of male and female trained teaching staffs in the provinces. There were more male

trained teaching staffs, 1,781 compared to 684 of female trained teaching staffs. In Phnom Penh has a better scenario in terms of proportion of male and female trained teaching staffs as compared to other institutions in Provinces.

5.1.6 Challenges of Current TVET in Cambodia

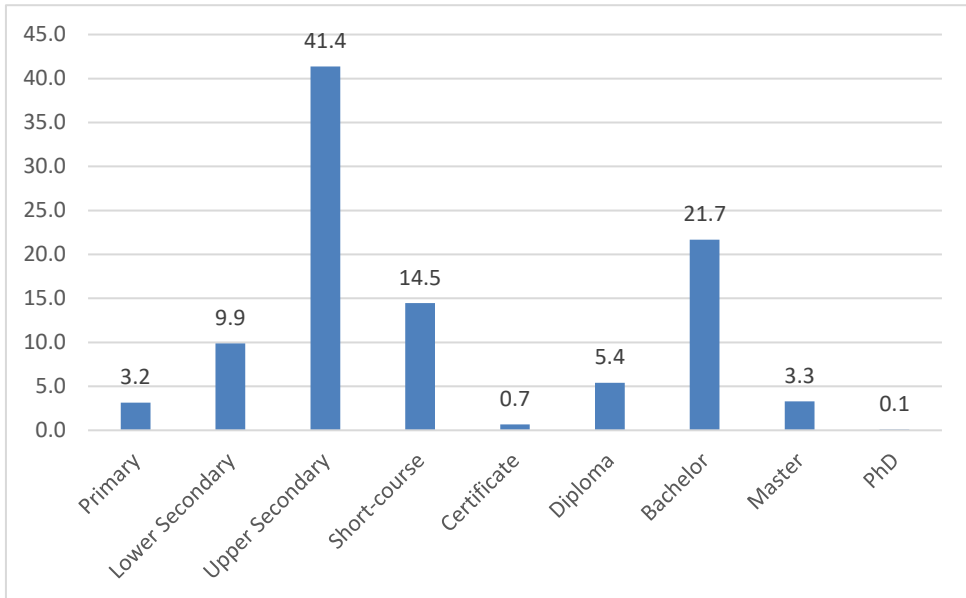
While there has been quite significant progress in the development of TVET in Cambodia over the past decade, the RGC recognize that this sector is still lagging behind when compared with some countries in the Asia-Pacific region as the government continue to deal with the following challenges:

First, low access to TVET Education. As mentioned in the previous section, there are only 23 PTCs/VTCs throughout the country and only a few of these institutions are in the communities. Most of the people who are living in the rural area do not know whereabouts of these training centers as they cannot access to any information regarding the vocation training program in the rural communities. Furthermore, the high opportunity cost of schooling for poor students remains a major constraint to TVET enrollment and completion.

Second, lack of qualified teachers. A shortage in qualified trainers impedes improvements in TVET Education outcomes. Despite notable in-service instructors training improvements, gaps persist in TVET trainers' content mastery and knowledge of effective pedagogy to improve students learning. The teaching profession attracts few top graduates, which partly explains the lack of qualified instructors. Trainers have limited opportunities to upgrade their pedagogical content knowledge. Based on Technical and Vocational Education Training Statistics report from Ministry of Labor and Vocational Training, in the academic year 2017-2018, there were 41.4% of instructors who had completed Upper Secondary Education, which are the majority, while there were only 9.9% completed Lower Secondary Education. Also, the statistics

report showed that there were 21.7% holding Bachelor Degree while 3.3% of instructor got Master Degree and only 0.1% got PhD. (See Figure 5.3).

Figure 5.3: Training Staff by Education Qualification



Source: Technical and Vocational Education and Training Statistics, MoLVT, 2018

With the limited qualified instructors, it is a big challenge in TVET sector in Cambodian since the new curriculums which have been developed. The instructors are required new skills and knowledge related to workforce to fit with these new updated curriculums. As mentioned earlier in Table 5.4, more than half (1,098) of all the instructors have not received any pedagogical training at all while 297 and 699 of them received basic and advance training. Furthermore, instructor deployment is also a challenge and has resulted in few qualified instructors, especially women in disadvantaged areas. The proportion of women instructors in TVET remains low at 42.6% overall, with 38% in provinces while the majority of instructors (66%) in urban areas are women.

Third, low quality and relevance of standards, curriculum, and assessment. Teaching and learning specialized skilled require minimum service standards for basic inputs such as laboratories, workshops, and equipment. Lacking these

standards exacerbates inequities in teaching and learning quality across Cambodia's TVET Education. Limited innovative teaching strategies, and infrequent review and alignment of curriculum content to the skills needs of students. The absence of a clear learner assessment framework to measure student learning, identify least learned skills and analyze underlying factors affecting poor learning outcomes precludes improvements in content and pedagogy. The TVET system has no strong links to private sector partners that could improve labor market relevance. Additionally, TVET students have limited access to opportunities for experiential learning, career guidance, and additional learning resources. The Ministry of Education, Youth and Sport (MoEYS) and Ministry of Labor and Vocational Training recognizes the need to use ICT in teaching and learning, but the government has yet to prepare a clear implementation plan to inform related investment and training.

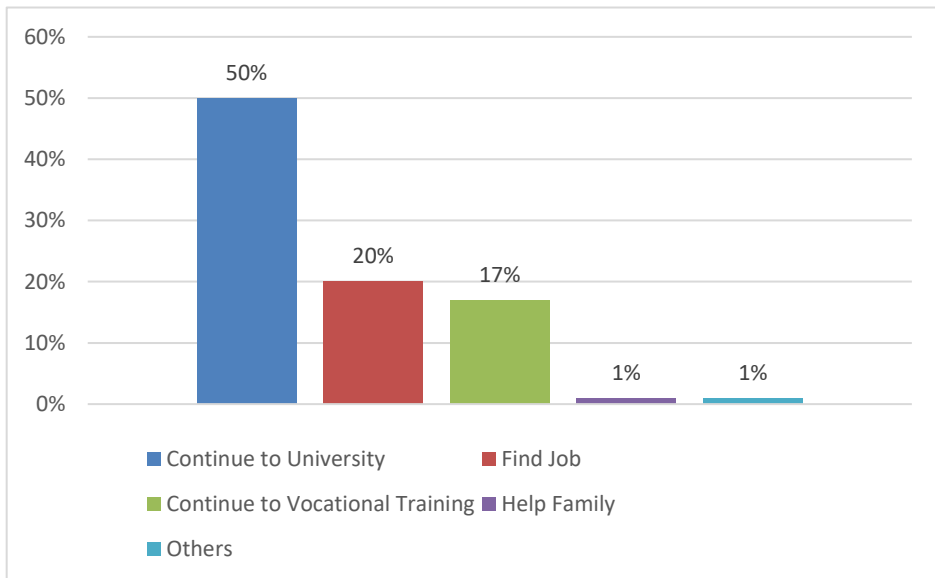
Fourth, lacks of skill level of labor force. The problem of skills has become apparent (ADB, 2015; Sothy et al., 2015) According to two Employers Skills Need Surveys, are of which one was conducted in 2012 and the other in 2014, employers have shown that they face the problem of skills shortages and skills gaps. Skill shortages happen when there is lack of applicants with the right skills for the job and it causes difficulties in recruiting staff; whereas, skills gap happens when the existing workforce lacks skills at the required level for completing the job or task (Bruni et a., 2013). From the two surveys, there are four main skills among first-time job seekers reported to be lacking among workers by the employers: (1) technical and practical skills, (2) job-specific skills, (3) foreign language skills, and (4) basic computer literacy. Skills gaps are found mainly in some occupations including plant and machine operations, technician and associate professionals, elementary occupations, and services and sales workers. Hence, skills that need to be improved reported by the employers include job-specific tasks, foreign language skills, teamwork and

oral communication, problem solving, and manual dexterity. The employers perceived a variety of negative impacts caused by this skills problem. The major four are: delays in developing new products or services, increase in workload for other staff, loss of business to competitors, and difficulty in meeting customer service objectives.

Last but not least, lack of value attributed to TVET. Some people value only higher education (university) which causes the low enrollment in TVET. Up to the present, a number of educational institutions have not yet widely provided guidance to students on choice of learning as well as the promotion of importance of TVET. The negative perception which is common throughout ASEAN viewed TVET as “second chance” and/or “second rank” education for the poor, marginalized group, and school dropped out youth. This also poses a big challenge on TVET enrollment to train workforces for existing and new growing industries.

According to the result of a research which was done by Korea Research Institute for Vocational Education & Training (KRIVET) in 2010, there were 17% of respondents who planned to choose Vocational Training Institution while 50% and 30% continued to universities and find jobs respectively (see Figure 5.4). This research was done by asking students about their future plan after finishing high school.

Figure 5.4: Student's Future Plan after High School



Source: KRIVET, 2010

5.3 Official Development Cooperation in Cambodia

Since the early 1990s, the major source of external finance has been in form of Official Development Assistance (ODA), which has made a significant contribution in supporting national development as well as transformed the country's human and national capacity, business environment, and social welfare. Since 2008, actual disbursements have risen from USD 979 million to USD 1.35 billion in 2017 (see Figure 5.5 below). Despite constraints on public resource availability in donor countries, disbursements in 2017 for Cambodia show an increase of 9% compared to a year earlier. As shown in Figure 10 below, there was steady growth in annual disbursement since 2010. In 2012, the total disbursement peaked at USD 1.5 billion. Later, the disbursement gradually fell to USD 1.45 billion in 2014 and USD 1.21 billion in 2016. However, according to estimated disbursement, the total ODA disbursement bounds back to USD 1.35 billion in 2017.

Figure 5.5: Total ODA Disbursement 2008-2018 (in USD Million)

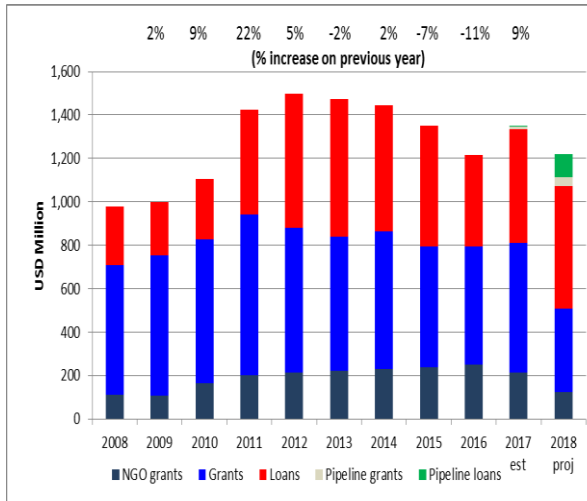
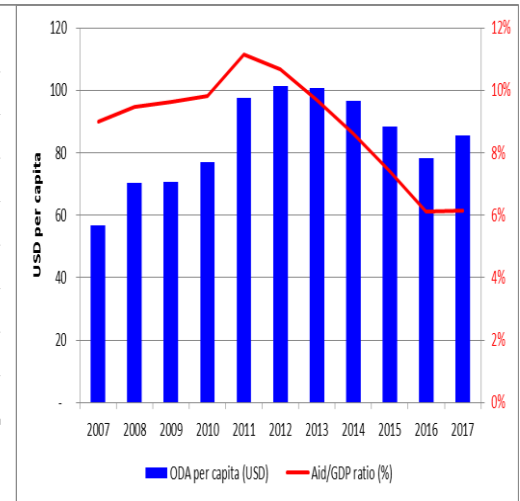


Figure 5.6: ODA per capita and Aid/GDP ratio 2007-2017 (in USD per capita)



Source: Development Cooperation and Partnership Report, 2018

The initial growth of total ODA disbursement in 2010 was driven by grants, but later, there was uptick in loan proportion that elevated the disbursement to peak in 2012. Loan disbursements continued to rise until 2013, were greater than ODA grants for the first time, and then subsequently decreased from USD 583 million in 2014 to USD 420 million in 2016. Event though, there was no sharp fluctuation in disbursement of grant (DP and NGO) in the period 2012-2017 while DP grants surges by USD 50 million in 2017, leading to expansion of grant proportion in total ODA disbursement by 10% compared to a year earlier.

Figure 5.6 reveals the broad trends of development cooperation provision and the relative importance of these resources in contributing to national development. The aid per capita ratios had increased from 2007, reaching over 1 billion per capita in 2012. However, the ODA/GDP ratio has fallen from 10% in 2013 to 6% in 2017, as GDP growth has remained robust while development cooperation has leveled off. The broad downward trend in the ODA/GDP ratio highlights, however, that, as Cambodia moves towards middle-income status, aid dependency is likely to be reduced as ODA’s relative share of financing in

national development declines even as actual aid volumes may remain stable or even increase. Although, the downward trend in aid delivery to Cambodia, shown in Figure 10, there is a strong and continued commitment of the international community to support Cambodia's development priorities.

5.3.1 ODA Disbursement by Development Partners

To further explore the growth of total ODA disbursement to Cambodia, Table 10 lists the total disbursement figure of all development partners between 2008 and 2018.

Out of USD 1.21 billion provided by the Development Partners in 2016, USD 224 million was provided by China, which has been Cambodia's single largest provider of external cooperation since 2010 despite a sharp drop in 2017 disbursement (associated with large capital project implementation). Disbursement by UN agencies and NGOs (core funds) is completely grant (except for IFAD's loan to Agriculture sector), and in 2017, disbursement by UN agencies increases by USD 13 million. International Financial Institutions (IFIs) indicate substantial growth as disbursement between 2016 and 2018 increases by USD 110 million.

There were fluctuations in disbursement among European partners as some donors have reduced and ceased their disbursement totally. Nonetheless, active donors like EC, France, Germany and Sweden are disbursing more money in 2017. Japan continues to be a major provider of support, trending upward over the period to disburse USD 126.4 million in 2017 while Korea has also increased markedly in the period from USD 33 million in 2008 to USD 51.2 million by 2017. Increases from these partners, as well as from ADB, are mainly in the form of soft loans, which explains the share of loans rising to over 50% of external funding.

Table 5.5: Total ODA Disbursement by Development Partners 2008-2018 (in USD Million)

Development Partners	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017 (Est.)	2018 (Proj.)
UN AGENCIES											
Total Programmes Delivered	118.8	148.9	114.0	89.5	88.1	-	107.2	93.7	93.4	-	-
Total Own Funds Disbursed	73.2	101.8	73.9	56.5	53.7	49.8	53.9	47.2	63.2	76.3	57.0
Multilaterals											
World Bank	41.7	60.4	56.9	73.8	66.0	35.5	50.6	17.6	20.1	39.7	54.2
Asian Development Bank	145.7	89.4	75.4	126.9	82.0	171.4	129.8	137.2	109.9	146.0	181.2
GAVI Alliance	-	1.7	3.6	6.7	4.9	10.7	5.5	19.0	10.2	10.9	9.2
Global Fund	38.6	46.5	61.2	60.2	20.1	45.4	54.6	33.3	28.2	71.7	-
Sub-Total UN & Multilaterals	299.2	299.7	270.9	324.1	226.8	312.8	294.4	254.3	231.5	344.6	301.6
EUROPEAN UNION											
European Commission	48.4	49.4	32.9	61.0	41.6	36.6	70.3	55.8	56.0	59.8	26.7
Czech Republic	0.0	-	-	-	-	-	1.2	1.2	1.3	1.2	-
France	29.8	25.4	22.4	19.5	24.8	17.8	59.5	63.3	31.9	103.3	40.6
Germany	36.6	27.9	35.3	43.7	44.6	34.3	29.8	25.8	48.4	36.5	29.7
Ireland		0.7	0.7	0.7	0.3	1.2	0.7	0.6	0.6	1.3	1.3
Sweden	15.9	22.8	24.7	28.6	30.2	33.8	33.0	21.8	30.1	20.3	13.0
United Kingdom	29.6	32.6	24.7	34.2	28.2	13.7	0.1	0.2	1.6	2.3	0.3
Other EU Member States	30.7	41.9	52.0	48.3	18.2	9.9	6.0				
Sub-Total: EU partners	191.0	200.7	192.7	236.1	187.9	147.3	200.6	168.7	169.8	224.6	111.6
Other Bilateral Donors											
Australia	49.1	47.8	63.4	78.2	79.5	59.3	64.9	55.9	51.9	56.3	41.3

Canada	11.5	16.7	12.8	18.5	20.5	11.8	5.7	3.8	3.0	1.6	0.7
China	95.4	114.7	154.1	332.0	460.7	436.6	347.8	339.4	265.3	223.5	251.4
Japan	126.4	134.0	140.0	114.4	172.3	130.8	111.4	110.4	119.7	126.4	168.0
New Zealand	2.8	2.3	5.2	4.4	3.8	3.2	6.0	4.9	4.0	5.3	5.5
Republic of Korea	33.0	15.8	35.2	45.3	46.2	50.1	80.3	61.7	31.9	51.2	24.6
Switzerland	3.9	3.0	3.1	4.5	4.3	7.8	11.8	13.0	15.8	13.8	10.0
United States of America	55.7	56.9	63.3	64.4	85.0	93.5	91.6	101.0	71.1	76.0	35.7
Sub-Total: Other	377.6	391.3	477.2	661.8	872.3	793.1	719.6	690.0	562.6	554.2	537.2
NGOs (core funds)	110.8	108.5	165.0	200.7	212.3	220.8	230.7	237.7	250.3	211.3	122.7
Pipeline Projects										14.2	147.2
Grand total	978.5	1000.2	1105.8	1422.6	1499.2	1473.9	1445.2	1350.7	1214.2	1348.9	1220.3

Source: Development Cooperation and Partnership Report, 2018

Most other major development partners maintained a relatively flat trend in their support with the exception of ADB, which was more volatile due to the nature of the large infrastructure projects that it has funded. By 2013, the programmes of development partners that had discontinued their bilateral cooperation with Cambodia – Canada, Denmark, UK with Spain to follow – began to close.

5.3.2 ODA Disbursement by Sector

In terms of long-term trends in sector support, Social Sector received the biggest share with USD 469.7 million, accounting for 39% of total ODA disbursement, followed by Infrastructure Sector around 29% while Economic and Cross-cutting Sector received 19% and 13% share, respectively. Social sector support traditionally commanded the greatest share of development cooperation, peaking at USD 567.5 million in 2011 before declining to USD 459.4 million in 2013.

A review of sector trends (Table 11) shows that the most significant increase in recent years has been to the infrastructure sector, notably to the transportation sub-sector (principally roads, also rail, water and air). External support to transportation has increase from USD 161.9 million in 2008 to 216.6 in 2017. China, Japan, ADB and Korea are the main partners supporting this sub-sector. Elsewhere, the share of support to economic sector expands significantly from USD 235 million in 2016 to USD 302 million in 2017. The increase is due to more funds disbursed to support agriculture (which has more than doubled from USD 46.1 million in 2008 to USD 181.7 million in 2017), banking service, and urban management. The increase in aid to this sector is well aligned to support the Royal Government Policy on the Promotion of Paddy Production and Rice export.

Table 5.6: Total ODA Disbursement by Sectors 2008-2018 (in USD Million)

Sectors	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017 (Est.)	2018 (Proj.)
Social Sectors											
Health	136.7	161.8	211.4	205.3	203.0	203.2	204.8	203.7	209.3	213.8	102.0
Education	100.5	95.5	115.6	154.6	135.3	140.4	167.1	174.9	171.3	148.2	90.3
HIV/AIDS	57.9	56.3	46.4	69.4	33.5	34.7	45.8	30.2	23.2	32.2	6.4
Community & Social Welfare	51.7	54.5	58.9	138.2	136.4	81.1	84.8	98.6	65.9	53.9	36.5
Sub-Total	346.8	368.1	432.3	567.5	508.2	459.4	502.5	507.4	469.7	448.1	235.2
Economic Sectors											
Agriculture	46.1	80.9	90.4	144.9	185.4	184.4	218.1	171.0	142.0	181.7	173.9
Rural Development	56.8	64.4	67.8	48.6	81.3	77.0	85.5	93.6	67.6	74.8	73.9
Manufacturing, Mining & Trade	24.5	11.1	9.0	13.4	11.4	11.1	3.2	4.5	5.3	18.3	1.3
Banking and Business Services	44.9	12.8	30.9	73.1	4.0	43.8	14.3	27.0	14.0	14.8	4.5

Urban Planning Management	4.5	16.1	10.9	2.7	11.9	0.3	6.6	7.4	6.0	12.1	24.1
Sub-Total	176.8	185.3	209.0	282.7	294.0	316.6	327.7	303.5	234.9	301.7	277.7
Infrastructure Sectors											
Sectors	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017 (Est.)	2018 (Proj.)
Transportation	161.9	180.3	184.7	271.2	383.6	379.0	309.4	286.8	164.3	216.6	226.3
Water and Sanitation	25.5	17.3	24.4	36.1	52.3	59.3	63.7	37.8	39.0	75.7	37.5
Energy, Power and Electricity	32.8	21.7	41.5	57.3	66.7	59.9	66.5	54.8	138.8	88.6	136.1
Information and Communication	7.1	7.5	1.8	0.2	1.3	3.0	10.8	5.0	12.5	0.9	-
Sub-Total	227.3	226.8	252.4	364.8	503.9	501.2	450.4	384.4	354.6	381.8	399.9
Cross-cutting Sectors											
Gender	5.5	5.2	6.0	6.4	8.7	9.8	8.5	6.1	6.4	3.8	2.3
Tourism	5.0	6.0	4.0	2.2	0.8	0.7	0.6	1.8	1.4	17.2	9.8
Environment and Conservation	16.7	11.5	36.8	18.1	14.2	24.3	26.8	33.1	29.5	19.0	16.5
Climate Change	-	9.1	5.3	5.9	7.3	8.8	7.0	7.7	8.1	11.3	14.5
Culture and Arts	6.3	5.9	6.2	4.3	4.6	4.6	5.5	6.2	3.8	4.6	39.7
Governance and Administration	118.5	126.0	113.5	111.9	100.7	117.7	84.3	77.8	101.7	83.1	53.1
Budget and BoP Support	21.9	20.5	0.3	0.3	14.8	-	-	-	-	-	-
Emergency and Food Aid	16.0	11.1	14.8	25.5	25.0	19.3	25.2	14.8	1.3	0.3	-
Sub-Total	189.9	195.3	186.9	174.6	176.1	185.2	157.9	147.5	152.2	139.3	135.9
Others	37.5	24.6	25.1	32.9	17.0	11.6	6.9	7.8	2.9	63.8	24.5
Pipeline Projects										14.2	147.2
Grand Total	978.3	1,000.1	1,105.7	1,422.5	1,499.2	1,474.0	1,445.4	1,350.6	1,214.3	1,348.9	1,220.4

Source: Development Cooperation and Partnership Report, 2018

From 2015 to 2006, total disbursement fell by 10%, and there was reduced disbursement in all sectors. However, as total disbursement recovers in 2017, the growth does not appear in social and cross-cutting sectors. Instead, projected disbursement in 2018 illustrates deeper reductions in these sectors.

5.3.3 ODA Supports to TVET and Higher Education in Cambodia

The education sector has also received increased support and its share of total ODA increased from USD 100.5 million in 2006 to USD 171.3 million in 2016. The portfolio of on-going TVET and higher education projects (including scholarships and technical volunteers), as shown in Table 12, amount of USD 288.74 million with an annual disbursement ranging between USD 26-32 million in the period 2015-2017. Resource devoted to TVET as perhaps rather low, only USD 7.9 million in 2017, with Japan and ADB being the most active development partners. More encouraging is that 9 partners are active in the TVET field and, with an increased coordination and mobilization by responsible ministries, there is some potential to increase collaboration in this important area.

Table 5.7: Development Partner funding to TVET and Higher Education (in USD Million)

	Total Budget	2015	2016	2017
Higher education				
Czech Republic	0.21	0.04	0.12	-
France	10.69	0.82	0.68	0.41
Japan	14.04	3.51	0.64	0.67
Republic of Korea	5.28	-	0.58	4.13
Sweden	0.13	0.01	0.04	0.04
UK	0.31	-	-	0.20
UNESCO	0.03	0.02	-	-

World Bank	11.50	1.79	-	-
Total Higher education	42.18	6.20	2.06	5.45
Scholarships				
Australia	70.74	6.15	5.53	5.67
Canada	0.98	0.09	0.16	0.16
France	8.31	0.39	0.52	0.40
Japan	21.98	1.99	3.00	1.68
New Zealand	24.45	2.61	1.95	3.14
Total Scholarships	126.47	11.23	11.16	11.06
Technical volunteers				
Japan	17.74	2.77	2.28	2.41
Total Technical volunteers	17.74	2.77	2.28	2.41
TVET				
ADB	55.95	5.67	1.18	2.83
EU/EC	1.86	0.42	0.31	0.20
France	3.26	-	2.91	-
	Total Budget	2015	2016	2017
ILO	1.28	0.28	0.41	0.58
Japan	24.81	3.45	3.84	3.35
Sweden	6.25	1.08	1.05	1.37
Switzerland	10.70	0.66	1.48	2.17
UK	0.06	-	0.01	0.03
USA	1.00	0.40	0.20	0.20
Total TVET	105.17	11.95	11.39	10.72
Grand total	291.57	32.14	26.89	29.64

Source: Development Cooperation and Partnership Report, 2018

In recognition of the importance of promoting technical and vocational education at training (TVET), Ministry of Labor and Vocational Training has approved a National TVET Policy (2017-2025) in June 2017 that elaborates a

strategic framework within which the TVET system will be improved and long-term development programs would be designed. It establishes the priorities and action plans to improve the TVET system as well as provides a platform to engage key stakeholders. The support to TVET has been well aligned with the government priorities that has been set out in Industrial Development Policy (IDP).

5.3.4 Utilization Patterns of Aid in the TVET Education

The tranches of Development Partner support have allowed an expansion of the TVET education expenditures in respect of instructional materials, TVET institution operations, facilities, rehabilitation and maintenance and instructors deployment, production and development. The completed tracking study (funded by ADB) and other analytical work supported by the Japan, is helping to build confidence about the established financial management arrangements for the sector. In recent years, a further consideration was given to the learner assessment, competency-based assessment and certification system and the involvement of private sector. These considerations have been visualized by Development Partners in different project over the past years as shown in Table 5.8.

Table 5.8: Development Partners funding to TVET

Development Partners	Project Title	Years
ADB	Technical and Vocational Education and Training Sector Development Program	2015-2018
	Skills for Competitiveness Project	2019-2025
Canada	Partnerships for Community Development	2015-2020
Czech Republic	Fostering transition to employment for youth	2019-2021
EU/EC	Breaking the Cycle of Youth Marginalization and Vulnerability in Rural Communities in Cambodia	2015-2018
ILO	Scaling-up STED: Skills for Trade and Economic Diversification	2015-2017

	Enhanced employability of men and women through improved skills development and public employment services	2018-2019
Japan	Project for Improving TVET Quality to Meet the Needs of Industries	2015-2019
	The Project for Strengthening Engineering Education and Research for Industrial Development in Cambodia	2018-2024
Republic of Korea	Establish of Industry-Academia links-based Business Incubating System in Cambodia	2019-2023
	Science & Technology Support Program: Institute Cooperation	2009-2017
Sweden	Academy of Culinary Arts Vocational Training	2015-2018
	Academy of Culinary Arts Vocational Training phase II	2018-2020
	Skills Development & Employment for Youth	2017-2019
Switzerland	Poverty Reduction through Skills Development for Safe and Regular Migration in Cambodia (Lao PDR, Myanmar, Thailand and Vietnam) Inception phase	2017-2021
	Research, Policy Dialogue and Capacity Building Program on Technical and Vocational Education and Training	2017-2020
	Skills Development Programme Cambodia	2016-2020
	UN Joint Program on Youth Employment	2017-2019
UK	Discovering STEM careers through TVET: Promoting TVET paths to STEM careers through a publication, mentoring program and events.	2019-2020
	Promoting and increasing the understanding of TVET (Technical and Vocational Education & Training)	2018-2019
World Bank	Higher Education Institutions Capacity Improvement Project - IDA Credit No. 62210	2018-2024

Source: CDC ODA Database

These projects are designed to contribute to the RGC's strategies and other development partners' willingness in reducing poverty and achieving socio-economic development for Cambodia. These include (1) promotion of vocational and skill training to ensure continuing improvement in national productivity; (2) creation of jobs in the formal and non-formal sectors; (3) an increase in agricultural productivity to create jobs in rural areas; (4) the establishment of technical vocational education and training networks to assist

both men and women, especially the poor, disabled and vulnerable, to respond to labor market needs.

5.4 Survey Responses to Development Cooperation Aid Program

The section analyses the institution director and instructor’s responses to the Development Program in their institutions. The discussion focuses from the beginning of the years when the institutions started receiving the supports.

5.4.1 Form of Development Cooperation Aid to TVET Institutions

Most of the TVET Institutions in the study area received the Development Cooperation aid in the form of grants while there are some under the support in the form as loan. Five of the eight institutions in the study area namely, National Polytechnic Institute of Cambodia, Preah Kossamak Polytechnique Institute, Cambodia-India Entrepreneurship Development Institute, Cambodian-Thai Skill Development Center and JVC Technical School & Workshop had received curriculum materials under the aid program. Three schools such as Regional Polytechnic Institute Techo Sen in Kampot, in Battambang and in Siem Reap also received the infrastructure materials and had built their double stories building that catering to the needs for staff room, storage, library and classrooms (Table 5.9).

Table 5.9: Forms of Aid Program received by the Institutions in the Study Area

Form of Aid	No. of Institutions received	% Schools
Grants	8	100.0
Curriculum Materials	5	62.5
Infrastructure Provisions	3	37.5

Source: Researcher’s TVET Institutions Survey, 2019

The distribution patterns of the aid raised some concerns for the institutions in the province. The criteria used by the Ministry of Labor and Vocational Training regarding the supervision and the distribution of the aid to TVET Institutions were questioned by the instructors. Many opined that it would have been meaningful if the priority for the aid would have been given to the institute in the provinces since they lack of infrastructure facilities such as classroom, dormitory, workshop, storage facility and library.

As one director from one of the institutions in the study area mentioned:

“We’ve heard of the support from JICA but we have not yet received it. I’ve heard that some institutions in Siem Reap Province have received many supports while our school haven’t received it yet. Those school are much better than us since they have received assistance from not only Japan but also AUSAID. We are unfortunate since we did not receive much of these assistances. We are still left out and this was a drawback in terms of education development in our province.”

This reflects the concern over the aid distribution patterns in the TVET Institutions.

5.4.2 Responses from TVET Institutions

This section deals with various responses received from the institutions on the aid on TVET Education.

5.4.2.1 State of the Institutions

There is wide disparity in the institutions in the study area. The table 5.10 below shows the educational disparities in the study areas.

Table 5.10: Selected Educational Indicators in the Study Areas

Institutions	Gender of Institution Director	Student Enrollment	Total Instructors	Instructor-Student Ration	Total Trained Instructors	Trained Instructors – Students Ration
National Polytechnic Institute of Cambodia	M	1,406	66	1:21.3	43	1:32.6
Preah Kossamak Polytechnique Institute	F	4,180	105	1:39.8	56	1:74.6
Cambodia-India Entrepreneurship Development Institution	M	1,309	53	1:24.7	29	1:45.1
JVC Technical School & Workshop	M	309	15	1:20.6	6	1:51.5
Cambodian-Thai Skill Development Center	M	666	29	1:22.9	16	1:41.6
Regional Polytechnic Institute Techo Sen in Kampot	M	1,886	26	1:72.5	20	1:94.3
Regional Polytechnic Institute Techo Sen in Battambang	M	2,802	94	1:29.8	67	1:41.8
Regional Polytechnic Institute Techo Sen in Siem Reap	M	1,956	58	1:33.7	36	1:54.33
Total Number of Institution received		14,514	446	1:32.5	268	1:54.1

Source: Technical and Vocational Education and Training Statistic, 2018

As mentioned earlier, eight TVET institutions were taken for the study. Indicators such as genders disparity, instructor – student ratio were taken to have a comparative analysis among the institutions. In terms of gender of principle in institutions only one school was female – headed institution while the other institutions in the area had male director. In five institutions namely, National Polytechnic Institute of Cambodia, Cambodia-India Entrepreneurship Development Institution, JVC Technical School & Workshop, Cambodian-Thai Skill Development Center, and Regional Polytechnic Institute Techo Sen in Battambang, the instructor and student ratios were low, suggesting that they

were better off in terms of staffing compared to other institutions in the study area. The staffing situation was worse in Regional Polytechnic Institute Techo Sen in Kampot where the instructor student ratio value was as high as 1:72.5. Similarly, in terms of trained instructor – student ratio, the institutions such as National Polytechnic Institute of Cambodia, Cambodian-Thai Skill Development Center, Regional Polytechnic Institute Techo Sen in Battambang and Cambodia-India Entrepreneurship Development Institution were better off. Regional Polytechnic Institute Techo Sen in Kampot, JVC Technical School & Workshop, Preah Kossamak Polytechnique Institute and Regional Polytechnic Institute Techo Sen in Siem Reap were worse – off in terms of availability of trained instructors.

5.4.2.2 Awareness of the Aid Program in the Institutions

The study found greater public knowledge or awareness by the institution directors and instructors on the Development Aid to the institutions. The obvious reason of the awareness was that some of them were signatories to schools account to which the school grants were deposited into. Many acknowledge the aid program during the staff meetings in which they were briefed of their schools' meeting and financial reports. As shown in Table 5.11, of all the total respondents, 92.8% percent had indicated that they were aware of the aid for the schools. A small proportion of respondents were unaware of the aid package because they did not participate in the aid project and inaccessibility to modern communication.

Table 5.11: Awareness of the Development Aid

Category of respondents	No. of respondents	Yes	% Yes	No	% No
Institution Director	9	9	100	0	0
Instructor	74	68	93.2	6	6.8
Total	83	77	92.8	14	7.2

Source: Researcher's TVET Institutions Survey, 2019

In some school, the instructors did a great job. They undertook the supervision work on the infrastructure construction in their institutions. This was noticed in Regional Polytechnic Institute Techo Sen in Battambang and in Siem Reap. These three institutions are fortunate to received infrastructure grants from the aid. While in some institutions class instructors are already using the newly produced standard curriculum materials that were produced under the TVET Development Projects.

5.4.2.3 Institutions Director Response on School Improvement

The response of the Director and Deputy Director on the improvement in the institutions widely varied. Six out of eight of the institution directors responded that they have seen improvement in the curriculum materials in their institutions while 37.5 percent of the directors said there was improved infrastructure in their institutions (Table 5.12). Only 12.5 percent said that there was an improvement in the Internship Programs. This show that, most of the institutions area does not have any Internship Program which are very important to strengthen and improve the involvement of the employers in TVET delivery.

Table 5.12: Response of Institution Directors towards institution improvement

Institutions	Curriculum Materials	Better Physical Infrastructure	Internship Program
National Polytechnic Institute of Cambodia	✓	-	✓
Preah Kossamak Polytechnique Institute	✓	-	✓
Cambodia-India Entrepreneurship Development Institution	-	-	-
JVC Technical School & Workshop	✓	-	-
Cambodian-Thai Skill Development Center	✓	-	-
Regional Polytechnic Institute Techo Sen in Kampot	-	✓	-
Regional Polytechnic Institute Techo Sen in Battambang	✓	✓	-
Regional Polytechnic Institute Techo Sen in Siem Reap	✓	✓	-
Total Number of Institution received	6	5	1
% Institution Received	75	37.5	12.5

Source: Researcher's TVET Institutions Survey, 2019

5.4.2.4 Level of Difficulties in Accessing Development Aid

The Institution Director of eight institutions responded differently to questions how they access the aid for their respective institution. Nearly 62.5 percent of the institution directors responded that it was difficult in accessing the development aid while the other 37.5 percent stated that they found easy to access for their schools (Researcher interview, 2019). They also stated that access to aid was a time-consuming process.

5.4.2.5 Level of Community Support and Participation

Although the need for primary education is high in the communities or provinces, their support and participation are institutions development in the study area is crucial. This needs to be looked at by both the institutions administration and the community leaders. Of eight institutions in the study area, 62.5 percent of the institution director stated that there was weak participation by the community. Another 12.5 percent had indicated that there was a medium level of community participation in their institutions. Only one-third of the institution directors responded a very strong support from the community towards their institution. According to the Ministry of Labor and Vocational Training (Researcher interview, 2019) the study area has done well as compared to other areas in terms of community participation. Overall there is poor community support and participation in school development.

Table 5.13: Institutions Director’s Response to Level of Community to the Institutions

Category	% of responses
Strong	25
Medium	12.5
Weak	62.5
Total	100.0

Source: Researcher’s TVET Institutions Survey, 2019

There are several reasons for the poor community participation in the study area. One instructor observed that the poor community participation was due to lack of trust and confidence on the institution administration. According the him, the institution administration lack of accountability and transparency in handling institutions affairs. As a result, there is withdrawal of community

support from the institutions development. In another institution, an instructor responded that there is lack of coordination, and consultation between the institution director and the community.

In some areas, the communities have wrong notion and perception toward development aid. The communities think that aid is nothing else but just money. So, if there is aid, there is money to pay for people to do their jobs required by the institutions. So, to them, there should be no free labor. They think that someone would be contracted to do the job on their behalf because there is money coming from the aid program. This creates the dependency mentality and attitude of replying on others and money for a job to be done. This attitude also contributes to low level of community participation in some areas.

5.4.3 Problems in Development Aid to Institutions

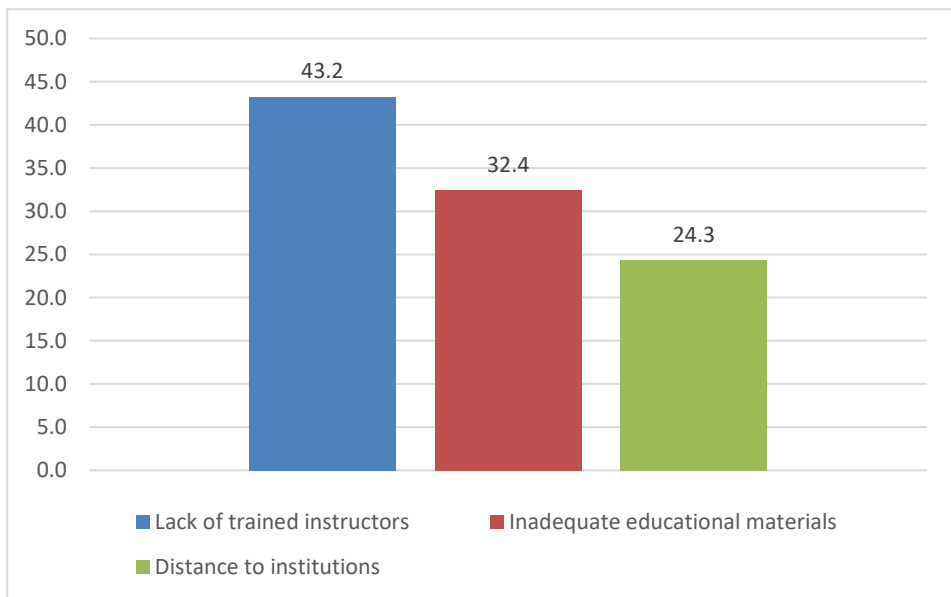
The development aid has improved the infrastructure facilities and curriculums materials in some institutions. However, there are some institutions still face many problems. The responses from the instructors give a picture of the problems that they see still exist in the institutions.

The instructor perspective on the problems encountered was very interesting. Inadequate educational resources and lack of trained instructors in the institutions and the distance from rural areas to the institutions are some of the problem observed by the instructors. Of total respondents, 43.2 percent indicated that there are still inadequate educational materials exist in the institutions. Some institution directors stated that one of the contributing factors to this problem was the undercounting of student number in the institutions by the staff of Provincial Department of Labor and Vocational Training. Another factor is that two of the institutions in the study area had not received the curriculum materials (Table 5.12). The other issue was the distance traveled by the students to and back from institutions. About 32.4 percent of the instructors

indicated that the distance from village to institutions was a major concern. This means that the institutions are located far away from the villages and it makes accessibility to TVET education a problem for the rural students. Another 24.3 percent of the respondents stated that the lack of trained instructors was a problem in the institutions (See Figure 5.7).

The issue of instructors training is critical for TVET development. Although one of the components of the Development Partners Aid was to improve the TVET instructors training, there is still inadequate trained instructor in the TVET institutions. In this respect the development aid has been ineffective and not achieving its intended goals. Instructor training in fact takes two or three years to meet the necessary requirements for someone to be a qualified-instructors.

Figure 5.7: Instructor Response to Problems in Development Aid



Source: Researcher's TVET Institutions Survey, 2019

5.4.4 Positive Impacts of Development Aid on TVET Education

An assessment of impacts of aid is difficult because nature of the projects differs from place to place in Cambodia. The effectiveness of development cooperation in TVET, however, was measured in terms of timing of supports, distributions, improvement in infrastructure and availability of educational resources including new curriculum materials in institutions. Enrollment pattern also reflects aid impacts. The study finds that despite failure in some fronts, the development aid has contributed significantly to the development of TVET education in Cambodia. This was evident from respondents' responses. About 56.6 percent of all respondents had indicated that the Development Aid was effective in addressing the education needs of the community while 43.4 percent responded negatively (See Table 5.14).

Table 5.14: Response towards effectiveness of Development Aid in TVET Education

Category	No. of respondents	Response YES	%	Response NO	%
Institution Director	8	5	62.5	3	37.5
Instructor	74	42	56.8	32	43.2
Total	83	47	56.6	35	43.4

Source: Researcher's TVET Institutions Survey, 2019

5.4.4.1 Institutions Infrastructure Improvement

There is a mixed response to the issue of infrastructure improvement. Out of eight institutions studied, only three have actually received the materials for the infrastructure improvement. These institutions include Regional Polytechnic Institute Techo Sen in Kompot, in Battambang and in Siem Reap Province. The other five institutions are yet to received their share of aid for the infrastructure

development. Nearly, 54.1 percent respondents said that the institution infrastructure has not been improved under the aid program (see Table 5.15).

Table 5.15: Response Towards Institution Infrastructure Improvement

Category	No. of respondents	% of respondents
Improved	34	35.9
Not Improved	40	54.1
Total	74	100.0

Source: Researchers' TVET Institutions Survey, 2019

5.4.4.2 Improvement in Course Materials

The instructor's responses on the improvement student's course materials in institutions under the development aid varies. About 64.9 percent of the respondents stated that there was improvement on the learning materials while 35.1 percent said that were not improvements at all. (Table 5.16).

Table 5.16: Response Towards Improvement of Course's Materials in Institutions

Category	No. of respondents	% of respondents
Yes	48	64.9
No	26	35.1
Total	74	100.0

Source: Researchers' TVET Institutions Survey, 2019

5.4.4.3 Student Enrollment

The student enrollment patterns also indicate the effectiveness of aid program. According to the institution directors of the eight institutions, there was a steady increase in the female student enrollment in the institution. The institution directors acknowledge that this increase in female students' enrollment was attributed to the commitment made by MoLVT and development partners for

TVET Education. The correct record of enrolment was however difficult to obtain from many institutions. Access to specific data on the female enrollment patterns before and after the development aid implementation was more difficult. Another factor obtained by the institution director was that the annual staff movement according to posting. It further hinders keeping of proper records in some institutions.

5.4.5 Negative Impacts of Development Aid

While there were some positive impacts of the ODA on TVET development in the study area, there were some negative impacts as well. One of the negative impacts of aid was that it creates a dependency mentality in the rural areas and at the national level. Some stated that there is money coming from overseas to get people to do the work required in the schools so people should be paid for their labor. At the national level, relying heavily on aid funding for TVET development is more dependent creating an ad hoc arrangement. The question remains how will the government continue to maintain and run the TVET Institutions when the aid is lapsed? Another area of failure is the development of educational resources particularly the curriculum materials. The Ministry of Labor and Vocational Training and the development partners need to look at more closely on curriculum development. The current TVET curriculum is giving more attention on some skills only like construction, electronics, mechanic and so on. The curriculum development under the aid program should be more need based and to be matched with the labor market.

5.5 Chapter Summary

The study has given some interesting but not surprising results on the state of TVET in Cambodia. There exist gender inequalities in the TVET Education sector throughout the country. The inequality exists in TVET institution headship, the ratio of male and female instructors and trained instructor –

student ratio. There are more male trained instructors compared to female instructors. There also existed high instructor – student ratios. The high instructor student ratios affect the quality of TVET education to a great extent.

The development aid on TVET education has been an integral part of education that promotes human resources development in Cambodia. It has taken a new shift. It has now focused on providing skilled to match with the labor market. The improvement in TVET education in Cambodia was one of the major objectives of the Development Partner’s assistance to TVET by supporting the Ministry of Labor and Vocational Training with immediate goal of re-establishing and maintaining the delivery of skilled to youth.

The survey responses of the Development Partner have shared some points to consider. While there are new infrastructure and new curriculum for TVET Institutions, the distribution patterns of aid raised some concerns for the remote schools. These schools felt deprived of having equal access to the aid program. The issue of access to education is critical as some schools were built away from communities and bad road conditions that hinder easy access for the youth. The Ministry of Education and the donor partners need to look at more closely on curriculum development which are to be more needed – based and also labor market.

Chapter VI: CONCLUSION AND RECOMMENDATION

The final chapter presents the discussion of core findings and policy implications drawn for this study. It ends with the recommendations for further research.

6.1 Discussion on Core Findings

TVET is essential and a major concern in human resources development. It empowers people to require more technical skills capable to access to employment. Most of the developing countries are unable to mobilize their own resources to fully cope with the growing demand for TVET. These countries use “development aid as an instrument in meeting growing educational resources demands. Like any other countries, Cambodia depend on the external sources of financing for meeting its education needs.

This study focused on the TVET Education and role of aid in its development in Cambodia. The objective of study was to assess the impact of ODA in supporting TVET sector in Cambodia.

With the support from development partners and related stakeholders, Cambodia has made impressive achievements towards national socio-economic development. However, development aid is still vital for Cambodia and the country continues to rely on aid to help in creating provision and further development of TVET for its citizens. Development aid is well defined as the aid given by bilateral government and multilateral agencies to support the socio-economic development. The most common type of foreign aid is ODA, which is assistance given to promote development and to combat poverty. However, the motives for giving aid vary widely. The main purpose of aid is development of the recipient country. Some donor countries often provide

foreign aid to enhance their own security while some for diplomatic recognition. Some donor countries however, provide aid to relieve suffering caused by natural or man-made disasters such as famine, disease, and war, to promote economic development, to help establish or strengthen political institutions, and to address a variety of transnational problem including disease, terrorism and other crimes, and destruction of the environment.

According to the Development Cooperation and Partnership Report (2018), aid from all donors to Cambodia was USD 1.34 billion, higher than a year before. This increase of ODA disbursement in 2017 is driven by growth in disbursement from UN agencies, IFIs, EUs, and Japan. ADB and France are major donor among their groups with combine disbursement accounting for 19% of total fund. Japan's disbursement was one tenth of total disbursement. Despite a sharp drop in 2017 disbursement, China remains the top external development partners, providing USD 224 million and representing 17% of total ODA disbursement in 2017.

Three levels of assessment were done to assess the impacts of Development Aid program in Cambodia. The assessment was done on the national level, provincial level, and at the TVET institutions level in the study area. Some of the indicators used in the study are state of TVET development, gender equality, instructor-students rations and quality teaching staff available in the institutions.

At, the national level, the study showed that there existed wide gender inequalities in TVET Education sector in the study area. Firstly, in terms of director in institutions, the data for male to female director ratio in the institute was nearly 7:1, which mean seven male directors to one female director. The trained instructor – student ratio in Cambodia as whole was 1:21. The trained instructor student – ration in the area was as high as 1:34. In the study area, has a higher ratio (1:32.5) suggesting an inadequacy in teaching staff available. The

proportion of trained and untrained instructors in the study area by gender gives a picture for gender imbalance in quality teaching staff. The study shows that among 44,806 there are only 996 instructors were trained. There were more male trained instructors (741 instructors) as compared to female trained instructors (255 instructors).

Disparities also existed at the TVET institution in the study area. In terms of gender of director in the institutions only one school was a female director. Among eight institutions, the instructor – student ratio in Regional Polytechnic Institute Techo Sen in Kampot were high as 1:72.5, suggesting that this school was worse while the other seven were better off. This suggests that one instructor is training 72 students in the institution. Similarly, in terms of trained instructor – student ratio, the institutions such as Regional Polytechnic Institute Techo Sen in Kompot and in Siem Reap, and Preak Kossomak Polytechnique Institute were worse off in terms of availability of trained instructors.

The development partners focused its policy in improving the TVET education sector in Cambodia. The volume of development cooperation aid from 2015-2017 ranged from USD 26-32 million. The support was provided in the funding for institutions, instructor training and development program, curriculum review and reform program and national infrastructure development program.

Institute responses from the study have raised mixed feeling on the development aid program. The study revealed that there was high public awareness of the aid program. All the institutions in the study areas received aid in the form of grants. Six out of eight institutions in study area had received curriculum materials under the aid program. Five institutions also received infrastructure material and had built new building catering the needs for classroom, staff room, workshop, library and storage. Although there is some aid received by the institutions in the study area, the distribution patterns of the

aid raised some concerns for the school in the province. These institutions lack infrastructure facilities such as classrooms, strong facility, library, educational materials and other learning resources as compared to the other schools.

Institution directors' response on school improvement under the aid program varied widely. Six of the institution directors responded that they have seen improvement in the curriculum material in their institutions while another 37.5 percent of them said there was improved infrastructure in their institutions. Only 12.5 percent said that there was an improvement in the Internship Programs. These differences are primarily due to the pattern of dissemination of different tranche of development partners to TVET institutions. The institution directors responded differently to questions – how they access the aid for their respective institutions. Nearly 62.5 percent of institutions director responded that it was difficult in accessing the development aid while 37.5 percent stated that they found easy to access the development aid for their institutions.

The study analyzed the extent of community participation in institution development. The level of community support and participation to educational development in the study area varied widely. Of the eight institutions in the study area, 62.5 percent of the institution directors stated that there was weak participation from the community. Another 12.5 percent had indicated that there was a medium level of community participation while 25 percent of the institution's directors responded a very strong support from the community toward their institution development

The development aid has improved the infrastructure facilities and curriculum materials in some institutions. However, other schools still face problems such as inadequate educational resources, and lack of trained instructors.

The effectiveness of development aid in TVET education was measured in terms of timing of grants, distribution, improvement in infrastructure and availability of educational resources including new curriculum materials and internship programs in the institutions. Enrollment patterns also reflected the impact of the aid program. The study shows that despite some failures, development cooperation has contributed significantly to the development of TVET education in Cambodia. About 56.6 percent of respondents had indicated that the development aid was effective in addressing the TVET education needs of the community while 43.4 percent responded negatively.

There is a mixture of responses from the instructors to the issues of infrastructure. 52.1 percent of respondents said that the institution infrastructure has not been improved under the aid program.

Regarding the course materials in the institutions under development aid program, the responses are greatly improved. About 64.9 percent of the respondents stated that there was improvement on the learning materials while 35.1 percent said that there was no improvement at all.

The student enrollment patterns also indicate the effectiveness of the aid program, according to all the institution directors. They observed that there was a steady increase in female enrollment in their institutions. The directors acknowledged that the increase in the female student enrollment was attributed to the commitment made by the government and development partners.

The state of TVET education in the study area could be assumed in other provinces as well. The impacts of the development aid projects on education development especially on TVET education are clearly noticeable. On the positive side, there were new infrastructure development, new curriculum materials production and increase in the enrollment in the institutions. On the other side, there exists inequality in terms of distribution of aid to TVET

institution in the study area. Aid dependency is worrying concern in the study area. The government needs to relook at the curriculum development that is used in the institutions to address the needs of the society and not just keeping the institutions temporarily. Community participation is critical. The study shows it is limited or lacking in the study area. For the effectiveness of aid programme, the community participation is most needed. Awareness campaigns are required for community involvement and the role of NGOs, government and private sector in this regard is crucial.

6.2 Recommendations

For aid to continue effectively in providing quality education that would in turn empower people to contribute effectively to the process of development, some issues are to be addressed. There us need for policy intervention by the government.

6.2.1 For the Government

The following are some issues for the government to consider in improving the TVET education needs of the people in Cambodia.

Firstly, there is a need addressing the inadequate staffing and providing adequately trained instructors in improving the quality TVET education in the provinces in Cambodia. By doing so, the government to focus on strengthening and improving the National Technical Training Institute (NTTI) to introduce competency-based, pre- and in-service TVET instructor training and instructor assessment. This could provide inclusive assessment tools for understanding, deliver and evaluation the training.

Secondly, the instructor education policy in the TVET institutions needs to be re-looked at. It seems that while the TVET education infrastructure and curriculum materials have been improved through the support from

development partners, the availability of trained instructors still remains inadequate. The lack of trained instructors affects overall quality education in the country.

Thirdly, the government, development partners and NGOs should encourage TVET education through the media on the issues relating aid and education. Specific references should be made known to the public on the aims, objectives and the expected outcomes and benefits of education to the individuals, families and community at large. Part of the TVET education should include the areas where aid programme needs community's input and participation.

Fourthly, the government and private sector should work together to strengthen the TVET education through internship programs. DGTVET need to develop and implement an Internship Policy in coordination with Sector Skills Councils (SSC) to guide the reform of existing internship program provided Public TVET Institutions. Furthermore, DGTVET should coordinate with SSC to develop a revised framework and guidelines for the internship programs.

Fifthly, the government need to strengthen the financing of public TVET institutions. By doing so, the government would need to start financing start-up TVET institutions, in particular RTCs and PTCs. This would help both RTCs and PTCs to identify eligible expenditures such as staff training, teaching materials and equipment, stationery, utilities, transport, industry liaison, marketing, tracer studies of certificate graduates, monitoring and evaluation and cluster development.

6.2.2 For the Development Partners

The following recommendations are made to the development partners in order to make aid more meaningful and effective:

Firstly, the issues aid availability to geographically remote institutions need to be looked at. It would be more effective and meaningful if they identify and addresses the needs of the remote institutions. As the present study shows institutions in the province are lagging behind in terms of curriculum materials. There exist inequity conditions in aid distribution and utilization in which some institutions are better off than others. Many institutions also receive assistances from the development partners such as EU, AUSAID, Sweden and Japan Government. However, many institutions receive no aid and survive from their limited resources. There is a greater need for distributional justice and the aid distribution to be need – based and given to priority schools and areas. The distributional equity is an essential component of sustainable education development.

Secondly, community participation in TVET education development projects is key to success. Incentives by the development partners may be given to communities who have shown greater commitment and participation in TVET education development. This will in turn encourage more community participation and lead to successful TVET development.

Thirdly, there is a need for greater involvement of national level NGOs and civil society organizations in identification of priority institutions and areas needing aid and in helping distribution of aid, implementation and evaluation of aid programs for its greater effectiveness.

6.3 Future Research

First of all, there is necessary for a systematic country -wide study on the impact of the ODA for TVET education. This is to identify both the positive and negative impacts and also constraints of the aid program Secondly, an in-depth study is required focusing on how aid projects can be sustained in the long run.

Secondly, there is a need to investigate in detail the instructor-training programmes in the country. It is also important to investigate the potential of Skill Bridging Program. Studies should focus on how staff development programs are developed and how can they conducted more effectively in order to improve quality education.

Thirdly, the current study revealed that community participation is lacking in some areas. However, an in-depth study is required for focusing more on nature of community participation in TVET development in Cambodia.

Last but not least, the current development programmes has introduced a new locally designed and produced curriculum materials. A study should be done to check the relevancy and level of student's literacy on this. This would certainly help in the future planning and designing of course for a sustained TVET education development in Cambodia.

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Abstract in Korean

캄보디아 기술 및 직업 교육훈련에서의 공적개발원조(ODA) 역할:

SUY Sovannara

서울대학교 행정대학원

글로벌행정전공

본 연구는 캄보디아 기술 및 직업 교육 훈련(TVET)의 개발을 촉진하고 지원하는 데 있어 ODA(공식 개발 지원)의 역할과 관행을 검토한다. 이 연구는 심층 인터뷰와 반구조화 면접을 이용한 질적 접근 방식을 채택했으며, 소규모 설문 조사로 보완되었다. 본 연구에서는 교육청, 청소년체육부, 노동부, 직업훈련개발파트너(KOICA, JICA, ADB, 세계은행 등) 등 16개의 기관에서 정보를 수집했으며, 반구조화 면접에는 8대 연구소장이 선정되었다. 또한 60명의 응답자가 이 설문조사에 선택되었다. 본 연구의 결과는 ODA가 강의실, 저장시설, 직원 사무실, 인턴십 프로그램 및 교육과정 개발 등 새로운 교육 인프라를 구축하여 TVET를 홍보하고 지원하는 데 중요한 역할을 수행했음을 보여준다. 이러한 지원은 TVET 기관에 보조금, 커리큘럼 자료 및 교육 인프라 개발을 위한 형태로 제공되었다. 그러나 부처들은 TVET 홍보 관행에 있어 몇 가지 문제점과 도전에 직면해 있다. 여기에는 원조 분배, 교육 자료, 커리큘럼과 인프라 개발 및 교사 훈련이 해당된다. 연구 대상 8개 기관 중 모든 기관이 지원금을 받았고, 그 중 5개 기관은 커리큘럼 자료를 받았으며, 2개 기관은 인프라 개발을 위한 보조금을 받았고, 1개 기관만이 인턴십 프로그램에 대한 보조금을 받았다. 일부 측면에서는 실패한 부분이 있지만 공적개발원조는 캄보디아 TVET 교육 발전에 크게 기여했다.

주제어: 공적개발원조, 기술 및 직업 교육훈련, 수업자료, 인프라 개발, 공동체 참여

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