Ministry of Education, Youth and Sport

Research report on

"THE STUDY ON THE LOW COMPLETION RATE IN PRIMARY AND LOWER SECONDARY EDUCATION"

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DEPARTMENT OF POLICY September 2019

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EXECUTIVE SUMMARY

Completion rates in primary and lower secondary education are the most important in the education sector responding to the Education Law of the Ministry of Education, Youth and Sports, "All students have to complete a basic education"; however, the results of completion in primary and lower secondary education in some areas have not yet met the target indicators due to migration issues, dropouts, marriage, poverty, evangelism, migration of parents for both inside and outside of the country, neglect of education, etc.

The Ministry of Education, Youth and Sport conducted this study in order to understand the variations in the population and students in the targeted areas, gender parity in completion of primary and lower secondary education, and identify specific interventions to address low completion rate issues. The study covers 12 provinces, 36 districts, 144 districts with a completion rate below the target (40%), and a total of 1,200 participants, including DoEYS, DoEYS, district and commune authorities, school principals, teachers, parents of grade 6 and grade 9 students and parents with children of ages 13 to 20. Based on the findings and in-depth analysis of the study, the research team concludes from the factors leading to low completion rates in primary and lower secondary education as follows:

Students' factors: migration, dropouts, repetition and overaged enrollment students, ethnic minorities, students with disabilities, are the causes leading to lower completion rates, which may also come from other factors, such as factors of students, statistics, structures, teachers, parents, etc.

Geographical factors: some of the schools in disadvantaged areas, such as the mountainous areas, island areas without roads, (mud, lake), which make it difficult for students to travel to or from school, leading students to be frequently absent or dropout, and the lack of transportation, which is the most challenge to confront the dropouts.

Cultural and traditional factor is one of the challenges that leads to low completion rates as ethnic minorities still take cultural issues seriously by allowing their daughters to get married with very young age, giving very low value of study for daughters, and this causes to mobilize their children's workforce to help household chores to make their livings.

Statistical factor: between the National Institute of Statistics (NIS) data, compared to the

baseline data, is higher than the actual population data in almost districts, especially the data of EMIS, in which some districts are too far diffierent.

Factors of students' changes: most of the actual completion rates at the DoEYS is higher than the completion rates provided by EMIS, of which only a few districts are lower than the data from the EMIS.

Family factors: some families are less likely to motivate children or to push their children or push only the son or daughter, or they don't know about the value of education, and some families do not want their children to stay away from home because their children are unsafe, especially daughters. Some parents are illiterate, impoverished with poor conditions, who do not think or think about the future of the children, leading them to stop learning or drop out of school.

Social factor: drawing from the inner and outer environment, some students drop out of school, especially the young ones because of drug abuse, fellowship, materialism, etc.

Statistics factor: the current completion rates are calculated only public students, not including students in private schools. For students, they move from place to place, or from school to school. Additionally, many incomplete schools still exist in primary and lower secondary schools.

In order to increase the completion rate in primary and lower secondary education, the Ministry of Education, Youth and Sport and education stakeholders should increase and strengthen scholarships to students in a timely manner, improve the capacity of technical officers at elementary schools, build the capacity of technical officers in PoEYS, DoEYS on information system management, train school principals on basic computer, management and leadership, and school planning (new directors). In addition, the Ministry of Education, Youth and Sport and Province of Education, Youth and Sport should increase monitoring and evaluation at District of Education, Youth and Sport and school levels, as well as properly manage health, sanitation and environmental school infrastructure, and increase the construction of dormitories for teachers and students (especially female students) in disadvantaged areas; moreover, they should also provide budget for data collection for PoEYS, DoEYS and schools, and they should strengthen the capacity of teachers by training them

on new teaching methods for teachers to be more capable of teaching students, and they should provide specialist teachers in all schools. For better statistical work, it needs to collaborate with the National Institute of Statistics (NIS) to project people after the census in 2019 and at all levels, and the population figures should be broken down by gender, age, disability, specific age with clear geography. The Ministry of Education, Youth and Sport should also build schools in schools that lack school buildings and equip teaching and learning facilities appropriately, provide timely academic books to students and create templates and strengthen cooperation in data collection and actual update at local level.

ABBREVIATION

Abbreviation	Full
CR	Completion Rate
DoPo	Department of Policy
DTMT	District Training Monitoring Team
DLI	Direct Link Indicator
DoEYS	Distirct of Education, Youth and Sport
EMIS	Education Management Information System
GPI	Gender Parity Index
IT	Information Technology
JMI	Join Monitoring Indicator
LSCR	Low Secondary Completion Rate
MoEYS	Ministry of Education, Youth and Sport
NIS	National Institute of Statistics
PCR	Primary Completion Rate
PoEYS	Province of Education, Youth and Sport
SDGs	Sustainable Development Goals
T	Teachers
SBM	School Based Management
SP	School Principals
Ss	Students
SSC	School Support Committee
UNICEF	The United Nations Children's Fund
UNESCO	The United Nations, Educational, Scientific, and Cultural Organization
WHO	World Health Organization

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Chapter 1: INTRODUCTION

1.1 Background Information

By universal definition, completion rate is the percentage of any age group of children or adolescents aged 3 to 5 years over the age range expected that children are in the last grade of any education level (school level)[1]. In Cambodia, primary education has six levels, while the expected age of children learning in the last grade (grade 6) is 11 years old, since the official age for entering grade 1 in Cambodia is 6 years old. Therefore, the age range of 14 to 16 (i.e. 11+3 and 11+5) is the age group for calculating primary completion rates. The lower secondary school completion rate is a higher percentage of the age group of 3 to 5 years than the general age range expected in the last grade of lower secondary school. Lower secondary education has three levels of grades from 7 to 9, so the last school year (grade 9) is 14 years old and ages 17 to 19 (i.e. 14+3 and 14+5) are the target age group for calculating the lower secondary school completion rates.

World Education data 2008-2014 shows that completion rate in primary education is 51% for low-income countries, 84% for low-average-income countries, and 92% for middle-income countries. In particular, the lower secondary school completion rate is 27% for low-income countries, 68% for low-average-income countries, and 79% for high-middle-income countries[2]. Indicators that indicate low completion rates are due to low enrollment or over-age entry in any education levels, high dropout rates, high repetition rates, low completion rates, higher rates of over-age children, the ratio of entering the last grade of education level, or a combination of all above factors. The purpose of these indicators is to show the rate of children overaged 3-5 for children with the age of 11 that completed primary education and 14 years of age for lower secondary school students. The completion rate of 100% or closer is an indicator that illustrates all or almost children or adolescents have completed primary school (children overage of 11 with 3-5 years) and have completed the lower secondary school (children overage of 14 with 3-5 years). The definition of completion rate in Cambodia is calculated by taking the total number of students who have reached the last grade of a school level minus the number of students in their last grade (excluding

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1   Statistical Institute of UNESCO Website http://uis.unesco.org/en/glossary-term/completion-rate retrieved on July 6, 2018.

2   Global Education Monitoring Report: Education for the People and the World, Creating a Future for All, UNESCO, 2016, pp. 184-185.

repeated students) then, the results are divided by the total number of children in the last grade of school (11 years of age for primary school and 14 for the lower secondary school).

1.2 Reasons of the Study

The completion rates of primary and secondary schools are important indicators which clarify in response to education sector with the education law. Article 68 of the Constitutional Law of the Kingdom of Cambodia stipulates that, "The state shall provide free primary and secondary education in all public. All citizens shall have at least nine years of education[3]." The completions rates at all levels of education in Cambodia remain a matter of concern, though the Ministry of Education, Youth and Sport has introduced medium and long-term measures to address the problem since 2010. Primary school completion rates are indicators for comparing the actual performance of education to the Sustainable Development Goals (SDGs). Completion rates at both primary and lower secondary levels in some districts are still low and have not met the targets set in the Education Strategic Plan 2014-2018 as well as yet to meet Joined Monitoring Indicators (JMI), which the Europen Union (EU) requires an increase in some districts (115 districts in 2019 and 132 districts in 2021), demanding a minimum completion rate of at least 80%. In contrast[4], only 87 districts (excluding neighborhoods/Khans in Phnom Penh) met at least 80% of primary school completion rates (EMIS, 2018).

Lower secondary school completion rates are generally calculated and measured at the provincial level because the Province of Education, Youth and Sport is highly responsible for the education system at the secondary education. In line with this principle, the new Education Strategic Plan of the Ministry of Education, Youth and Sport as well as the Direct Link Indicator (DLI) of the European Union sets out indicators that set conditions for some provinces or municipalities to achieve the completion rate in lower secondary schools of at least 40% from 2017-2018 onwards[5]. By 2018, 13 provinces have achieved a 40% of completion rate in lower secondary school, and the target for 2019-2020 is to have 14 provinces completed. For this target, there are many challenges that hinder the achievement of completion rates, including migration, dropout, marriage, poverty, priesthood, displacement of parents or guardians, working in overseas, education devaluation, etc.

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3   The Constitutional Law of the Kingdom of Cambodia 1993
4   Statistics and Indicators 2017-2018 of Department of Management Information System
5   The EU has proposed to shift the main indicator from graduation rate to dropout rate (for the same lower secondary level). The European Union sees the use of dropout rates as an indicator more realistic in its assessment.

1.3 Objectives of the Study

The purpose of this study is to find out the causes of low completion rates in primary and lower secondary education in some provinces and (1) understand the population changes and students in the target areas (2) find out gender trends in completion rates in both primary and lower secondary education, and (3) identify specific interventions to solve the low completion rates in primary and lower secondary schools.

1.4 Research Questions

In order to meet the objectives set out in section 1.3 above, this study is completely based on the following key questions:

1. How do the population and students in the target areas change related to completion rates in primary and lower secondary schools?

2. What are the differences in the gender parity index on completion rates in both primary and lower secondary schools?

3. How are specific interventions needed to address low completion rates in primary and lower secondary schools?

1.5 Importance of the Study

The findings of this study will provide scientific evidence that may reflect demographic issues and enrollment data, factors leading to low completion rates in some districts and provinces where the education process is not yet fully good enough, and even better results can also answer the question of why female students learn better than male at both primary and lower secondary levels. Leaders of the Ministry of Education, Youth and Sport as well as education operators will be able to use the findings of this research to identify and develop strategic interventions to increase completion rates in both primary and lower secondary education and achieve goals as defined in the Education Strategic Plan 2019-2023 as well as the Sustainable Development Goals (SDGs). In this sense, this study will also contribute to promoting the overall reform of the education system as a mechanism to ensure that all children receive free, equitable, inclusive, and quality education, and they can also finish the basic education.
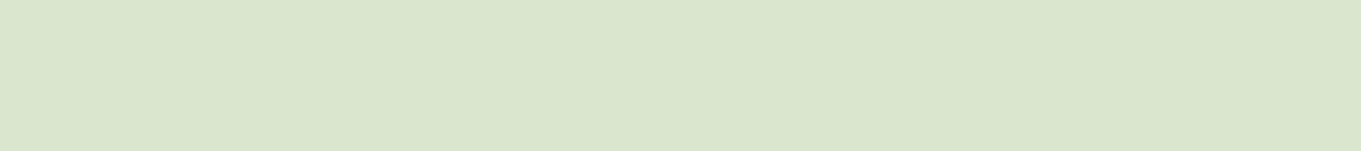
Chapter 2: LITERATURE REVIEW

2.1 Usage of Education Indicators

According to the management, analysis, and usage of the Education Management Information System (EMIS) of the Ministry of Education, Youth and Sport, the indicator is defined as an indicator that tells us the situation or events in real life. Education indicators, especially officials and stakeholders, are concerned about the development of situations that are already or are being implemented or will be implemented in education so that they can be used as the basis for measuring them compared to objectives set out (EMIS, 2018, p.5). Education indicators are crucial for measuring the growth of educational services provided as the inputs of resources, processes, outputs, and outcomes. Key education indicators include access, efficiency, quality, and equity indicators (EMIS, 2018, p.5), in which indicator measurements are defined as percentages, rates, and ratios.

The use of educational indicators aims to track economic, justice, criminal or social systems. In this sense, statistical indicators are used to monitor complex conditions that are difficult to judge regularly or fail in daily observations. The main purpose of an indicator is to present a system by which information can be used to judge progress toward certain goals or standards to the past standards (Shavelson, et al., 1991). Education indicators (Shavelson, et al., 1991) are statistics that reflect key aspects of the education system and describe the system as a whole, describing the main status and characteristics, for example, the number of students enrolled in school, etc.

Education indicators can provide clues about the educational programs we want. For example, using indicators to describe the state of a society and its potential; thus, enhancing the ability to solve a country or ministry problem in an effort to find out solutions. The results will also provide more direct contributions, which are important inputs to assist management in decision-making for policy makers, decision makers, etc (Sheldon and Parke, 1975, p. 698 as cited in Shavelson, et al., 1991). Similarly, Shavelson, et al. (1991, p. 2) suggested that indicators can assist policy makers in interpreting or converting those goals into action.

A good education indicator system will provide accurate and clear information to clarify or highlight educational situations and contribute to improve education information. The

information generated simply cannot be used publicly, meaning that it is necessary to make an effort for the analysis and combine reports of reliable studies which can be used officially (Shavelson, et al., 1991, p.2).

Shavelson, et al. (1991, p. 2) also suggested that in order for indicators to be more credible, especially the national indicators, it should be broadly considered on educational outputs, for example, achievements, participation, and so on. Normal monitoring results provide no explanation for the observed trends. The trends can be explained by demographic changes, educational improvements, or some other combinations. Education policy has an indirect effect on outputs through a number of activities, such as raising teacher standards, certificate quality, or for university completion, etc. The direct impact of these policies will be reflected in changes in the way teachers are taught. For example, teacher qualifications, such as increasing the number of undergraduate teachers in the subjects they teach, are not only educational degrees, which require training in teaching methods, teacher preparation, and curriculum. In addition, national indicators must indicate at least one key component of the education system. The results of monitoring indicators should reflect the nature of students and community in which the school is a financial and human resource provider, especially teachers. Schools must provide for the adequacy of the curriculum and teaching for equitable education excellence, especially for other educational processes. Indicators need to communicate with each other in order to be able to see or measure results.

2.2 Definitions and Completion Rate Use

According to (Boissiere, 2004) defines completion rate as the proportion of students graduating from primary school in a school year to the total number of children of formal school age. Similarly, Ayub (2018) defines completion rate as the ratio of the number of students attending a school year compared to the total number of students (that group) successfully passed the exam in primary school. Muli (2014) also says completion rate is referred as the percentage of students completing a particular course or level of education. In addition, the primary completion rate refers to the percentage of students who completed their last year of primary school (Wambua, 2014). The completion rate is a ratio of the number of new students in the last grade at any school level (excluding repeaters) in the same school year (T) and the number of people who meet the age of the last grade of the schol level in the same academic year (T) in percentages (EMIS, 2018, p.20). There is a

calculation method as shown in the following formula:

$$CR = \frac{\text{Number of new pupils in last grade at aschool level}}{\text{Total number of populations age responsding to the last grade}} \times 100$$
$$\text{(excluding repeatiters) in academic year (T)}$$

To calculate the formula shown above, data are required, such as (1) the number of new pupils attending the last grade in a school year (excluding repeatiters) in the school year (T), and (2) the number of populations age responding to the age of the last grade in that school year (T). In order to be reliable, the data are taken from (1) schools, (2) district of Education, Youth and Sport, and (3) Province of Education, Youth and Sport, for new pupils in the last grade in the school level. For the population of the age-matched to the last grade of the school level, data are obtained from (1) chief of village, commune, district, province, (2) Provincial Department of Planning, and (3) age-group projection of total population geopgraphy.

For example, for the academic year 2017-2018, the total number of students enrolled in Grade 12 in high school A is 120. It is learned that population aged 17 from four communes for high school A is 138. Therefore, the calculation of the high school completion rate at high school A in the school year 2017-2018 is CR = 120/138 x 100 = 86.95% (EMIS, 2018, p. 211). The interpretation of the results of the formula above is that, in the first case, the rate below 100% means that the population of the last grade of any school level do not complete all from the geography. In the second case, the ratio of 100% means that the population ages in the last grade of a school level have completed from the geography.

As for calculating completion rates used for SDG4 (EMIS, 2018, p.22), the completion rate as a percentage of students in the Cohort or the Cohort age-group of 3-5 years above the official age, which completes the last grade of that school level. The official age of the last grade in each school level is the age at which a student attends a particular grade. If they start their formal schooling at any school level, studying full-time, without repetition or jumping classes. The formula of the calculation is CR $= \frac{EAGn.AG\,(a+3t5)}{PAG\,(a+3t5)}$ in which EAGn.AG (a + 3t5) is a population aged 3-5 years above the official age. a who has completed the last grade of n school, whereas PAG (a + 3t5) is a population aged 3-5 years above the official age a that responds to the last grade of n school. The data needed to calculate the completion rate used for SDG4 is to have population by the age group responding

to the last grade of any school level. The age at enrollment and the duration of each school level, in which data are obtained from the census data and family surveys. In this sense, an interpretation of the completion rate approaching 100% indicates that people aged 3-5 who are more than the official age of a school level have completed their school level mostly from the geography.

Completion rate in primary school is the number of new students (excluding grade 6 pupils) in any school year as a percentage of the 11-year-old child in that school year (EMIS, Private Education Statistics & Indicators, 2017-2018), while the completion rate in lower secondary school is the number of new students (excluding grade 9 pupils) in a school year as the percentage of 14-year-old child in that school year.

2.3 Gender Parity Index

Gender Parity Index (GPI) is the ratio of the female to the male of any indicator (EMIS, Private Education Statistics & Indicators, 2017-2018). If the indicator of gender equality is equal to 1, that means it has gender equality. But according to (EMIS, Public Education Statistics & Indicators, 2017-2018), the Gender Parity Index (GPI) compares the value of any education indicator of female to the value of male's education indicator. If the index is between 0.97 and 1.03, then there is a gender ratio that uses the formula $\text{GPI} = \frac{\text{Female's education indicator value}}{\text{Male's education indicator value}}$ The measure of the education gender equality index helps to explain how women and men are more likely to participate in learning opportunities. With an emphasis on Education for All (EFA), the Gender Parity Index is often used to examine progress towards goals[6]. The Gender Parity Index helps in comparisons by showing the ratio of female-to-male value for a given indicator. An index of less than 1 indicates that the indicator value is higher than those of women. But if the index value is bigger than 1, it indicates that the value of the indicator of men is higher than women. Conversely, if the result of the Gender Parity Index is equal to 1, that means the Gender Parity Index is achieved.

2.4 Reasons for Low Completion Rates

According to the results of a study, it shows that most students from Indonesia in poor families drop out of school because their parents cannot afford to pay the school fee for them.

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6   https://www.epdc.org/topic/gender-parity-indices, retrieved on 14 November 2018

Gender discrimination is also one of the major causes of low completion rates. Another factor in school dropouts is the fact that children are left (orphaned children) whom of them are twice as likely to drop out of school. Using parents' time to take their children to and from school also causes lower completion rates. School environment, family factors, poverty, cultural factors, social and gender issues remain the issues. In addition, transportation fares are also a problem for children from poor families and homes away from school (Daniel Suryadarma, 2006). Similar to the study of Wambua (2014), it suggests that low completion rates are caused by long distance, learning and teaching materials in schools, time management, child labor, unsupported environment, lack of counseling, poverty, cultural practices, early pregnancy and behavior. Parents' negatives are also the causes of low completion rates. Low-education parents, family size, parental support in economic activities, household activities, absenteeism, and dropout (Muli, 2014) are factors leading to lower completion rates. Poverty and economic hardship are key factors behind high dropout and low student retention in primary education (Kushiyat, 2007, as cited in Shree Prasad Devkota, 2015, p. 154). Overall, dropouts, economic hardship and gender discrimination are the reasons for the low completion rates.

According to Farooq (2010), students who enroll late have some challenges in terms of repetition, leading to low completion rates in schools and another factor that drives students out of school because of staying alone (loneliness), and lack of friendship, while others have learning difficulties. Students who fail to allocate appropriate resources to the educational level and basic factors of the school are the cause of the problem. On the other hand, the majority of students who lack the support of teachers, schools and children who are having a negative social or emotional impact on their studies are also factors in dropping out. Teacher behavior may affect students' completion rates in schools i.e. teachers have lower levels of education where students have less confidence in teaching, professional use, or decision-making (Chae Young Kim & Martyn Rouse, 2011).

Meanwhile, Ishiguro (2018) and Shree Prasad Devkota (2015) found that poverty and children from rural areas; they dropped school to help their parents. Ethnic minority members are still unaware of the value of education and lack of education due to low education. Similarly, Fata No's research (2012) shows that high absenteeism rates, late enrollment, and poor academic performance are the reasons for the low completion rates. In addition, other researches have shown that social cohesion is also a cause of low completion rates

in primary school. Education policy also has an impact on completion rates and remains a risk and a challenge for young people in Cambodia. According to Okwach Abagi (1997) suggested that education policies and management processes can lead to lower completion rates. Similarly, in the study of Ruff (2016), he inllustrated that education policy is also one of the leading causes of low completion rates.

Tracy Brunette (2017) noted that starting in the first few classes in elementary school is also the cause of this problem. High repetition rates affect the use of education resources and students' ability to graduate in primary school. Poor health or malnutrition and incentives, child labor and poverty, school level, school location, and provide education with poor quality are the main causes of incompleting school (Ricardo Sabates, 2011). Girls' primary school completion rates are influenced by school environmental factors, economy, society, culture, poverty, child labor and care (Ayub, 2018). Factors associated with (1) school: ineffective teaching, inadequate teachers, absence of teachers, inadequate textbooks and poor academic evaluation systems); (2) students: less motivation, learning difficulties, problems of health, nutrition and behavior), and (3) families: parents or guardians with little or no education about the value of education and problems of household income (Admassu, 2015).

2.5 Challenges of Low Completion Rates

Not school completing is a major concern for education field, affecting health and happiness, living standards and socioeconomic status, and so on in many Western societies (Arnhild Myhr, et al., 2017). According to a report by the UK Department of Education and Training, youth groups identified by the British authorities as uneducated, unemployed or untrained (Young People not in Education, Employment or Training (NEET) is a group of subjects to be likely believed to cause social or anti-social behavior problems (Simmons). Similarly, Duke (1966) suggested that education is an effective tool in cultivating a nationalist spirit. Another link between education and society is the positive impact of education on people's physical and mental health, as education gives people confidence to improve their quality of life, health care, and increase their livelihoods better and get a good environmental job and better conditions (Gathmann, Jurges & Reinhold, 2014). Muslim and Mohd Noor (2011) have stated that students are a mirror of the reality of the current and future society. Therefore, if a child does not attend school properly and transits from one school

level to another, or not pursuing high education in accordance with setting or governmental goals, there can be social unrest, such as domestic violence, unrest in society, etc.

Katharina, et al. (2018) analyzed a large sample of disorders and studied chronic health conditions. To identify the study, they identified two key education reforms, one setting the minimum age for dropping out of school and the second on the impact of education growth. This approach accurately estimates the impact of education on a wide range of health conditions. The results of the study showed that further education, which passed from school level to another, had little impact on the prevalence of chronic diseases, especially diabetes.

2.6 Strategies Increasing Completion Rates

Most of the strategies that researchers use to prevent the lowest completion rates are to train teachers. According to Farooq, teachers are the key solutions to reducing student dropouts. Ruff (2016) suggested that teachers with strong attitudes influence students' learning. Similarly, Okwach Abagi (1997) and Chae Young Kim & Martyn Rouse (2011) have stated that principals and teachers play the most important role in students' education. Teachers play a vital role in maintaining the education of students, but the teachers also need more training in how to better teach their students. In addition, teachers need to pay more attention to student learning and place experienced teachers in grade three (Ricardo Sabates, 2011). Chae Young Kim & Martyn Rouse (2011, p.426 as cited in MoEYS 2007b) states that one of the principles of freindly schools requires that teachers' attitudes, behaviors and values be considered in this regard if there is a limited motivation from teachers can make teachers less attentive and responsible for teaching students. To increase completion rates, it is required to train teachers, add instructional materials to improve the learning environment and the provision of appropriate additional classes for students who are struggling with repetition, support for life issues, such as material handling and education costs, etc., promote child health and learning (Admassu, 2015). In addition, there must be a curriculum, materials, teaching hours, classroom instruction, student learning ability, net enrolment rate increases, along with primary school completion rates, urban and rural gender balance (Boissiere). Similarly, Githaka Mwangi (2017) has suggested that providing assistance programs to the poor is a better way to increase completion rates. Scholarship program, school lunch, dinner based on demand, provision of basic school supplies and materials, strengthening quality instructional approaches for kids, guidance on dropout, motivation of teachers

and girls of bilingual support (mother tongue) is also a way to make completion rates better (Shree Prasad Devkota, 2015). Whereas, Muli (2014) states that the Ministry of Education, Youth and Sport should demonstrate the value of education and provide support to poor children about education to stakeholders.

Chapter 3: DESIGN AND METHODS OF RESEARCH

## 3.1 Scope and Limitation of the Study

The study covers 12 provinces, 36 districts, and 144 schools with completion rates below 40% in lower secondary school and primary schools below 80%, including Banteay meanchey, Battambang, Kep, Kohkong, Kratie, Otdarmeanchey, Preahsihanouk, Ratanakiri. Stungtreng, Tbongkhmum, and Mondulkiri.

3.2 Types of Participants

The sample of the study was randomly selected on a computerized basis among the 12 provinces, with completion rate below 40% in lower secondary school and below 80% for primary education. The participants were 12 directors or deputy-directors of Province of Education, Youth and Sport, 36 chiefs or vice-chief of District of Education, Youth and Sport, 27 district authorities, 88 communal authorities, 143 school directors of primary and secondary schools, 143 primary teachers, and 144 teachers teaching grade 6 in primary school and grade 9 in lower secondary school; in addition, for the data to be more reliable, the research team recruited 144 parents of students in grades 6 and 9 and 634 parents with children ages 13-20 with the total of 1,200 participants and the schools selected only for complete schools.

3.3 Research Tools

The study was used a quantitative method, in which all participants were required to complete quetionnaires and qualitative method, required all participants for semi-structured interviews to confirm the reliability of the data.

Qualitaitve Method	Quantitative Method
Interview participants through questionnaires prepared	Survey and questionnaires
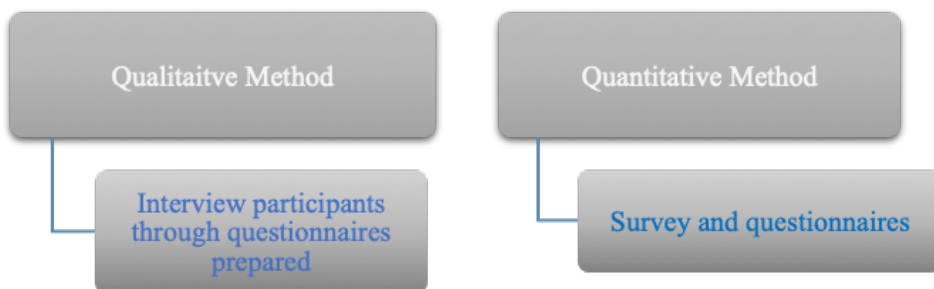
3.4 Data Collection, Entry and Analysis

After the research tool was prepared, the research team of the Department of Policy (DoPo), the Department of Information Management Information System (EMIS) and the Department Monitoring and Evaluation (M&E) collected data as planned in targeted areas and locations. The data were conducted through semi-structured interviews and completing questionnaires, in which participants completed a pre-designed questionnaire, and some of the questions were semi-structured interviews to further clarify reliability. After the data was collected, the team entered the data into Excel, and the team cleaned up the data before converting it into SPSS, Version 23 to analyze the data based on the purpose and the research questions and then the research team conducted an in-depth consultation, input and verify the reliability.

3.5. Research Framework

The study is based mainly on data provided by the Department of Education Management Information System (by age) and data from the National Institute of Statistics (Ministry of Planning). Also, to ensure the accuracy and reliability of the data, the research team conducted semi-structured (semi-open) interviews with respondents at the sub-national level. The research team will also study relevant documents, including European Union indicators and targets, demographic data from census projections and related documents on calculating completion rates conducted in Cambodia as well as other countries.

3.6 Sample Selection and Location for Study

The sample selection was based on data from the Department of Education Management Information System (EMIS) 2017-2018 in 12 provinces of completion rates with lower 40% in lower secondary school and less than 80% in primary education. The 12 provinces were selected as the target provinces in the study, and each district randomly selected for two primary schools and two secondary schools.

3.7 Preparation of Research Tools

After the research team had prepared the concept note and approved by the leaders of the Ministry of Education, Youth and Sports, the research team prepared the research proposal, research format and process for the management. Subsequently, the team studied the key

documents for the purpose of designing research tools in line with the research objectives. This research work is led by the Department of Policy in collaboration with the Department of Information Management System (EMIS) and the Department of Monitoring and Evaluation (M&E). In addition, the research project also cooperated with the Department of Primary Education, the General Seconday Education Department (GSED), and other professional departments of the Ministry of Education, Youth, and Sport.

Chapter 4: FINDINGS

4.1 Findings of the Study

4.1.1 Population Changes

4.1.1.1 Population Statistics by Certain Age

Based on quantitative and qualitative data from the Provinces of Education, Youth and Sport (PoEYS), Districts of Education, Youth, and Sport (DoEYS), district authorities, and schools, it shows that statistics of population by age in 2017 have some challenges in terms of population data, especially ages 11 to 19. These problems make it difficult to calculate completion rates and calculate other indicators. 16.66% of the PoEYS do not have population data aged 11-19, while 11.11% of the DoEYS do not have population data of ages 11 to 19 and 2.77% has no population data of ages 15 to 19, and 22.22% has no population data of age 19. For district authorities, 40.74% has no population data of ages 11-19, while 28.67% of schools have no population data of ages 11-19.

4.1.1.2 Usage of Population Statistics

75% of the 12 PoEYS used the population projection statistics, while the remaining 25% never used the population statistics. The PoEYS used the population statistics to plan the Education Strategic Plan (ESP), calculate indicators, such as enrollment rates, population growth rates for preschoolers by age, and adjustments with officially recognized statistical rules. For DoEYS, 41.66% used the demographic statistics for the purpose of obtaining accurate figures as well as finding the population growth rate, increase, decrease or actual, compare and collect, complete indicators of the Education Management Information System (EMIS). According to the Provincial Department of Planning for calculating indicators, such as completion rates, net enrollment rates, gross enrollment rates, etc., but 58.34% of DoEYS have not used the population projection statistics. 33.34% district authorities have been aware of population statistics, which is a difference from the actual statistics due to the long-term migration in and out (to work abroad). A short-term migration, i.e., people entering or leaving during the season, such as the agricultural harvest season. On the other hand, the receiving and providing unclear information of the people or the collectors themselves come from the population statistics of the district police office. In addition, another 66.66% of districts do not know the population projection statistics (Appendix 2).

4.1.1.3 Actual Population and Projection Statistics

100% of PoEYS said that the actual statistics are different from the projection statistics that can be caused by the projection statistics only increasing year by year, while the actual population statistics increase or decrease from year to year; on the other hand, the population growth statistics increased slightly over the last year; however, the population projections from the Ministry of Planning are too high compared to the actual numbers; for example, Krong Senmonorom projection is higher than the actual statistics. In Pichrada district, the population projection is low, while the actual population increased because of new people. Population statistics are estimation, while actual population statistics are real people, because people are relocated, migrated in and out; on the other hand, the population statistics of the Ministry of Planning is long (once in every 10 years or half a national census); on the contrary, year after year, the movement of people varies from place to place due to migration to new agricultural land or find work. In general, the basic population statistics are much higher than the Ministry of Planning's statistics, and most of the figures are duplicate because most schools do not make home mapping; moreover, the timing of data collection and population record of the Ministry of Planning do not respond to the actual population from the communes and DoEYS, and the collection dates vary as the actual statistics can increase or decrease irregularly and the actual data collection does not use formulas to predict precise figures by simply summing the data collected directly. In addition, the difference between the projection statistics and the actual count may be due to the new population (new village), the unreasonable record, incorrect identification, in which the census only estimates and the statistics officers (school principals, instructors) do not collect fully, lack of skills and inadequacy because when the population data collection, people live there, and after collected, they migrate; furthermore, the data provided by the communes offered to schools differs from the Provincial Department of Planning's data. On the other hand, the projection is incremental, but the actual population cannot increase in the order as planned. The Provincial Department of Planning's figures follow a more accurate pattern than the actual population, since the actual population statistics are collected once a year, and the planner's statistics use the previous year data, but the actual collection is made annually and the people are irregular fluctuations due to migration, displacement, mortality, uncertainty of census, etc. In return, these factors can sometimes be decreased or inflated.

The DoEYS conducted the actual census, summing the data in district of planning, calculating the projection by using different formulas, and statistically significant differences can be attributed to time-dependent data collection, in which data collection takes a different time, gets different data.

4.1.1.4 Statistic of School Level Graduates

The province with the highest number of students entering the sixth grade of academic year 2017-2018 is Battambang, with a total of 21,710 students (10,926 girls) and the highest followed by Tbongkhmum province with 15, 108 students (7584 females), while the third highest province is Banteaymeanchey, with a total of 12, 505 students (6,418 females) and the lowest province is Kep (702 students, 343 females), and the second lowest is Pailin (1,294 students, 676 females), and the third lowest is Kohkong, with a total of 2,192 students (1,133 girls). According to statistics of students entering the sixth grade of academic year 2017-2018, there are 3,221 students (1,605 girls) in Tbongkhmum district, Tbongkhmum province and 4,218 pupils (634 girls) in Chetborei district, Kratie province, with the highest grade 6, and the second highest is Kamreang and Ekphnom district, Battambang province, while the lowest completion rate is Kohnhek, Mondulkiri province and Siempang, Ratanakiri province.

Grade 6 pupils in the target districts in academic year 2017-2018 are similar in male and

female pupils, except for one district, with more boys than girls.

Graph 1.1 Grade 6 pupils by target districts AY2017-2018

Statistics of Grade 6 Students by District Academic Year 2017-2018
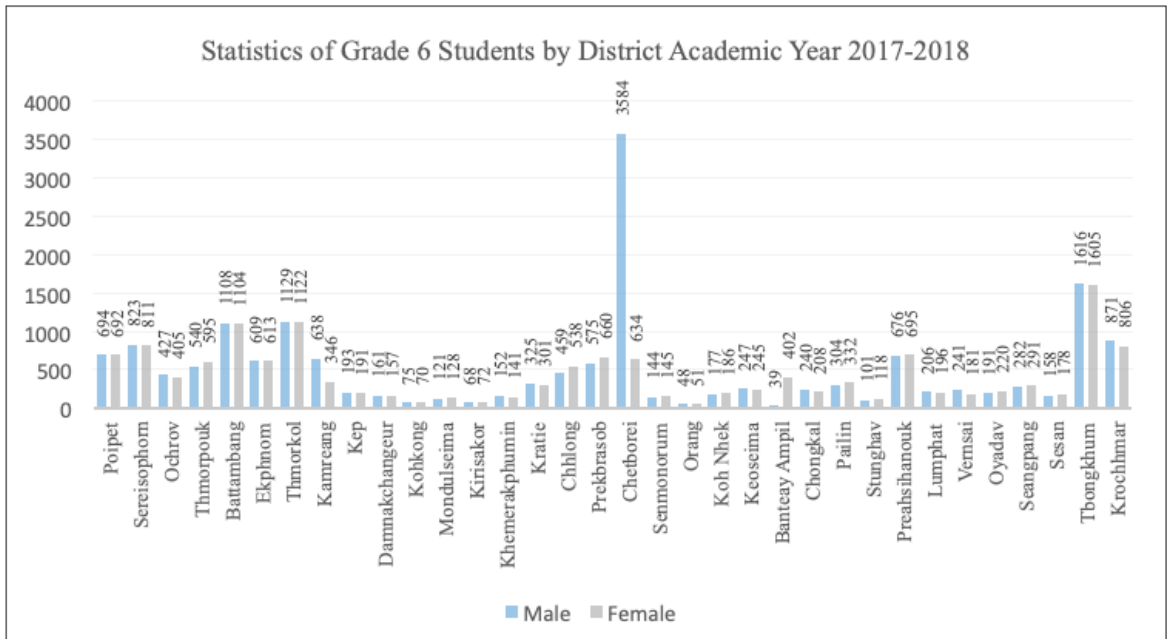
4.1.1.5 Beginning School Year Statistics and Repeated Grade 6 2017-2018

Beginning year and repetition of grade 6 pupils in province of school year 2017-2018 shows that the repetitions of grade 6 pupils vary by changing in accordance with the number of beginning year and the number of pupils repeated, which means more beginning pupils, it also has high repetitions proportionally, more or less in each province; for example, Battambang has a large number pupils of beginning year (21,710 pupils) with repetition of 497 pupils, and Tbongkhmum with 15,108 pupils in beginning year and repetition of 386 pupils, compared to small provinces, such as Kep with 702 in beginning year with repetition of 21 and Pailin with 1,294 in beginning year and repetition of 17 pupils.

Graph 1.2 Beginning year and repetition of grade 6 by province AY2017-2018

Beginning Pupils and Repetition of Grade 6 by Province Academic Year 2017-2018
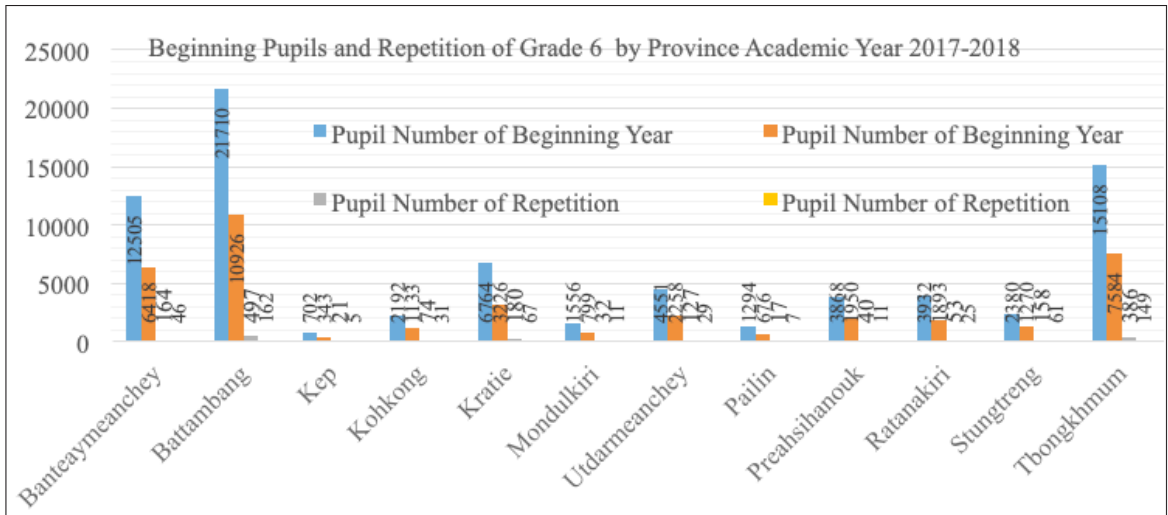
4.1.16 Beginning School Year Statistics and Repeation of Grade 9 2017-2018

Completion rates also vary by the number of students in each province: the province with the highest number of students in the province, such as Banteaymeanchey, Battambang and Tbongkhmum, and the small provinces also consist of fewer repetitors, such as Kep, Pailin,

Preahsihanouk, Mondulkiri, Ratanakiri, Stungtreng, etc.

Graphic 1.3 Beginning year and repetition of grade 9 by province, AY2017-2018
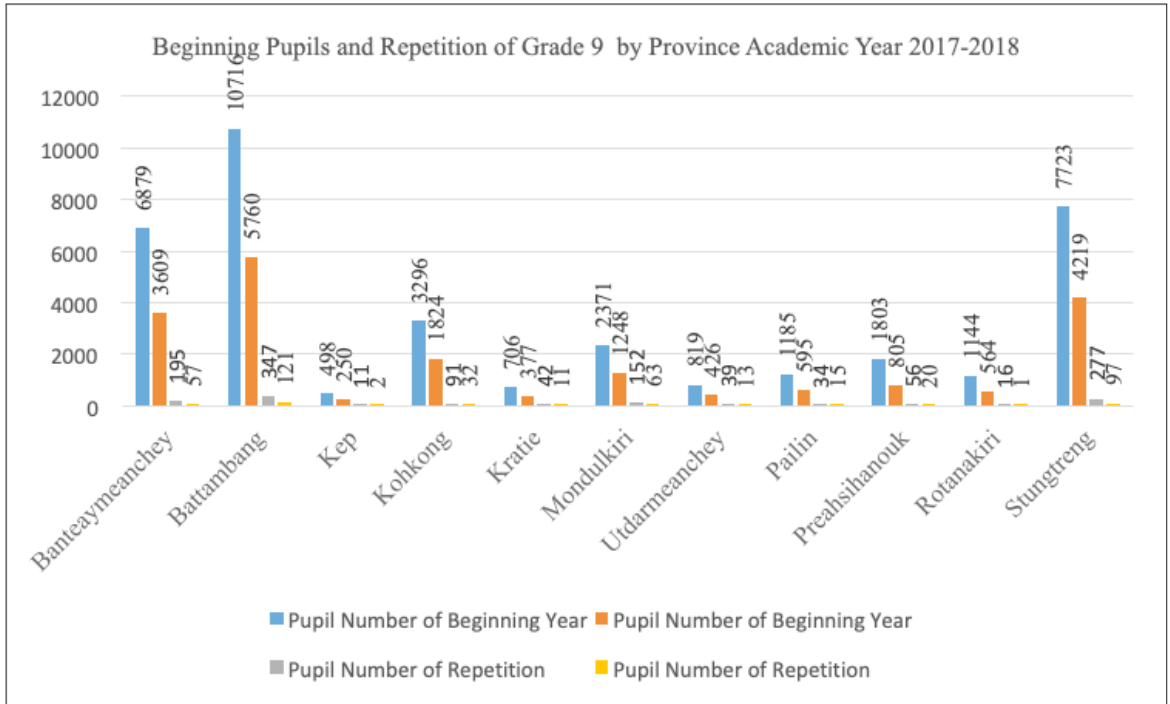

4.1.1.7 Population Statistical Sources

In practice at each level, from the PoEYS to the school level shows that the use of population statistics from different sources, 58.33% of the PoEYS confirmed that they have used the population statistics from the Education Management Information System (EMIS), the Ministry of Planning and the Provincial Department of Planning, while around 50% of them used actual statistics. For the DoEYS, 30.55% used population statistics from the the Education Management Information System (EMIS), and 19.44% obtained data from commune and 63.88% collected data from actual data, while the remaining 16.66% collected data from other sources, such as village health centers, commune data, public and private schools through school directors with the village chief as the data collecors. Of the 143 principals, 62.23% used actual collection statistics through home map or study maps; 54.54% used commune statistics, while 20.27% used police statistics and 9.79% also used statistics from various sources, such as home visits, village chiefs, health centers, primary

school statistics census, class-in-charge teachers and DoEYS.

61.80% of teachers reported using statistics from villages, communes, while 40.97% said to use statistics from the police, 18.27% used statistics from the school support committee and 8.33% used other sources, such as home self-surveying, school mapping, study mapping, direct statistics, teachers, school administrators (school directors), census, and from the DoEYS. 18.51% of district authorities used statistics from PoEYS, 37.03% used statistics from DoEYS, whereas 59.25% used statistics from actual collection from village, commune, and district, and 33.33% obtained from district police officers and 7.40% from other sources, such as registrar, etc.

Graph 1.4 Population Sources
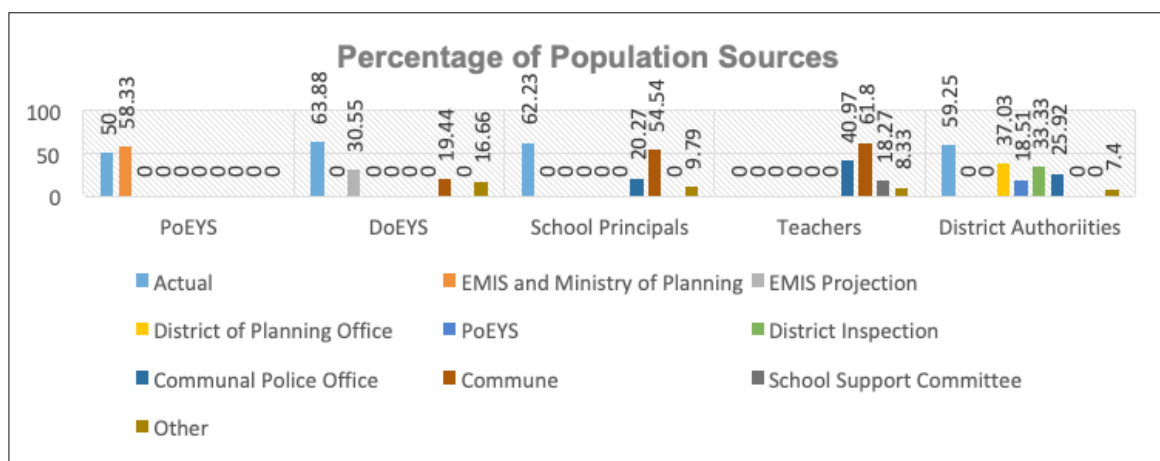
4.1.1.8 Student Statistical Sources

100% of PoEYS collected pupil statistics from schools, while 58.3% came from DoEYS; 50% were from EMIS and 8.33% were from sources like teachers, class-in-charge teachers; 30.55% took the pupil statistics from the EMIS; 19.44% came from the district planning office; 19.44% took the commune data, while 63.88% took from the actual collection and 16.66% came from various sources, such as through the school principals, village chiefs, village health centers, villages, commune level data, school mapping, public and private schools, census consolidated pupils from schools and filling in tables Pri, Pre, Sec, and so

forth.

Graph 1.5 Pupil Sources

Percentage of Pupil statistics sources
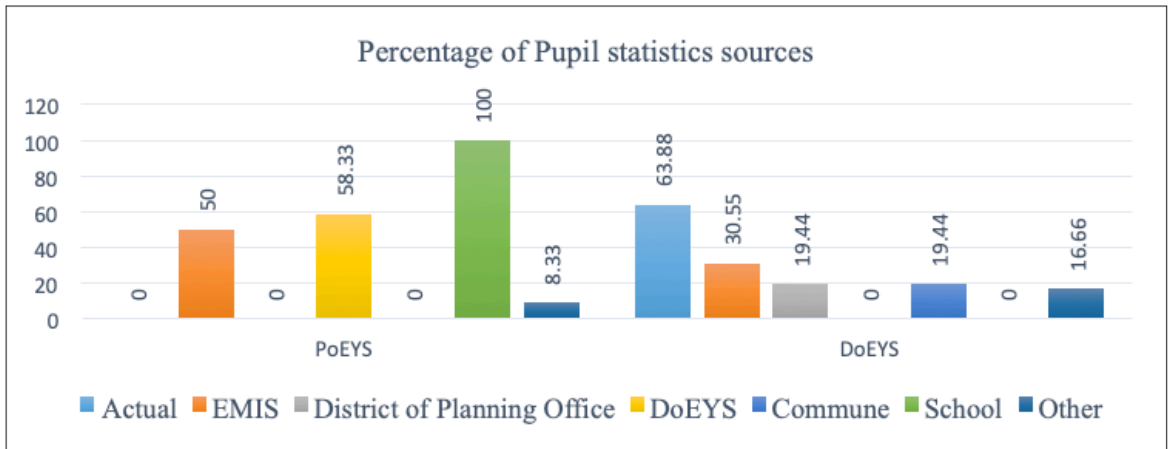
4.1.1.9 Population Statistics for School Age

61.80% of teachers stated that they have the age-specific population statistics in the classrooms through a list of pupils, 61.80% from communes, 18.05% from police, 18.75% from school support committees and 1.4% from other sources, such as school mapping, teachers collectiong from the actual data from homes, school administrators (school principals) census statistics and DoEYS.

4.1.1.10 General Status of Student Studies

Most students (83.62%) were of the ages required by the Ministry of Education, Youth and Sport, and 87.06% of pupils had never repeated, while 76.73% had never dropped out, and 83.63% had completed primary school; on the contrary, only 16.37% had not completed primary school. In addition, 11.02% of students were overaged and 15.15% were under age and 12.94% were repeated (Graph 1.6).

Graph 1.6 Pupils' Study

General Situation of Pupil's Learning

Bar chart values:
- Learning with overage: 11.02
- Learning with right age: 83.62
- Learning with under age: 15.51
- Learning with repetition: 12.94
- Learning with no repetition: 87.06
- School dropout: 23.27
- Never dropout: 76.73
- Complete primary school: 83.63
- Not complete primary school: 16.37
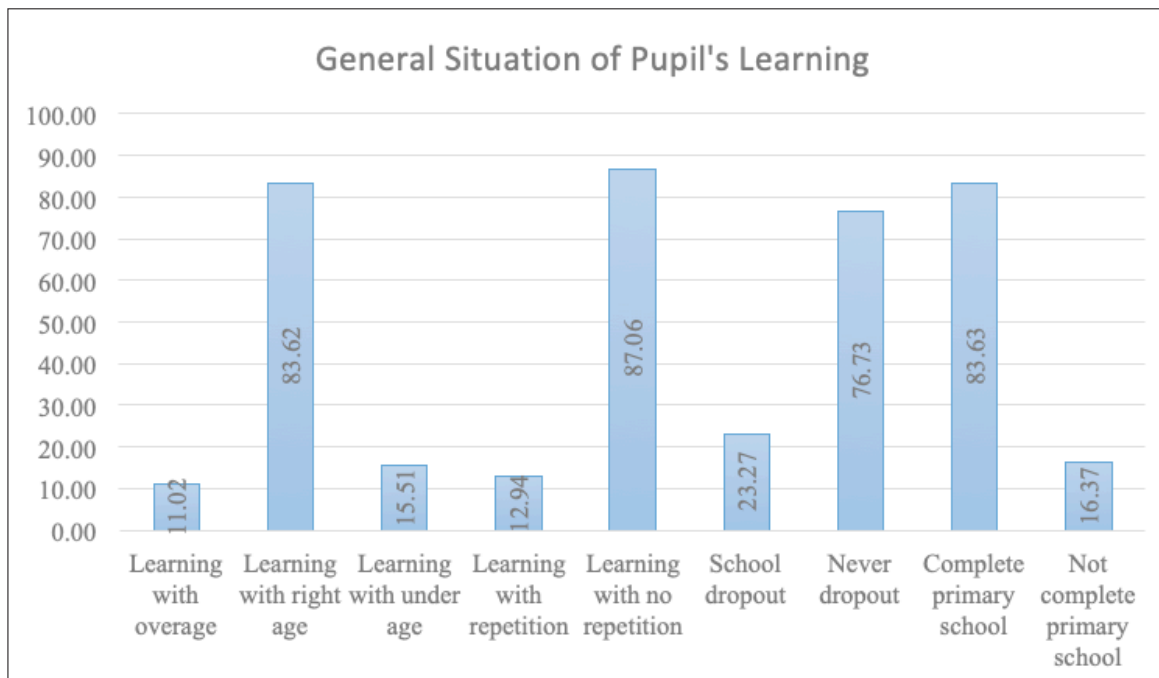
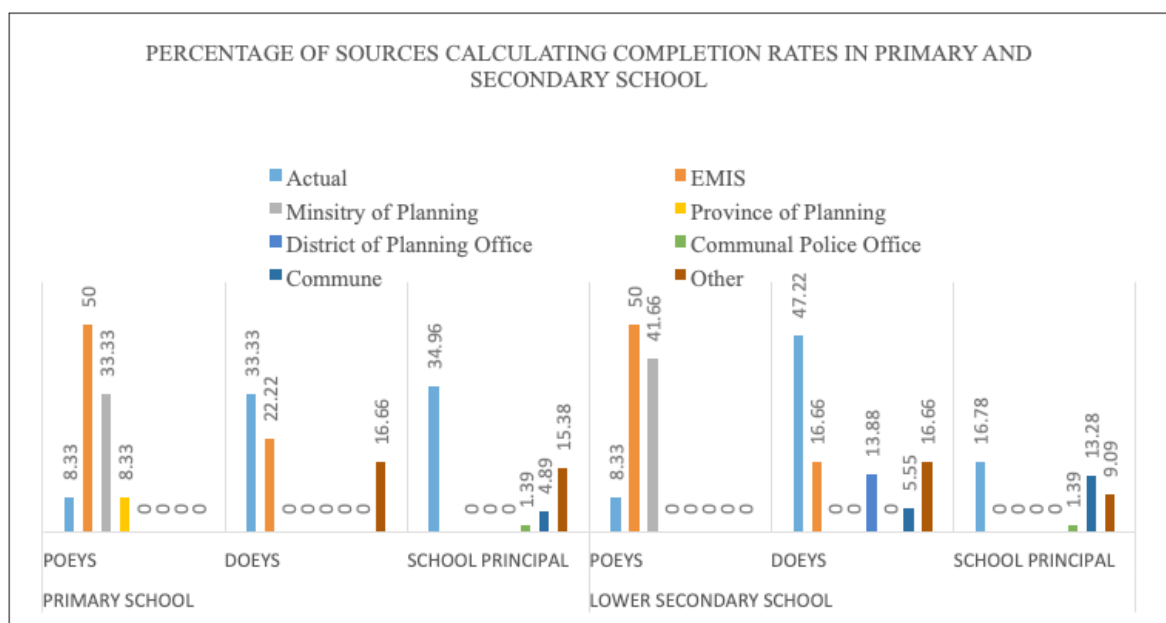*4.1.2 Methods to Calculate the Completion Rate*

4.1.2.1 Calculation Sources of Completion Rate

The way to calculate primary school completion rates among the 12 provinces took population figures for calculating completion rates from EMIS, while 33.33% were taken from the Ministry of Planning (projection). 8.33% from the Provincial Department of Planning and 8.33% from the authorities. For the DoEYS, 22.22% took data from EMIS, and 22.22% from commune/sangkat data, 5.55% of the commune/sangkat data are most used from the actual population collected with 33.33%, while 16.66% took other figures, such as the collection from schools through school principals from school mapping and PoEYS. The school principals also mentioned that computing the completion rate in primary education using population statistics, of which 34.96% came from the actual collection, either the school mapping or study mapping, 4.89% from the commune, 1.39% from police and 15.38% came from other sources, such as actual collections, commune, police, etc.

For calculating lower secondary school completion rates, data from the DoEYS, 50% came from the Management Information System (EMIS), 41.66% from the Ministry of

Planning (figure) and 8.33 % from the actual figures from local authorities, but out of the 12 provinces, none of them used figures from the Provincial Department of Planning. Similarly, 16.66% of DoEYS used figures from the Management Information System (EMIS), 13.88% used District of Planning Office data, 5.55% from commune data, while 47.22% used data from the actual collection, and 16.66% came from various sources, such as school collections through school principals, school mapping, and PoEYS. Calculating the completion rate in lower secondary school, 16.78% of the school principals stated that they used the statistics of the population through collecting from the school mapping, 13.28% from the commune and 1.39% from the police, while 9.09% came from various sources, such as the census of primary school teachers, and DoEYS, etc.

Graph 1.7 Source Calculating Completion Rate in Primary and Lower Secondary Education

4.1.2.3 Methods to Calculate Completion Rate in Primary Schools

The ways to calculate the completion rate in primary schools, both PoEYS and DoEYS understood similarly that the calculation is accurate, up to 80%, of which 83% are PoEYS and 83.33% of DoEYS, while the DoEYS of 86.11% seems to contradict the data obtained by the school principals while among 81 school principals, only 23.45 percent said that the way to calculate the completion rate is correct; however, up to 76.55 percent said the way

to calculate the completion rate in primary school is incorrect. Thus, the data between the PoEYS and DoEYS is similar contradicting to the data of the school principals.

4.1.2.4 Methods to Calculate Completion Rate in Primary and lower Secondary Education

Of the 66.66% of PoEYS, 66.66% of school principals and 75% of DoEYS considered the method of calculating the completion rate in the lower secondary school is correct, whereas
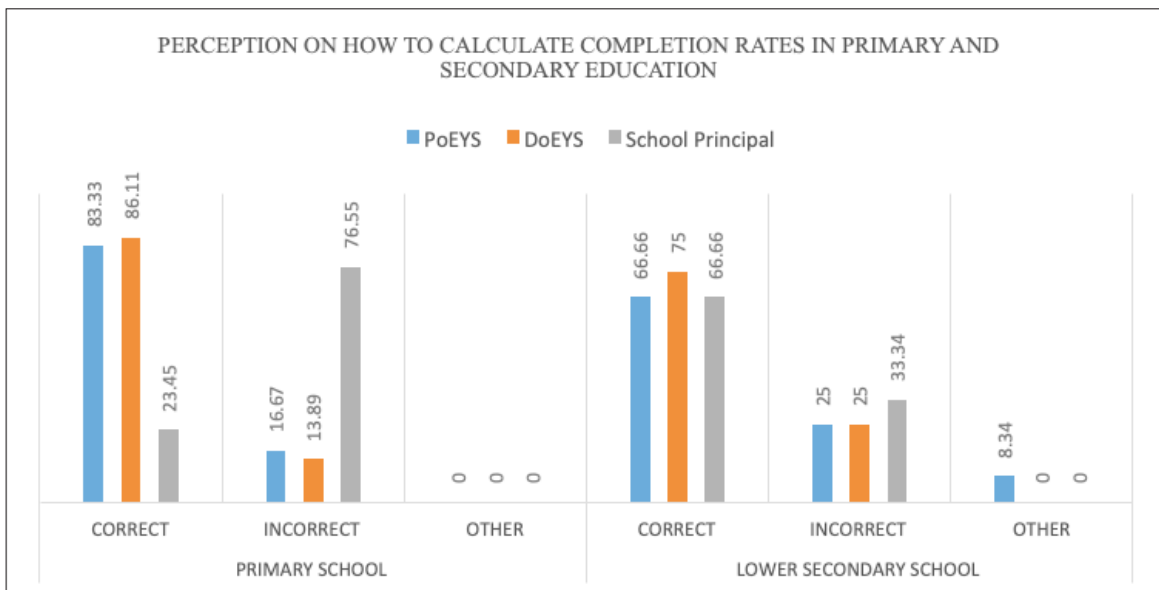
4.1.2.3 Methods to Calculate Primary School Completion Rate

The methods to calculate primary school completion rates at both PoEYS and DoEYS are similar in terms of accuracy with over **80%**, of which **83.33%** from PoEYS, **86.11%** from DoEYS; in contrast to data from school principals, only 23.45% of 81 school principals said it is correct, while 76.55% said methods to calculate the completion rate of primary school is incorrect. Therefore, the data between the PoEYS and DoEYS is similar, and it seems to constrast to the data of the school principals.

4.1.2.4 Methods to Calculate Lower Secondary School Completion Rate

Among 66.66% of PoEYS, 66.66% of school principals, and 75% of DoEYS thought that the method for calculating the completion rate in lower secondary school is correct, while 25% of PoEYS, 25% of DoEYS, and 33. 33% of school principals said that the method of calculating completion rates is not correct based on what the MoESY has set out yet. Only 16.66% of teachers reported that the method of calculating completion rates is correct, while 63.88% found that the calculation of completion rates is not accurate; 15.27% answered they did not know and 4.16% did not answer. Overall, looking at the responses of data providers at the PoEYS, DoEYS and school principals seem to be similar in terms of how to calculate lower secondary school completion rates; in contrast, the data obtained from teachers seem to be opposite. Among the informants from the PoEYS, DoEYS, school principals, teachers and parents found that those who understand the completion rates as well as the definitions set by the Ministry of Education, Youth and Sport are very small, but in general observation, the PoEYS and DoEYS and school principals are aware abit high; in contrast, none of the 144 parents had the proper knowledge or understanding of the completion rate as determined by the Ministry of Education, Youth and Sport.

Graph 1.8 Method to Calculate Completion Rate

PERCEPTION ON HOW TO CALCULATE COMPLETION RATES IN PRIMARY AND SECONDARY EDUCATION

■ PoEYS   ■ DoEYS   ■ School Principal

PRIMARY SCHOOL
- CORRECT: 83.33, 86.11, 23.45
- INCORRECT: 16.67, 13.89, 76.55
- OTHER: 0, 0, 0

LOWER SECONDARY SCHOOL
- CORRECT: 66.66, 75, 66.66
- INCORRECT: 25, 25, 33.34
- OTHER: 8.34, 0, 0

4.1.2.5 Trainings Related to Completion Rate Calculation

Although awareness of completion rates is limited, the training on calculating education indicators at the provincial levels at almost 100% with 91.66%, in which only 8.34% had never been trained. Whereas, the district levels, 72.22% received training on the calculation of education indicators, with an average of two times of training per person, while only 27.78% had never been trained. For the school principals, it seems to be less number than the provincial and district levels, with those only 53.84% have been trained in the calculation of education indicators, with an average of 1.3 time trained per person, whereas 46.16% had never been trained. Overall, among the participants of PoEYS, DoEYS, and school principals, only the PoEYS and DoEYS mostly received training on calculating education indicators; on the contrary, the school principals seem to be limited (Annex 5).

4.1.3 Challenges for Data Collection

According to the data obtained from the stakeholders, it showed that the population data collector has many challenges that make the data collection not accurate. The following are some of the challenges of DoEYS and district authorities: data collection without meeting the house owners (they go to Thailand or mobilize, migrate in and out without informing the chief of village, commune) and reports to the district administrators have been late, while

the village chief's knowledge is limited, and lack of transportation for data collection in village and some villages and communes have paid less attention to collect data that makes the data collection not for all families. In the village and commune level, there is no budget for data collection, and the delay in monitoring population growth and reporting is irregular. Whereas the support planning officers are not enough to collect data as needed. On the other hand, the figures of provincial and communal levels have not consisted with each other, not accurate, and it is hard to choose, especially when there is no time to collect specifically, and sometimes when the actual data collection, people are not at home (farming) and new comers have no legal documents. In addition to these issues, there is also uncertainty over the commune chief's ability to collect data. Reports from different sources are not accurate, and some organizations update monthly, some annually, or multi-year plans.

As for the principal's challenges, it is similar to the challenges faced by DoEYS and PoEYS's in which school principals mentioned some challenges, such as actual statistical data are not as the same as the DoEYS and PoEYS's with lateness; moreover, school mapping is also changing (migration in and out). Furthermore, the lack of accurate data from the local, lack of good communication between teachers and local authorities that make it difficult to collect data in people's homes and some teachers have not fully understood the statistical questionnaires and lack of budget, insufficient preparation, not enough time, lack of technical skills, lack of computational formulas, and lack of documentation. The data obtained from different sources are different, less accurate with each family data (incorrect age) and some families less engaged while the new directors are less aware of the statistical work, and some people do not have specific residence; some families do not have enough documents (no birth certificate or registrar), and the data collectors do not understand the method of data collection, in which some parents do not understand the value of education, which they do not inspire their children to enroll, and some do not register or drop out, while others drop out without informing schools.

However, communes also face similar challenges to DoEYS, and even though few communes have mentioned that there are no challenges in collecting population data, which those challenges include: communes have too much work with no time to collect data, lack of knowledge of data collection, lack of transportation for statistical collection in island, and statistical work responsible by only communal clerk, while statistics management in some villages is unclear, lack of reports of people dying and leaving because new comers

and migrants are often not informed to the local authorities and some have no birth certificates. Moreover, sometimes the data collector does not meet the people as they go to the fields and their understanding of population statistics is limited. People do not understand their children's education, lack of family books, scatter of people's homes, and limitation of village chief's knowledge, no budget for data collection, and displacement without informing local police in and out, while some children have not listed their names into the family books, and it is hard to meet people because they work away, less cooperative, and more new comers from other villages without transferred documents, difficult to communicate with using the ethnical languages, bias statistics with new birth and death.

Challenges provided by PoEYS, DoEYS, and school principals, including school principals, DoEYS, and district authorities have a limited understanding and of how data is collected, while it is late because some people migrate and the data collected is not yet compatible or matched or cooperated according to the Ministry of Education, Youth and Sport (MoEYS) wants because of the uncertain data being collected at all levels. In addition, data management is still difficult because migrants do not provide accurate information to local authorities, and it is difficult to collect due to the long distance from home to home, which it takes time in collecting; moreover, budget resources are limited in collecting data and are subject to mutual fines, whereas the report to the local authorities or national level is not accurate or precise as the data collection is not collected from all houses, and data are different in each household. Also, changes of the data controllers make it difficult to manage the data.

4.1.3.1 Population Data

Data obtained from PoEYS and DoEYS have some challenges, such as data from the Provincial Department of Planning and the Ministry of Planning do not match with the data of the DoEYS and schools, and the data of the village do not also match with the actual data collected by the school and DoEYS. In addition, there is no clear population statistics system, which makes it difficult to manage the data and movement of people, while some villages and communes do not update population data, resulting in inconsistent data (figures and actual numbers do not match with each other), and some of villages and communes have not collected accurate data yet, making it difficult to calculate other rates. Whereas, the census is difficult because of the migration of people, natural disasters, geographical factors, lack of officials, no budget for census, lack of means, and people are not involved,

etc. On the other hand, village and commune chiefs do not have accurate and comprehensive age population data, and some schools do not collect data using only previous-year data, and some schools use data through village chiefs, which is difficult because some village chiefs do not collect data of the new year, just giving the previous-year figures, and some authorities are less cooperative, while some data providers are too narrow in their data delivery to make the data inaccurate.

4.1.3.2 Student Data

The data collected by PoEYS and DoEYS have been faced some challenges, such as collecting student data is not realistic age (ladder numbers and new statistics officers are changing frequently), providing student statistics is late, not paying attention for statistics and some areas find it difficult to collect data. Whereas the statistics controller is uncertain in the area of difficulty due to late enrollment, disagreement between the Planning Office and the Technical Office, the age of the first grade is not exactly the same and the students transfer from another district without proper documentation, migration with parents which make changes of the number of children in the village and geographical situation, which is difficult to travel (waterways, bumpy roads). In addition, the provision of school records is late (frequent lateness) and the data is different, while the Planning Office does not have a clear questionnaire for collecting student data, and some school principals have limited understanding of how to extract statistics in census tables, etc.
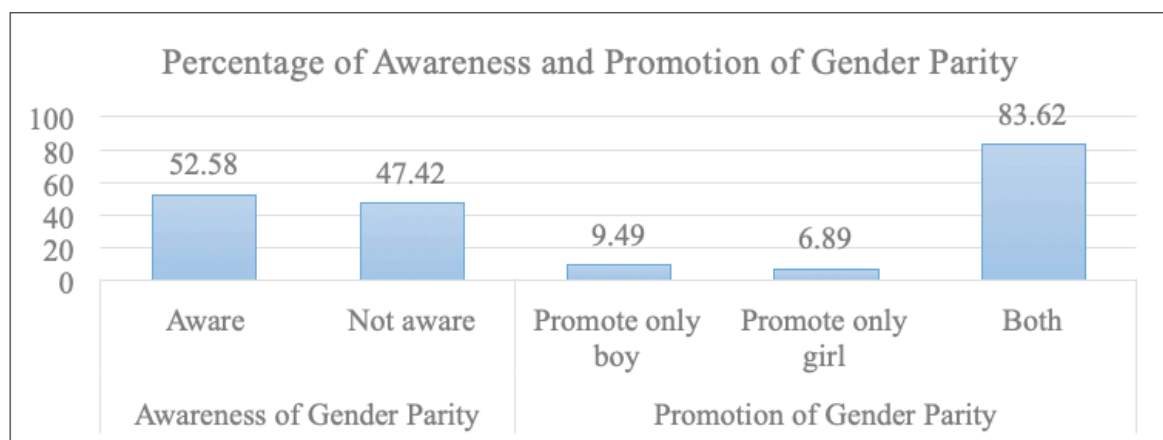
4.1.3 Gender Parity Index of Completion Rate

Most of parents push both children (sons and daughters) up to 83.62% because both sons and daughters need to have high knowledge for all because education can make it easier to find work in the future and they are able to help their family, and if they both (sons and daughters) have high knowledge, they will make their parents less difficult in the future; on the other hand, parents want their children to have honorability, have good jobs using intelligence; hence, they have an equal opportunity to learn. On the other hand, children have an equal right to education, as children must have equal knowledge to live in society and in the future parents can depend on both children.

9.48% of parents want sons to learn more than daughters based on the fact that sons are easy to travel without worrying about safety; sons are wiser than daughters, and they want

their sons to have higher knowledge than daughters; moreover, sons struggle to study harder than daughters, and sons can live far away alone, so they give priority to their sons, while daughters have difficulty in going to school far away. On the contrary, 6.89% of parents want their daughters to learn more than sons, on the grounds that to let their daughters have the same education they need without being as stupid as their parents; on the other hand, their children will be able to find jobs and have good future, and daughters are wiser than sons, while others have only daughters and they want their daghters to have knowledge.

52.58% of respondents are aware of gender enhancement in motivating in their local, of which 47.42% are unaware at all. According to their clarification, gender-promoting activities, such as the promotion of equal rights between men and women, children having equal rights, regardless of whether they are male or female meaning they are able to attend social activities equally.

Graph 1.9 Understanding and Promoting Gender Parity

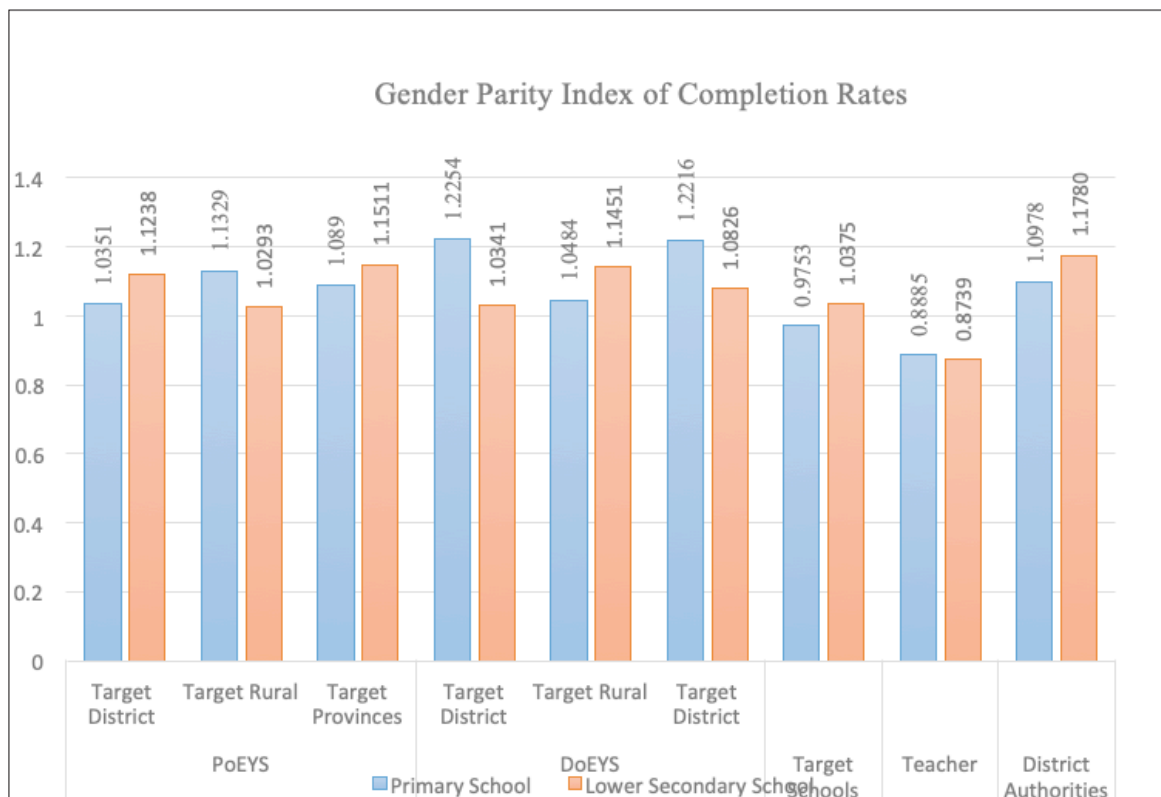*4.1.4.1 Gender Parity Index of Primary School Completion Rate*

Gender Parity Index[7] of primary school completion rate for school year 2017-2018 for PoEYS, DoEYS in urban and rural areas throughout target provinces, schools, teachers, and district authorities, most of them give higher values of female indicators than men (index >1).

Most primary school completion rates indicate that female student values are bigger than male students according to data provided by PoEYS, DoEYS and district authorities; in

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7   Gender Parity Index is than 1.

contrast, the data provided by teachers shows that the value of male students is bigger than female (0.8885), while target school's gender parity index of completion rate in primary school has gender parity indext between female and male students (index=0.9753).

Graph 1.10 Gender Parity Index of Completion Rate

4.1.4.2 Gender Parity Index of Upper Secondary Education Completion Rate

Graph 1.10 shows the Gender Parity Index of the primary and lower secondary school completion rates for academic year 2017-2018 based on the data from target PoEYS, Do-EYS, and schools, teachers, district authorities are similar to the Gender Parity Index of primary school completion rates, in which almost all indicate that lower secondary school completion rates are more valuable for female students than male students (index >1), except that the data provided by teachers value male more than female students (index=0.83939), in which this value is almost identical to the data provided by teachers in primary school. Thus, the Gender Parity Index of primary and lower secondary school is the majority of the participants confirmed that the gender index values of female students are bigger than male

students, although school principals stated that there is gender equality between female and male students.

4.1.4.2 Reasons for Differences between Male and Female Students

The reasons that make differences in completion rates between female and male students in terms of data from PoEYS, DoEYS, district authorities, school principals are due to:

1. Living standard factors: Most male students have to support their parents in fishing, cassava work, construction, etc., while daughters have to work in factories or domestic jobs to help meet the needs and livelihoods of parents, requiring them to migrate, drop out of school and some students relocate with their parents.

2. Family factors: Some families do not support their children or support only their daughters or sons, or they do not understand the value of education and others do not want their children to stay away from home because their children are not safe, especially daughters. Some parents are illiterate, have poor living conditions that they have not considered or thought for long future about their children, and it causes children to drop out of school.

3. Traditional factors: Some families take the tradition seriously because they think that daughters must marry younger than sons, and daughters do not have to study higher and they value the education for only sons who can study or work away from home, while daughters have to help with the household chores, and help their parents; moreover, daughters have more housework than sons. The ethnic tradition is that the daughters have to work at home and the sons have to work to support their family, so sons have to learn more than daughters.

4. Geographical factors: Some students decide to drop out of school because of the difficult roads to travel, home away from school, and are afraid to travel for the safety reasons, especially girls.

5. Mindset factors: Some parents or guardians still have a strict view of their children, values the education of sons rather than daughters; sons are the biggest in family, so sons can learn better than daughters, and they are worried about safety issues for daughters.

6. Student number factors: Students enrolled and studied has more female students in number than male students, while the population growth in the community is also different, i.e. more girls than boys.

7. Social factors: Factors that influence the environment for both inside and outside of schools that make some students drop out of school, especially boys, such as drug abuse, friend relationship, materialism, etc.

4.1.4.3 Activities to Promote Gender Equality

Gender promoting activities are generally done in different ways:

1. Motivation: Encouraging women to find jobs by providing leadership opportunities to increase scholarships for disadvantaged students, and students in difficult situations, especially women who are regularly encouraged in their teaching and working hours, motivating teachers to participate in leadership work in organization like participating in good teacher competition, school principals or vice-principals to lead the organization, giving girls with the ability to lead the class, president of girl council, establishing the girl council, girl scouts, scouts participating in the composition and poems competition, heightening girl to be a member of girl council, youth council, appointing female teachers as the school board, promoting women as leaders, and improving gender to be leaders by women to have equal rights to men.

2. Strategic planning: Put the strategy of promoting gender action in the provincial education plan and put activities into the annual operational plan (AOP) as well as incorporate women's issues into the commune, district and investment plans.

3. Providing opportunities: Arrange women to have roles in various school committees, give important roles for women, offer scholarships for women and participation in social work, inspire schools to establish girl councelling committee, plan to put women into class and school leadership, provide a variety of priorities for women to participate in activities, improve separate toilets and bathrooms for boys and girls, send girls to attend camp inside and outside of provinces and include women into the children council and national scouts, etc.

4 - Trainings: Conduct training courses on school development plans, use core activity budget, visit villages, establish gender action groups and conduct gender equality training, promote equal rights between men and women.

5. Improving infrastructure: Improve toilets by urging schools to organize female toilets apart from male students and directing school principals to organize school-level committee by grade for girls as a class monitor or sub-class monitor.

6. Disseminating: Through gender seminars, educating parents at homes and communities by involving more girls in social activities, giving the girl a head as a school child group or as a class monitor, educating students on the value of education and community about the benefits, values of education (children learning), disseminating to subordinate organizations on taking care of gender equality, dissenating and penetrating gender through a meeting with school directors, teachers, staff, as well as promoting in villages, schools to promote physical education for girl pupils, supporting materials for poor students through woman and child council.

7. Communications: Communicate with development partners seeking scholarships to help girls through commune councils, safe village and commune, parents explaining the impact of illiterate daughters, cooperate with public and private sectors, promote gender-based education, health promotion, promote equal rights, and make an investment plan.

4.1.4 Measures to Increase Enrollment

According to statistics, reports, and direct interviews with the 12 target provinces, it shows a total student growth of 0.75%, with male students increasing 0.82% and females up to 1.67%, and the increases are based on the population increases, parents and guardians sending their children to school as they become more aware of the value of education, a wider campaign to collect students, scholarship provision, reforms of the MoEYS, better living standard of people and reducing migration, having budget to disseminate in community, communes, school mapping, enrollment without payment and preventing migration of people. Conversely, although the overall figure of some of the target provinces shows an increase, a small number of provinces are declining, which may be due to the fact that living standard factor, migration, lack of accommodations; some parents are not aware of the values of education, and aged children are less than the previous academic years.

In order to mobilize children to attend school, the PoEYS have also participated in some activities, such as encouraging parents to send their children to school, disseminating to parents, students to bring school-aged children to school, campaigning to mobilize children to

school, mobilizing development partners to support, educating parents on the importance of education, and communities and local authorities better understand the value of education. In addition, PoEYS have launched campaigns to mobilize students to school through Facebook of the MoEYS in persuading students into education system, disseminate local authorities, school support committees to help mobilize children as many as they can, and school support committees help collect school-aged children (6 years) at homes, improve schools to be friendly schools equipped with toilets, as well as strengthening safety and security of students in collaboration with the community and local authorities to be more closely.

Whereas, DoEYS show an average increase of 2.31%, with boys on average 4.91% and girls on average 3.22%, and the increaces in some districts are because people get aware of education, have confidence in schools, schools getting nearer to people's homes, increasing population's birth, and getting more involvement of school activities, such as the care of school buildings, collecting children to attend school, checking student attendance regularly, increasing the comprehensive dissemination to the community and the relevant authorities. Increasing student enrollment in some districts, there are also some problems that cause students to drop out of school in some districts, which could be due to migration and children being away from school, especially in some annex villages, birth delays, schools away from homes in some areas, improper schools (wooden buildings, lack of chairs), less support from community, decline of school-aged children, moving to Phnom Penh, or transferring to private schools, etc.

In addition, DoEYS also have implemented and participated in several activities to collect children, such as setting up school support committee to conduct a census once a year, updating school mapping, identifying the target of collecting children to join the community in gathering students, preparing school mapping in target villages, mobilizing children in all forms, disseminating all stakeholders to mobilize children, updating existing statistics for school-aged children, collaborating with development partners to further strengthen capacity of the committees, pushing school directors to facilitate students to enroll, communicate with village, commune, and district authorities to help prevent the migrants, strengthen the performance of officers and teachers, informing the students of dropout as well as some students to attend with commune, meeting with the school principals to disseminate through banners, proverbs and strengthening teacher and student discipline, improving school environment, establishing school buildings, and increasing cooperation with the authorities and monks in pagodas.

At school level, school principals stated that the average enrollment of students increased by an average of 7.07%, with the average male student increasing by 6.19% and the female student average 4.80%, and the increases are that parents become more aware of the benefits of education and they encourage their children to come to schools; teachers have paid attention and more responsible for their work, and student enrollment have also increased, and the increases of participation and confidence of parents; communities and authorities at all levels provide enough educational material to students. However, in some schools, there is a decrease in number of students due to fewer mobilizations, poor living conditions, migration to work abroad, less school-aged children, going with parents to Thailand, less pupils promoted from primary schools, lack of transportation, schools without scholarship, decreases of children (birth delays), creating new schools, students transferring to other schools or private schools. In addition to increasing the number of students attending schools, each school also participated in student recruitment activities, such as instructing parents to bring their children to school, improve their school environment and the discipline of teachers, visit students' home to encourage their children to learn and explain to parents the value of monthly meeting attendance at the commune office, listing of students who have more absents or phone their parents, take home-visits for pupils who are not enrolled, deliver leaflets, disseminate, help train pupils who dropped out of school to come back to study, organize village networks in for schools, and so forth.

4.1.5.1 School Dropouts

According to data provided by the PoEYS, the school dropouts have dropped by 1.90% on average at the PoEYS, and this decrease may be due to the fact that parents are aware of the importance of education and want their children to have good jobs in the future; parents help their children to come to school and study at home; besides, PoEYS have also planned more precisely (better planning and monitoring) and schools have been established in all areas starting from the incompleted schools. On the contrary, a small number of provinces still have high rates of dropout, which is largely due to inaccurate data collection; some parents do not encourage their children to come to school, and some exploit their child labor for the living conditions.

Similarly, data provided by DoEYS showed an average decrease of 0.53%, which could be due to the participation of school committee to acquire some information about a student

dropping out of school, explain to parents to bring their child back to school; in addition, the management have taken care, teachers with professional conscience, students working hard, parents preventing their children to drop out, and push children into school, have schools and teachers in schools, as well as involvement of all stakeholders, and people understand the value of education of their children, promote poor students; furthermore, provide school meals for poor pupils, better livelihoods and DoEYS have made meetings to disseminate to parents, communities, school principals, and communities have also helped collect students dropping out of school by informing the relevant authorities to help foster parents, etc. Although school drop-out rates are declining in a large number of DoEYS, a small number of DoEYS have also increased the dropouts, and the majority of school principals confused that students transferring as dropping out, migration with their parents and learn Islam (Khmer Islam), help parents' work, get married, work in factories and relocated to the parents, etc.

For the data provided by the school principals, the average dropout rate decreased by 3.79%, which may be due to the better student achievement, parents understand the value of education, teachers encourage students, reduce young marriages and migration, and help teach slow learning students, parents follow up their children's education, and school management committees meet students' parents who are absenteeism and encourage them to come back to learn. While most schools have a dropout rate drecreased, there are also a few schools have high dropouts that may be due to parental relocation, migration or going with parents because of living conditions, young marriages, factories near schools, families relocated frequently and move to private schools, etc.

Teachers, provided information through interviewing and completing questionnaires, seem to contradict data obtained from DOEYS and school directors, in which they mentioned the increases of dropouts with 0.23% that could be due to help with households and labor, migration, factory work, decreases of student number at the beginning school year, moving to private schools, living conditions, school away from home, less attention in pushing to learn from their parents, not want to study, relocation, poor family, home away from schools, early marriages, social hooks, slow learners or overage enrolment, and so forth.

The data provided by district authorities, communes, and parents are similar to a small

number in terms of dropout rates, which may be due to migration, materialism and marriages, lacks of capacity in education by helping to earn a living for family, going with parents for grade 1 pupils, farming, less pushing from parents, not understand the value of education, lack of transportation, taking examples of others (unemployment for previous learners), unwillingness to learn, poor performance learning, slow learning, school dropout, drugs abuse, and domestic violence.

4.1.5.2 Dropout Prevention

In order to prevent student dropout, all stakeholders from PoEYS, DoEYS, district authorities, communes, as well as school principals, and parents have done some of the following activies:

1. Teachers: Enhance teachers' ability to monitor and supervise teachers on teaching and learning regularly, and teachers must have clear lesson plans, punctuality, be willing to teach, have a good relationship with students and parents, and inform parents whose children have played struant.

2. Students: Provide scholarships, accommodation for students, promote and establish schools at all levels, provide health councelling for girls, monitor students' presence, find development partners, provide material support for poor students, visit students with absenteeism, try to explain students, home-visit for students dropout, contact their parents via students, meet with village, commune, parents and guardians to better understand the importance of education and get to understand the situation of students.

3. Parents: Home-visit to find out reasons, explain students about the value of education, especially examine the possibility of scholarships, encourage parents to bring their children to study, and disseminate to parents the importance of education at homes (encourage children to study, do not exploit children, and teach them more often at home), encourage children to study hard through the women committee in order to get the best results for children to become good citizens in society. In addition, regular contact with students, parents, teachers, students, issues of student study, visit students at home or in other events in the community, and prevent migration and drug trafficking.

4. District of Education, Youth and Sport: Provide guidance of students intending to dropout and provide learning materials, incentives, scholarships, or transportation for poor

students, manage data in public and private schools, meet with the women and children's committees, teachers and stakeholders to find ways to prevent, prepare the monitoring systems, strengthen school management committees; furthermore, comfort students for the reasons of learning, disseminate to the parents to understand the value of education and the consequences of stopping learning, and cooperating with local authorities by meeting once a month.

5. Province of Education, Youth and Sport: Provide accommodation for students, inspire and create schools at all levels, teamwork meetings at technical offices in PoEYS and DoEYS to find out challenges that need to be solved urgently, hand out textbooks to all students, hygiene, school environments, provide regular learning games with students, provide school buildings, and re-enrollment programs, strengthen school management, improve school structure, maintain student safety, establish schools at all levels, and collaborate with authorities to educate students on the construction of toilets, hand washing, build accommodations for students coming from the distance.

4.1.5.3 Repeatitions

According to data provided by PoEYS from the target provinces, it showed that average student retention decreased by an average of 0.65%, and this could be due to the promotion test at the beginning and end of the school year, increasing school budgets, and continuous reforms, efforts of all levels of education officials, development partners, student efforts, awareness of authorities, communities, parents, and student; moreover, parents are aware of the value of their child's education by providing additional guidance.

At the same time, DoEYS also reported that repetition decreased by an average of 0.31% because the Ministry of Education, Youth and Sport has, so far, modified the appropriate curriculum, adequate textbooks, and national adjustments; in addition, DoEYS have been pushing for more teaching on Thursday and re-entry programs. In addition, DoEYS have also assisted teachers in teaching and learning (making lesson plans, instructional materials, teaching methods), and school management and teachers have been very careful in managing and teaching students with no discrimination, regular and timely teaching, and regularly monitored by all involved in teaching and learning as well as students' achievement monitoring by month, semester and year, train slow performance leaners, especially an increase in the awareness of parents about the value of education with little traction of child labor.

On the other hand, data from school directors showed that the average repetition rate increased by 0.64%, which is in contrast to the data of PoEYS and DoEYS. This repetition may be due to low performance students, absenteeism, poor families, and irregular attendance due to school away from home, too often relocations, lateness, less attention from teachers for low performance students, and some students do not care or do not come for examinations. Likewise, teachers reported that the repetition rate increased by an average of 0.37%, which is due to the fact that more students are absent, going with parents, relocating with parents, overaged students, playfulness, less learning, low performance, less attention from their parents, lack of basic knowledge, and not good enough for curriculum.

Conversely, although PoEYS and DoEYS have reported declining of repetition rates in their provinces and districts, there are still a few PoEYS and DoEYS with a slight increase in repetition, which may be due to the fact that students with low performance, not have regular attendance, absenteeism, lack of additional teaching for slow learners, less cooperation between teachers and parents, less attention and irregular teaching, unpunctual teaching, teaching without lesson plans, some failed students without promotion tests, education quality base without allowing them to pass, less attention on child's learning, and so on.

Similarly, authorities of districts, communes, and parents or guardians also expressed their opinion that there is a slight increase in repetition rates because of **student factors**: few students pay less attention to education, and some come to school less often (absenteeism); some are away from school, while some have limited ability to understand what the teachers have explained, and most of them are underage students and from poor families, lazy and busy earning money for a living, absenteeism by helping their parents, and working in and out of the country; some students attend irregularly classes (too many absents set by law), some play truants (low performance), poor spirit, forgetfulness, dropout of mid-year then come back to learn, while some with low performance. **Living condition**: some students are busy helping parents' work, migration, away from school, poor parents, lack of the awareness of education values. **Social factor**: some students have friends who play truants, use drugs, do not go home. **Management factor**: it is caused by the loosening of the rules of the school, namely, inadequate and comprehensive management. **Family factor**: parents do not follow up their children's learning. In addition, due to the **teacher factor**: teachers focus much on quality, with following up absent students, too much attention to professional ethics, and attention with students, tightening rule of law and following

up children cautiously. Last but not least, **authority factor**: less dissemination to parents to encourage their children to come to school, or sometimes schools do not cooperate with local authorities regularly.

4.1.5.4 Prevention of Repetitions

In order to prevent and curb the repetition, PoEYS have increased scholarships, especially for girls, increase the quality of school toilets, keep safety for girls, and local authorities help people recognize the value of education, strengthen the discipline of learning, and teaching, testing to evaluate and support technical and material as well as review the weekly achievements with technical offices and subordinate units, encourage and motivate qualified teachers to teach in the long vacation, encourage parents to teach their children, encourage teachers to come to school regularly, make proper lesson plans, teach low performance students for extra classes, and class-in-charge teachers have to collaborate well with student guardians and ask for intervention from stakeholders, as well as create additional classes in all schools. Whereas, DoEYS and district authorities have also done some activities to prevent repetitions, such as providing special classes and study clubs for slow learners, strengthening management, absenteeism, testing of ending and beginning school year, strengthening teacher capacity and teaching methods, strengthening teaching, learning, and discipline of teachers and students, inspiring teachers to make lesson plans, teaching with instructional materials, punctuality, and taking care of students who are slow and train teachers with new methods, reducing multi grade contractual teachers, setting up school child councils to help slow learners at play time and free time, as well as encourage parents to help teach children at home. In addition, DoEYS have established learning program: students help students, monitor DTMT regularly and timely, strengthen management work (attendance of teachers and students), class inspection, achievement monitoring in every 6 months, direct home-visit for students with absenteeism, and continue cooperating authorities, school management committee, meet with school principals on the term of reference, such as the effectiveness of budgeting, student performance tests for the failed ones, and technical effectiveness, as well as communication with parents or guardians when students with more absents (appointments with parents), push them to learn during a commune / village, school management committee, monitor student scholarships, and encourage poor students to attend school. District authorities and commune have assisted in dealing with difficult families, coordinating with medical practitioners, dealing with actual challenges,

strengthening teacher discipline, parents / guardians making efforts to teach their children conscientiously, strengthening communication with parents, encouraging parents to monitor monthly study-record books, meeting in village and commune on student activities and meeting directly with student parents, pushing DoEYS to open additional classes for low performance students and monitoring student record books regularly. Moreover, they have advised students and guardians to encourage children to pay attention to learning and explained teachers not to be more absent, pay much attention to school girls by constructing toilets, meet with parents to find out reasons for absents of students, pay much attention for low performance learners as well as launch a publicity campaign to educate the public to understand the value of education, meet with teachers to find out the student rankings to find ways to improve the results, especially authorities have been helping to buy bicycles for students with homes away from schools and school supplies and reported it to parents when students are absent for no reasons.

School principals and teachers are also actively involved in preventing repetition, such as guiding parents to encourage children to come to school regularly and instruct teachers to plan to help student regularly as well as enhance teaching at all levels and also help keep regular track of low performance students, and help provide additional tutoring on Thursday, and identify those with low performance to be easy for additional teaching. In addition, it has partnered with the school management committee and community to provide home visit for students with low performance learning. School support committees and teachers have educated most absent students, provide information to parents to tell them to come to study regularly, as well as meet parents having children with slow performance learning, and regularly monitor student attendance, and also encourages teachers to pay attention to teaching students and teaching methods, and they have also inspired students to work hard and follow strict attendance rules by going to class to monitor and evaluate often as well as testing at the ending and beginning school year. In addition, teachers have also participated in some activities to prevent repetition, such as trying their best to teach, helping the low performance students, encouraging the students, providing extra classes, and teachers are also looking for good methods, organizing lesson plans, creating good atmosphere for students to learn, providing sport games, giving recommendation certificates, and finding methods to make them understand, home-visiting, explaining to the parents to check the child's results, and monitor the student's academic performance, establish a good relation-

ship with the parents to help slow learners. The guardians of students have also contributed to the curbing of repetition by encouraging children to try hard to study (not to exploit children), teach their children by enhancing learning, i.e. to send their children to school regularly, and when they are absent, it must be asked permission, encourage children to learn at home; furthermore, teachers must monitor students' performance by not discriminating against them inpite of poor or rich ones, as well as provide additional learning, tests of ending and beginning of school year, and so forth.

4.1.5.5 Factors Contributing to Low Completion Rates

According to data by PoEYS, it showed that the factors causing low completion rates are **dropout factor** (100%) among other highest reasons, in which the second highest is **migration** of 91.66%, poverty of 75%, whereas the fourth reason is that **repeated students and overaged children** of 66.66%, while low completion rates caused by **ethnicity** is only 41.66%, **disability** of 50% and other factors (8.33%).

The District Offices of Education, Youth and Sport suggested that factors for low completion rate caused by **poor students** of 72.58%, the second main reason is **migration** of 41.84%, dropouts of 32.17%, **overage** of 24.88%, 7.76% of **ethnic minorities**, and 6.97% of students with **disabilities**, while 17.59% are from other factors, such as **geographical factors**, home away from school, difficult road to travel; **social factors**, friends' motivation, early marriage, **living condition factor**, child labor force, migration with parents, job search; **student factor** (learning Chinese language), and **statistical statistics**, uncertain population statistics with low completion rates.

The data from district authorities appeared to contradict data from the PoEYS and DoEYS that is the reason for the low completion rate due to high dropout rates of 33.33%, while 51.85% due to migrations, 25.92% from repeated students, 22.22% of overage children, 66.66% of poor students, 29.62% of ethnic minority students, 7.40% of students with disabilities, 14.81% of other factors, including poor living conditions, lack of proper infrastructure, flooded communes, difficulty of traveling and spending much money, early marriage and job searching. The data from the communes are similar to the district authorities, in which 69.32% of poor students, 21.59% of high school dropouts, 58.81% of migration, 11.36% of repeated students, 18.18% of overaged children, 12.5% of ethnic minority students, and 7.95% disabilities, while 20.45% are due to factors, such as lack of some subject

teachers, lack of budget, lack of transportation, lack of schools or schools away from home, lack of transportation fare to school, or lack of money, drug abuse, working in factories, diseases, influenced by surrounding environment, bad friendship, parents exploiting labor force, and student factors with less attention in learning, and domestic violence.

Similarly, the school directors stated that the cause of poor students is 80.42%, while 76.92% is caused by migration, 55.22% of dropout students, 30.77% of overaged children, 26.57% of repeated students, 16.78% of ethnic minority students, and 4.89% of students with disabilities, whereas another 5.59% from other factors, such as living standards, changing to private schools, getting married, and not understanding the value of education by parents, and not sending their children to school.

Teachers showed that the dropout rate is 55.22% of dropouts, 80.55% of poor students, 72.92% of migrantion, 27.08% of overaged children, 20.14% of repeated students, 13.88% of ethnic minority students, and 3.47% of the students with disabilities, of which 1.38% of other factors, such as lack of transportation, living away from school, family living conditions, working with parents, materialism, shortage of teachers, giving less value of education by parents, social environment, less attention in learning by students, absents, less pushing from parents or divorces.

The perception of parents or guardians showed that 74.13% of poor students, 44.83% of migrations, 28.45% of dropout, 18.10% of overaged children, 15.51% of repeated students, 6.89% of ethnic minority students, 9.48% of students with disabilities, whereas 25% are from other factors, such as self-factors (not understand what they have learnt, or learning hard but not understanding, or not understanding the value of education), peer factor (traction from friends), social factors (social traction, drug abuse), family factors (lack of parental support, parental assistance), living condition factors (poor living conditions), and geographical factors (school away from home and difficult to travel).

For parents of students ages 13-20, they clarified that 72.58% are due to poor students, 41.84% of migration, 32.17% of dropouts, 25.67% of repeated students, 24.88% of overaged children, 7.76% of ethnic minority students, 6.97% of students with disabilities, whereas 17.59% of other factors, such as lack of transportation, poor living conditions, looking for life partners, lack of schools (especially lower secondary education), help for families to work in the fields, committing debauchery, drug abuse, bad friendships, less

learning, low school performance, love and marriage, lack of understanding of the value of education, attraction from the negative social environment, no more class due to having only grade 9 and domestic violence, and so on.

Graph 1.11 Factors for low completion rates
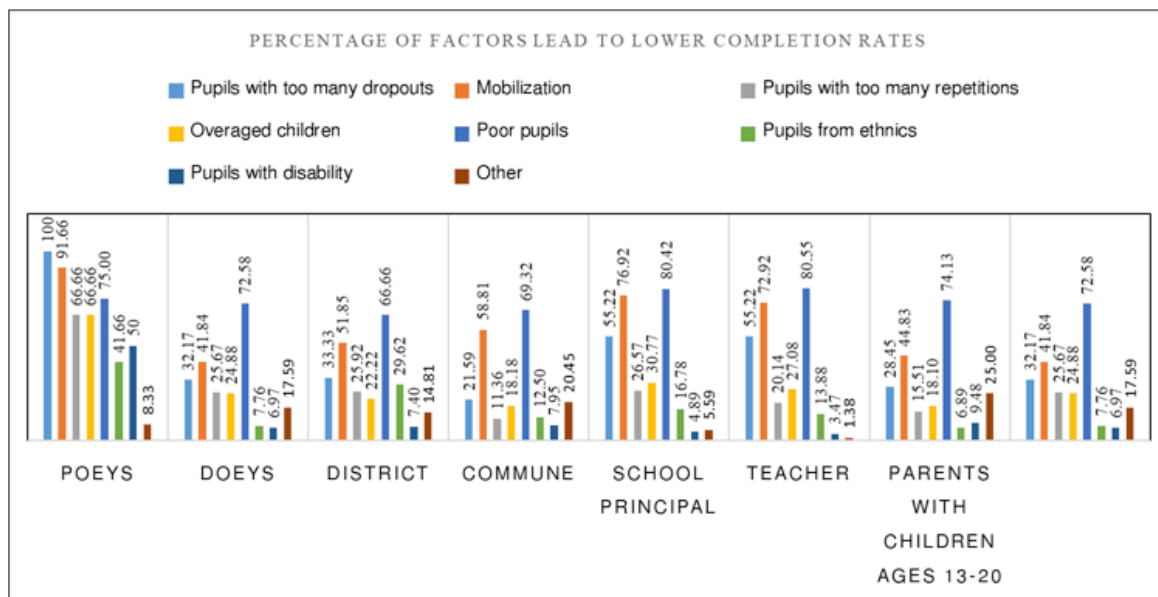
4.1.5.6 Measures Taken to Increase Completion Rates

In order to increase completion rates, PoEYS have so far offered scholarships to both public and private through donors, strengthened teacher capacity (teaching methodology and teacher morality), increased upper secondary schools closer to the community, especially prevent students from dropping out of school and repeating class, prevent migration, and train provincial school support committees and the roles and duties of helping schools, home visit, promote the importance of learning students, make all levels of school, provide facilities and accommodation for teachers and students, strengthen school management, provides additional funds to schools, improve the school environment, a safe learning environment, strengthen ending and beginning test, implement automatic promotion grade system, strengthen the technical sessions to monitor student outcomes, encourage students to learn, and push teachers to fully teach students and be conscious of their work and push to have enough teachers in rural areas. The Districts of Education, Youth and Sport have also participated in programs, such as promoting the value of education, enhancing programs for

poor students through development partners, encouraging poor students, disseminating to stakeholders to help parents to make their children complete their education, enhance their learning and teaching, take the test for failed students, and strengthen school management, monitor students with absenteeism. In addition, it also improves the quality of teaching and learning, the management of accurate data collection, mobilizes stakeholder input, as well as accurate scheduling and setting of the school environment both inside and outside with new mindset gradually. It also enhances the ability of teachers to teach with lesson plans, teaching methods, especially the workforce by mentoring parents or guardians, encourages children to come to school regularly, monitores their children's education at home, and conducts clear and timely student population census and dissemination meeting to parents or guardians, concerning local authorities in terms of completion rates, school visits to support the target schools, especially disseminate the policies of the Ministry of Education, Youth and Sport to all school principals and teachers in all schools to assist students in each school to make the completion rate increase. The Districts of Education, Youth and Sport have also had meetings to disseminate to students' parents about the value of education and gather children of all ages to attend school without discrimination in education services. In addition, the district authorities have also taken part in some activities to help increase the completion rate, such as promoting parents to encourage students to attend regular classes, combine as the local community for teachers to have a good relationship with the target students, home visit to educate people on the value of education, inspire parents to bring their children to school, introduce students to understand about their future, and the importance of study, motivate to offer academic rewards to completed students. The school principals must follow the teacher's instruction, and the classroom teachers must strive to educate the students professionally as well as inspire parents to monitor their children's education regularly and to strive to teach them more (at home). The communes have also engaged in a number of activities to encourage and educate parents about the value of education, educate people and prevent underage youth to work in factories and prevent migration, push teachers to be punctual in teaching, provide school buildings, accommodation and scholarships to poor students, and school principals must monitor teachers and students regularly to make them teach based on the curriculum set out.

School principals have participated in activities: introducing parents about the value of education, promoting student learning by encouraging students, enhancing instruction, as

well as campaigning to gather children of all ages to enroll in school, push guardians of students to send their children to school in cooperation with authorities to prevent migration and guide the parents to prevent their children dropping out of school at the same time, reduce repetition and dropout rates, improve school environment, maintain a good teaching environment, and control the teaching of teachers on a regular basis. The school principals must have good communication with the authorities and parents on a regular basis, encouraging at least complete basic education (grade 9); furthermore, the school principals must cooperate with the authorities and school support committee to instruct students' guardians not to act domestic violence. In addition to boosting the completion rate, teachers have conducted activities, such as offering rewards at the end of the year, encouraging students to study hard by regular teaching and learning, teachers with high morality, clear strategies in teaching, monitor students, direct helps of student parents having children with low school performance, visit parents with students of absenteeism, establish study club in village, encourage children to attend school regularly, encourage poor students, monitor low school students and collaborate with parents regularly, and improve student quality. In addition, it has also promoted local people to educate people about the value of education, especially to organize schools as a friendly school, develop one way accessible and create upper secondary schools near local locations as well as cooperate with local authorities to prevent other debaucheries. Whereas parents or guardians of students are involved in helping to increase completion rates, such as promoting the importance of knowledge through various programs by helping children understand the value of education, prevent their children from becoming addicted to drugs, as well as discuss with teachers to contact parents to help them understand the child's education. Similarly, student families have engaged in activities, such as urging students to further their education; school principals managed their teachers and students thoroughly, not using their children to do too much work at home, and interacting with teachers regularly. On the other hand, teachers have taught students cautiously with a sense of closeness for both physical and mental and have a good relationship with parents.

4.2 Perceptions and Challenges of Completion Rate

4.2.1 Completion Rate Satisfaction

Overall data from all participants are unhappy with the completion rate at only 9.77% and slight satisfaction at 11.93%, while the medium satisfaction is 32.36%, whereas 37.03%

are most satisfied, while 22.42% are completely satisfied with the completion rate. There-fore, the data indicated that most of the participants are satisfied with the completion rate, although the 12 Provinces of Education, Youth and Sport are not fully satisfied with the completion rates in their provinces, while few Districts of Education, Youth and Sport are dissatisfied with the results of completion rates, in which the data provided by the district authorities are similar to the data of the DoEYS.

Graph 1.12 Satisfaction with Completion Rate
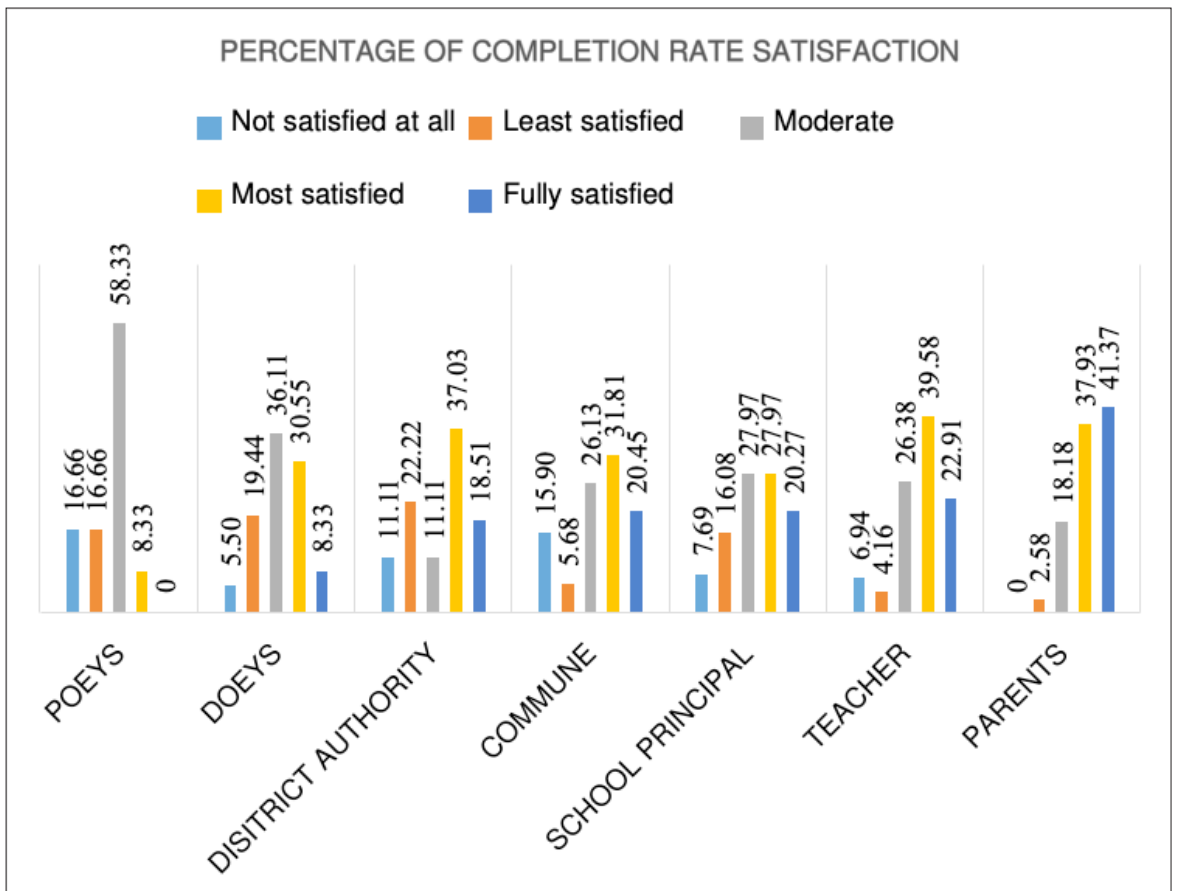
4.2.2 Job Performance Challenges

So far, although the Ministry of Education, Youth and Sport at all levels starting from the Ministry, PoEYS, DoEYS, and schools have worked hard to reform the finance, infra-structure, learning and teaching and develop the capacity of education staff; however, the education sector have still faced challenges in the 12 provinces, such as data collection is

not enough from elsewhere; data production is limited; the budget implementation is sluggish; DoEYS is still lack of technical equipment, such as computers, photocopiers, etc, and officials of DoEYS do not have good conditions of computers and English skills yet; in addition, officials at the DoEYS seem to be less focused and more job responsibilities, especially capacity limitation of leadership and management, as well as lack of technical and management skills, the habits without reform from the Ministry, officials with no professional conscience, no incentive for hard-working workers from the management, limitation of capacity building; in particular, officials have not yet qualified in planning to calculate other rates; in addition, it is also lack of teachers for working with each school. Similarly, data provided by DoEYS also raised some concerns and challenges, such as limitation of computer use, unclear administration, lack of funds to repair computers, photocopiers, narrow workplaces (no adequate equipment), while most school principals are less familiar with IT issues, have no knowledge of school development plans or annual operational plans, do not know how to monitor and evaluate their implementation plans, no monthly action plan, lack of teaching staff, and some teachers' teaching has not yet met the Ministry's requirements. Some of school principals have not yet received training in management and leadership. The inconsistent practice of peer-to-peer, comparisons, disciplinary practices, both staff and students, with some teachers still in need of student incentives (part-time teaching), lack of legal primary and kindergarten teachers, and specialists in math, physics, chemistry, and some of the teachers are non-specialized, and most of the teachers do not speak English, and they do not have computer ability for school administration to make obstructed work shortage, lack of school buildings, changing curriculum with training teachers. At the same time, the district authorities have faced challenges, such as daily work practices that do not respond to specific needs like slackness of daily reports, poor office environment, lack of subject teachers, especially in rural remote areas, some teachers and directors are limited (some teachers do not pay much attention to teaching), and the lack of school buildings. Communication between school principals and local authorities is limited, and there is a lack of involvement of parents or students, and the districts have no budget for short-term educational support as there is a lot of urgent work. District authorities have few officials to be responsible for education, limitation of transportation to monitor, and it is difficult as majority of district authorities are not skilled in education, and district and commune adminsitrators are lack of information on schools and high rate of repetition; learning is not responsive to the curriculum set by the ministry. The commune, however, raised challenges

such as a lack of education reports from schools, unplanned education budgets, too much work in commnune which cannot often complete educational work, less frequent parental involvement, students playing cell phones in classrooms, less attention and cooperation of the villages, communes and parents, less value from society, such as daughter cannot work, which is out of date ideas, lack of communication between teachers and authorities, lack of parental involvement, less punctual teaching, teachers from distant places, lack of teachers, lack of teaching and learning materials, lack of statistical data from schools, and so on.

As for the school principals, there were challenges such as narrow school grounds; new school principals were not trained on the capacity of management, leadership, adminis-tration and IT, not timely reporting, lack of facilities like computers, etc., lack of school buildings, lack of tables, lack of library and office space, lack of community involvement, lack of technical training for teachers and subject leaders, lack of subject teaches, lack of textbooks, lack of teaching and learning materials, lack of population statistics, and teachers changed from one place to another too often, less attention and irregular schooling of some teachers. Similarly, teachers mentioned challenges such as poor school administration, lack of computers, limitation of documentation and accounting records, lack of accommodation for teachers and students, lack of involvement of communities, less attentiuon of study from children, lack of technical training, lack of electricity and electronics, lack of desks, lack of materials, lack of textbooks, lack of lesson plans. Some schools do not have enough toilet facilities, ruining classrooms, toilets closed to the classrooms such and such. Whereas the school directors have many tasks that lead to work incompletely.

4.2.3 Participants' Request for Completion Rate

In response to the goals and objectives of the Ministry of Education, Youth and Sport regarding the completion rates of both primary and secondary schools, the Provines of Ed-ucation, Youth and Sport requested the Ministry to provide more scholarships to students in a timely manner and train officials to make them be able to disseminate at people's home to enroll their children; moreover, it should promote a change in parents' attitude towards their daughters, increase women's social work, enhance the safety of female students, as well as train technical officers from schools, DoEYS and PoEYS, and provide budget to schools timely, school-based inspections from the ministry if possible, provide schools to areas lacking buildings, provide subject teachers with schools that lack teachers, training of

officials at PoEYS and DoEYS from the Department of Education Management Information System (DEMIS), and training of school principals to use computer, training teachers on teaching methods and ethics, equipping standard toilets in all schools from elementary schools to upper secondary schools, building and repairing school buildings, strengthening capacity of teachers with new methods, encouraging good staff from leaders at all levels, strengthening regular school teaching work from national to sub-national levels, inspecting as a system, providing annual budget to schools for data collection because the population data is the data that can make the indicators reliable.

Whereas, DoEYS, district and commune authorities have proposed that the MoEYS have to provide more scholarships for poor students, outstanding students, conduct short-term administrative trainings and short-term computer repairing, provide materials for office requirements, provide legal teachers for primary and kindergarten to be enough in each school, provide specialist teachers in math, physics, chemistry, biology, computer science (IT) to under-qualified lower secondary schools in accordance with the number requested, train new directors on leadership and management, train computer skills and school planning methods, help poor students (transportation, clothes materials), and reinforce monitoring of student achievement more often. The Ministry of Education, Youth and Sport should build dormitories for pupils in all communes, provide the Khmer and Math orientation to teachers in grade 6, expand lower secondary schools in all communes and build enough school buildings at each lower secondary level, motivate teachers teaching in remote areas by building guesthouses for teachers and provide additional trainings for the district DTMT team. The Ministry and the Provinces of Education, Youth and Sport have to advise parents in the community by not allowing their children to drop out of school, determining the roles and cooperation of stakeholders, educational institutions, local authorities, schools, and communities. Teachers should visit students' parents twice a year, pay attention to their students, train teachers, as well as punish teachers who do not follow the rules, and help educate parents' mindset about the value of education, advice parents to communicate with teachers to monitor their children's learning. In addition, it should be equipped adequate school structure, improve school grounds, increase more activities for students, prevent drug trafficking, and strengthen the village education system; during school holiday, schools have to encourage outstanding students and prepare good school infrastructure to attract students. In addition, it should provide training on additional techniques and competencies for

teachers, provide specialist teachers, and encourage students with rewards, such as learning materials, provide ideas for school development, strengthen data work in primary school, assist in technical training through the opening of new curriculum development courses to leaders, and provide additional training to teachers with low educational qualifications and information technology, and provide administrative equipment, such as computers and photocopiers, and so on. Besides, more budget should be provided for school development. For the curriculum, do not change books too often and provide enough textbooks as well as specialized teachers, and should raise their salaries and allowances for teachers and encourage students to study hard, get rid of bribery and discrimination in schools. Also, parents or guardians have suggested that teachers provide more teaching during school hours rather than tutoring, and the Ministry of Education, Youth and Sport should visit more often and provide appropriate textbooks in accordance with level, improve school environment, provide scholarships to poor and outstanding students, and parents should encourage their children to study hard. In order to encourage students to study hard, teachers must come regularly and pay attention to education, encourage students to learn, especially teach low performance students, and tighten student discipline; and teachers and parents must communicate with each other more often. Students' families should inform teachers timely for low performance students or play truant, provide adequate and timely school supplies, such as books, pens and transportation. They have also participated in improving school environment; strengthen students or children discipline, especially in school hours; no telephone use, restrict the rules as setting out, and parents must encourage their children to learn at home, which means they struggle for their children, make convenient time for children to learn and visit school often.

Chapter 5: DISCUSSION

5.1 Discussion of the Findings

5.1.1 Population Changes

Based on the findings of the research from Provinces of Education, Youth and Sport, Districts of Education, Youth and Sport, district authorities, and a few schools have issues of specific aged population, especially 11 to 19 years old, in which these problems are the causes that make it difficult to calculate completion rates and calculate other indicators. 40.75% of the district authorities have no population data, which is the highest percentage of all participants. Of that, 58.33% and 66.66% have never used the population projection statistics; only 75% use population projection statistics and the purpose of using this statistic is to find out the exact figures as well as to find out how the population is decreasing or real compared to the actual collection, indicators of the Department of Educational Management Information System (DEMIS) and used to calculate indicators, such as completion rates, net enrolment rates of students, etc.

Existing sources of information are obtained from various sources, such as actual collections, Education Management Informaiton System (EMIS), communes (police), school support committees, District of Education, Youth and Sport, district inspectors, and other sources. As for the population statistics with school ages, there are also different sources such as from teachers, villages, communal police, school support committees, PoEYS, DoEYS, or actual collections. In terms of enrollment comparing to pupil ages, the majority of children (83.62%) attended based on the school-age set by the Ministry of Education, Youth and Sports, and only 11.20% are overaged. Of those, a small number of children had repetition of 12.93% and 23.27% dropped out of school, while 16.37% did not complete primary school, whereas 43.96% did not finish lower secondary school; that is a worrying figure, as it is a serious challenge to student completion rates in both primary and lower secondary school.

The actual statistics differ from the projection statistics because the projection statistics only add up year by year, whereas the actual population statistics increase or decrease year by year, and the population statistics increase only slightly; in contrast, the population projections by the Ministry of Planning are too high comparing to the actual numbers. On the

other hand, population projection statistics are estimates, while the actual population statistics are real people as people can relocate, migrate. The Ministry of Planning's population statistics are long-term (10-year or semi-national census), but the actual statistics are based on actual population, while the population varies from place to place. The actual population statistics may be more or less than the Ministry of Planning's statistics, because some of the figures are duplicate; in addition, the dates for data collection also vary as the actual population increases or decreases, and the actual statistics collection does not use a precise predictive formula, just sum up the actual population data collected. Another reason is because of the new comers (new village creation), unbiased survey, incorrect identification, only estimiated statistics, the cencus officers (school principals, teachers), incompleted census, lacking skills, and inadequate collection. On the other hand, there is a gradual increase in the population, but the actual population is birth delay that the population may not rise in the order as planned. The figures of the Provincial Departments of Planning are taken from the projections, and the provincial department of planning's figures are higher than the actual figures, since the actual population statistics are collected every year, where the planning officer uses the previous year data, and the actual statistics are collected every year and population fluctuates with the migration, mortality, unclear collection, such and such. The above-mentioned factors have led to reports with irregularities in population data, which can sometimes be either portals; on the other hand, significant differences have also been found in the statistical analysis that led to problems with calculating other rates as well.

5.1.2 Completion Rate calculation

The methods to calculate completion rate in primary and lower secondary school from PoEYS, DoEYS, and school directors found out that the population figures are taken from various sources, such as the Education Management Information System (EMIS), Ministry of Planning, (projection figures), Provincial Department of Planning, commune, and actual figures from the authorities (police), in which most figures are taken from EMIS and the actual collection.
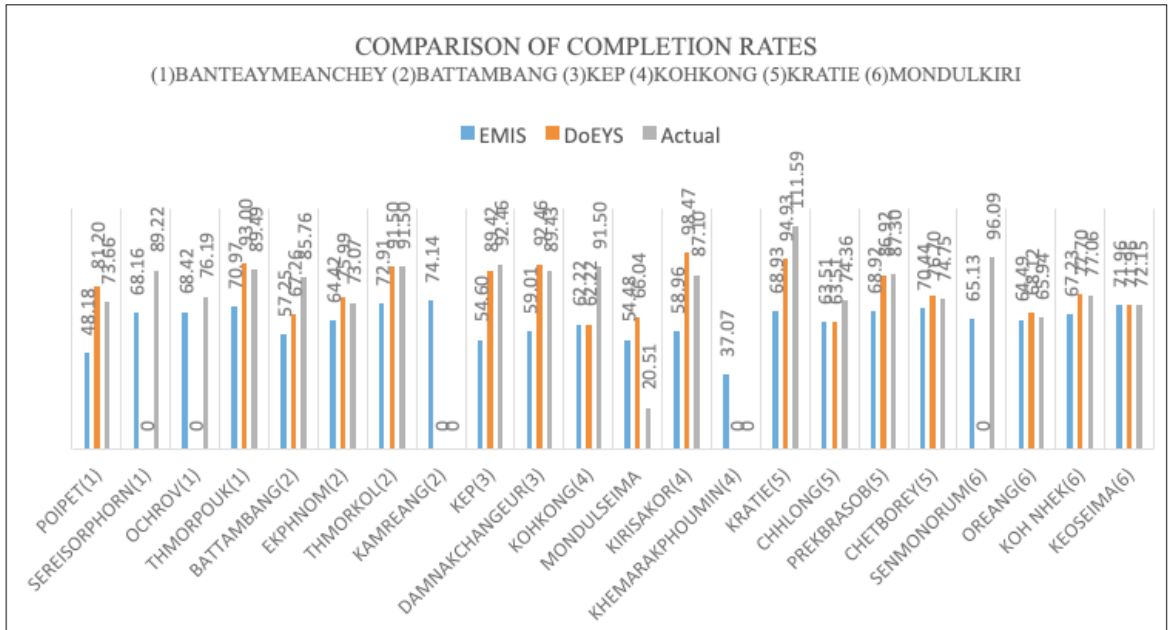
Whereas the method of calculating primary school completion rates in both PoEYS and DOEYS of more than 80% think that the calculation of completion rates is correct, but only 23.45% of school principals think that the method of completion rate calculation is incorrect. Whereas the method to calculate the completion rate in lower secondary school,

most of PoEYS, DoEYS, and school principals think that the methods is correct; in contrast, more than 60% of teachers think this calculation is incorrect. Therefore, the responses of the data providers at PoEYS, DoEYS, and school principals seem to be similar in how to calculate the completion rate in lower secondary school; on the contray, the data from teachers seems to be completely opposite.
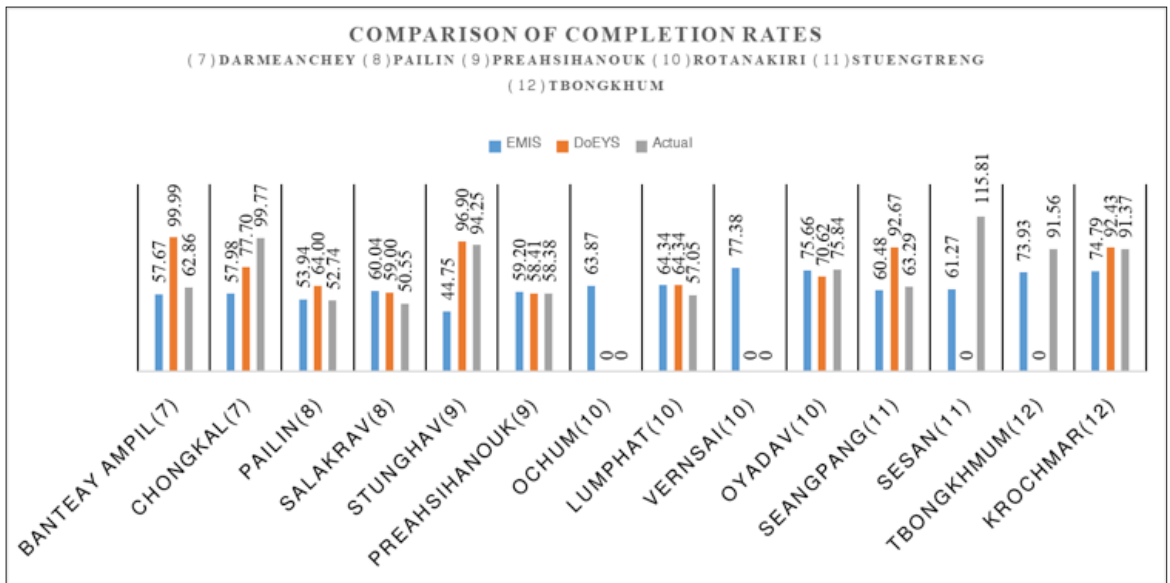
5.1.3 Comparison of Completion Rates

Calculation of completion rate between the Educational Management Information System, District of Education, Youth and Sport, and actual calculations of the research showed that the data on the EMIS is higher than DoEYS of six districts, in which the excess is too minimal, but the actual calculation is much higher than EMIS of 27 out of 36 districts. In contrast, there are 5 districts, which the actual calculation is lower than EMIS, including Mondulseima, Pailin, Sala Krao, Sihanoukville and Lumphat, while four districts did not have complete data, such as OChum, Vernsay, Kamrieng, and Khemarakphumin.

Graph 1.13(a) Comparison of Completion Rate by DoEYS

COMPARISON OF COMPLETION RATES
(1)BANTEAYMEANCHEY (2)BATTAMBANG (3)KEP (4)KOHKONG (5)KRATIE (6)MONDULKIRI

Graph 1.13(b) Comparison of Completion Rate by DoEYS

COMPARISON OF COMPLETION RATES
(7)DARMEANCHEY (8)PAILIN (9)PREAHSIHANOUK (10)ROTANAKIRI (11)STUENGTRENG
(12)TBONGKHUM

5.1.4 Understanding of Completion Rates

Among the informants from the Provinces of Education, Youth and Sport, Districts of Educaiton, Youth and Sport, school principals, teachers, and parents, those who understand the completion rates correctly as defined by the EMIS, are small percentage, but the actual figures show that the PoEYS, DOEYS and school principals are average aware of the completion rate; on the contrary, none of the 144 parents have the proper knowledge or understanding as determined by the MoEYS on completion rates. A lack of understanding of completion rates is also a consequence of encouraging children to study hard and also leads to more absenteeism or dropouts of school with no encouragement as those around them do not clearly understand the value of education, which is similar to the assertion (Admassu, 2015) that factors associated with schooling, ineffective teaching, inadequate teachers, absent teachers, textbooks, and improper assessment systems, motivation, learning difficulties, health conditions, nutritional and behavioral problems, (families, parents or guardians with low education or low awareness of the value of education, family income issues). By 2018, only 13 provinces have achieved a 40% lower secondary school completion rate, and the target for 2019-2020 is to have 14 provinces (MoEYS, 2018); on the contrary, there are also challenges that are the obstacles of achieving the completion rate, including migration, dropouts, marriages poverty, monkhood, relocation with parents or guardians abroad, less value of education.

5.1.4 Data Collection Challenges

Challenges for the Provinces of Education, Youth and Sport, Districts of Education, Youth and Sport, and school principals include the school directors, DoEYS, and authorities have limited understanding for data collection, whereas the data collection is late because some people migrate and the data collected is not yet consistent or compatible in accordance with the requirements by the Ministry of Education, Youth and Sport, for unclear data and the data collected is not consistent at all levels. Moreover, data management is difficult because migrants do not provide accurate information to local authorities, and it is difficult to collect data due to the long distance from home; in addition, budget resources are limited in collecting data, and there is a mutual blame, whereas the report to the authorities or national level is not accurate or precise as the data collection is not for all houses and data are different in each household. Also, there are changes for data managers, which make it

difficult to manage the data. The data of Provincial Department of Planning and Ministry of Planning do not match with the data of the MoEYS and schools, and the data of the village and commune are not consistent with the actual data collected by the school and the DoEYS. In addition, there is no clear population statistics system, which makes it difficult to manage population data and movement, whereas some villages do not update population data, making it difficult to obtain accurate data (figures and actual number are inconsistent), and some village, and commune authorities have not yet collected accurate data, making it difficult to calculate other rates. Whereas, the usage of population statistics of the National Institute of Statistics (NIS) has made some of the indicators used as population numbers with low results, and difficulty in census due to migration, natural disaster, lack of officers, lack of budget for census, lack of transportation, less participation by people, etc. On the other hand, commune chiefs do not have accurate aged population data, and some schools do not collect data using only previous year data and some schools use data through chiefs of village because some village chiefs do not collect new year statistics, which mean they give only previous year figures, and some authorities are less cooperative, less involved in the data collection process, while some informants are narrow to provide data that make data uncertainties in accordance with the requirement.

5.1.5 Causes of Completion Rates

According to the findings from PoEYS, DoEYS, district authorities, teachers, parents or guardians with children ages 13-20 years, find that the low completion rate is due to **the poor student factor** with the highest (74.55%) and the next highest is **the migration problem** (63.53%), and the third reason is **the high dropout rate** (50.56%), whereas a result of repetition and overaged enrollment is about 30%, which are similar to Farooq (2010) finds that late enrollment and repetition are factors to make a low completion rate in schools. Factors from overaged enrollment (31.88%) and repetition of 28.83%, ethnic minority students (19.38%), and students with disabilities for 13% and other factors of 13.03%, including **geographical factors**, distance from home, difficulty to travel, lack of transportation (home away from school), lack of money for transportation. **Social factors**, traction from friends or society, bad friendships, early marriage, traction of drug abuse, less attention in learning. **Living conditions**, the use of child labor, migration with parents, job finding in factory work, which Ishiguro (2018) found that poverty and children from rural areas dropped out of school to help their parents work. **Student or self-learning factors**, not understanding or

poor performance learning, less learning attention, absenteeism, physical illness, influence by surrounded environment, bad friendships. **Statistical factors**, uncertainty of population statistics, low completion rates. **Structural factors**, lack appropriate infrastructure such as damaged buildings, lack of toilets and hygiene, in which Ayub (2018) also suggested that girls' primary school completion rates are influenced by school environmental factors, socioeconomic factors, child labor and care. **Teacher factors,** lack of subject teachers, less attention of teachers in teaching, in which Chae Young Kim & Martyn Rouse (2011) suggested that teacher behavior may affect student completion rates in schools, such as teachers with low levels of education, professional use, decision making, etc. **Parental factors,** parents or guardians have little or no education or value of education without motivating their children to study hard, pushing their children to help at home, or not send their children to school or divorced parents or pupils with no parents.

Graph 1.14 Causes of Low Completion Rate
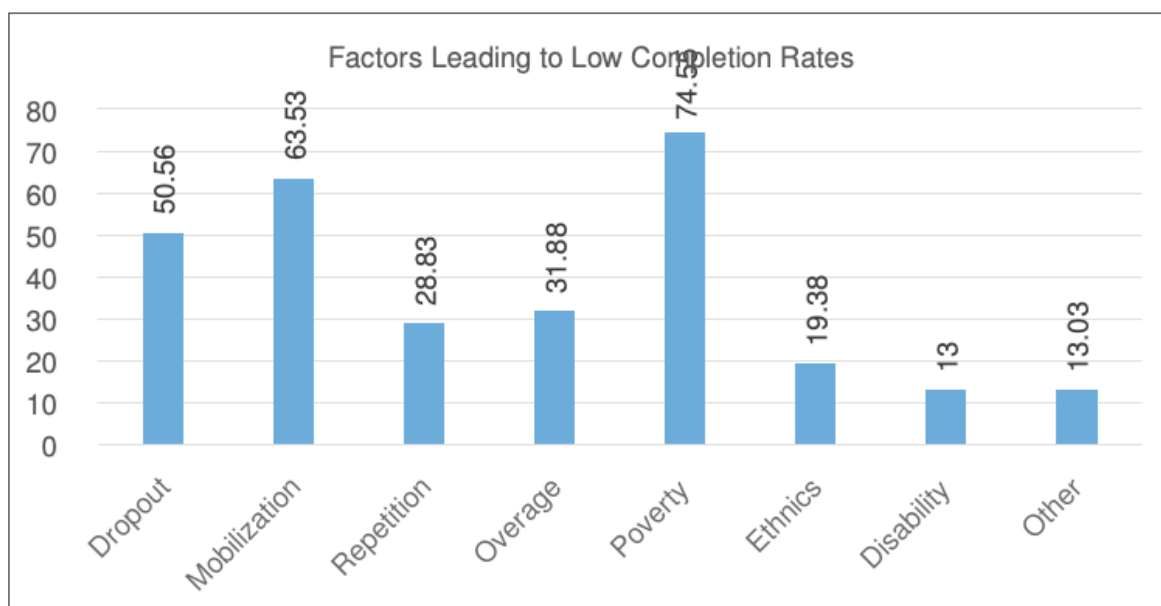
5.1.6 Gender Parity Index of Completion rates

The motivation between male and female students, parents encourage both children to learn at least 80% (both sons and daughters) because these days, sons and daughters are equally educated; on the other hand, education can make it easier to find a job in the future and to help the family and if both children (male and female) have high knowledge, they

can support the parents or family the next day, or they live with less pressure on the family or parents (less difficult for parents); in addition, some parents want their children to be honored, to be employed with intelligence, and that is why they offer equal opportunities for both children for learning, having the same opportunity, having the same knowledge, and not be as stupid as their parents, because the parents do not want to see their children to be difficult like their parents. For parents with children ages 13-20, they encourage their children to have a good education for both daughters and sons, because they want their children to be well-educated, well-paid, being able to earn a living and they can help parents when they get old as well as help society.

Conversely, few parents want their sons to learn more than their daughters or daughters rather than their sons, based on the fact that sons are easier to travel, no need to worry about safety; sons are wiser than girls, and the sons can live far away from their parents alone; thus, giving priority to sons because daughters are difficult to learn away. Whereas parents who want their daughters to learn more than sons, because they want their daughters to have knowledge, not have as low knowledge as them; on the other hand, it makes their children get a job and have a good future, while daughters are wiser than sons, and for some parens, they have only daughters and want their daughters to have better knowledge. For families with children ages 13 to 20, they motivate their children to study, in which they motivate only sons or daughters with similar ratio of about 7%, and the motivation of only sons of 7%. The reason why children want to be educated and easy to work for, daughters are less likely to learn, and sons are smarter than daughters or daughters are smarter (this is because he or she has only sons or daughters). And sons can work farther than daughters, can work better than daughters, and as head of family, while daughters are less important, and schools away from home may be easier to travel to than girls for safety reasons.

The Gender Parity Index helps in comparisons by showing the ratio of the female value to the male for a given indicator (Gender Parity Index--GPI), where an index of less than 1 indicates a male indicator value higher than female. However, if the index value is bigger than 1, it indicates that female's indicator is higher than male's. Conversely, if the result of the Gender Parity Index is equal to 1, it means that the Gender Parity Index is achieved (EMIS, Public Education Statistics & Indicators, 2017-2018). According to the findings on Gender Parity Index of completion rates in lower secondary school of academic year 2017-2018, it is similar to the Gender Parity Index of primary school completion rates, which

mean almost all figures (in target provinces, districts, rural ereas) specify that the value of the gender parity index is bigger than 1 on the completion rate of lower secondary school, which means female's indicator is higher than male's. Except for data provided by target schools and teachers in primary school, it shows that value of completion rate in primary school has higher value of male indicators than female due to the value of gender less than 1, which means that most previous practices value male indicators higher than female. In conclusion, the value female indicator of completion rate in overall is higher male indicators in primary and lower secondary education among the Provinces of Education, Youth and Sport, Districts of Education, Youth and Sport and schools. This means that PoEYS, DoEYS and schools highly value female, as well as encourage female students in activities, such as management, leadership, gender equality, school and social work, especially educational work.

51.6 Completion Rate between Female and Male Students

According to the findings of the reasons that the completion rate for male and female students may be due to **living condition factors**, most male students have to support their parents, such as fishing, cassava work, construction and so on. As for daughters, they have to work in factories or domestic jobs to help the needs and lack of living conditions, which require some students to migrate with their parents. Another factor is caused by **family factors**: some families are less likely to support their children or support only daughters or sons, or they are less aware of the value of education, and others do not want their children to stay away from home because their children do not have safety, especially daughters. Some parents are illiterate, have poor living conditions that they do not think or think critically about their children's future, which in turn drives them to drop out or stop learning. **Tradition factors**, some families take for granted is that they think daughters must marry at a younger age than sons; daughters do not have to study highly, and value the study only sons, because sons are able to study or work away from home, while daughters are to help with housework, care for the parents, and daughters has more housework burden than sons. The ethnic tradition is that daughters have to work at home and sons have to work to feed family, so they have to learn more than daughters. The fourth factor is due to **geographical factors**: some students decide to drop out of school because of the difficulty of traveling home, being away from school, and not being able to travel due to safety issues, especially girls. In addition, this is due to the fact that some parents or guardians still have a strict view

of their children, giving the value of studying only to sons rather than daughters, so sons can learn higher than daughters and daughters attending school have safety issues, such and such. Another factor is that the **number of students** who enroll and attend school with the number of female students is more than the number of male students, and the population growth in the community is also different, which means the number of girls are more than boys. The last factor is due to **social factors**, which may be due to the influence of the environment inside and outside of schools, which makes some students stop learning at an early age, especially boys, such as drugs abuse, bad friendships, materialism, and so on.

5.1.7 Measures to Increase Completion Rates

According to the above results, the component in the intervention to increase the completion rates, such as the Ministry of Education, Youth and Sport and the Provinces of Education, Youth and Sport, have been actively involved in providing scholarships, school feeding, school buildings as well as establishing new school locations to move closer to people's homes, teacher training as well as providing educational materials to guide schools to improve the quality, etc. Authorities and communities are also involved in charitable activities for disadvantaged families, as well as educating parents or guardians about the value of education, especially in preventing any form of abuse that harms students; in addition, the teachers are encouraged to follow the rules, encourage them as well as provide accommodation and scholarships to poor children. Whereas, school principals, and teachers have also participated in introducing parents to understand the value of education, improving the school environment, sanitation, strengthening learning and teaching, establishing a children's council and student groups to help monitor and encourage students facing dropouts, such as setting up an academic club to help improve the quality of education and appeal to students challenging with studies for their participation and not be lonely, especially to improve relations with parents.

5.1.8 Challenges of Completion Rates

The data raised by the target respondents shows that risk factors for completion rates in primary and lower secondary schools may be due to student factors, such as dropouts, migrations, poor students, repetions, less attention in learning, absenteeism, overaged children, indigenous students, students with disabilities, and other issues, such as (home away from school, difficult road to travel, flooded communes, which are difficult to travel and

expensive transportation, lack of transportation, lack of schools or far away schools), social factors (friends' motivation, early marriage, drug abuse, bad friendships), living condition factors (child labor, migrationwith parents, looking for jobs with one's skills, working in factory), statistical factors (imapropriate population statistics, low completion rates, issues of living conditions in family), teacher factors (lack of subject teachers), parents' exploitation of labor, and student factors, paying less attention in learning and domestic violence and so forth. Family factors (students attending private schools, parents have no awareness of the value of education, and do not send their children to school, materialism, less supportive parents or divorced parents).

On the other hand, the actual data collection is more accurate than the population projection statistics due to knowing the number of people in the village, the number of people in districts and the number of people in communities. The Districts of Education, Youth and Sport have also agreed on the differences between the projection statistics and the actual statistics, all of which may be due to new coming factors of people (new villages), and data collection without specific purposes, which means collection with just estimation. The census officers are incomplete, incompetent, and incomplete, especially as the data provided by the communes is different from the data from the province of planning. In addition, the projection can increase gradually, but the actual population with birth delay that the population cannot grow at the planned rate. The Provincial Department of Planning's figures follow the projection statistical pattern, and the Provincial Department of Planning's figures are larger than the actual figures collected, as the actual population statistics are collected every year, which the planners use the previous year data. In addition, the population generally fluctuates, with migration, relocation, mortality, incomplete data collection, and so on. All of these factors make the report of the population irregular with the data and the actual situation, which can sometimes be a port or a balloon in some areas. Another feature, the Districts of Education, Youth and Sport conducted the actual collection and summing up at the district level by using of different formulas, and statistically significant differences may be due to data collection time, which means the data collection takes place different times, it also results in different data.

## 5.1.9 Satisfaction with Completion Rates

Among all participants who provided the survey answers from the Provinces of Education, Youth and Sport, the Districts of Education, Youth and Sport, school directors, teachers, parents or guardian found that the majority of them are fully satisfied with the completion rate; however, there are few of them are the least satisified with the completion rate. This result indicates that although the completion rate is not fully satisfactory, most of the education stakeholders are satisified with completion rates.

Chapter 6: CONCLUSION AND RECOMMENDATION

6.1 Conclusion

Comparing overall projected population data with projected data of population cohort of 11 years old of National Institute of Statistics (NIS), projected population data are higher than the actual data in virtually all districts. Those districts in which projected data are much higher than the actual data are: Tbongkhmum, Battambang, Thmorkol, Krochhmar, and Poipet. However, a small number of districts in which projected data and actual data are not significantly different are Keoseima, Oraing, Sihanouk, and Lumphat.

Graph 1.15 Actual data of student in 11 years old and projected data of population in 11 years old in various district
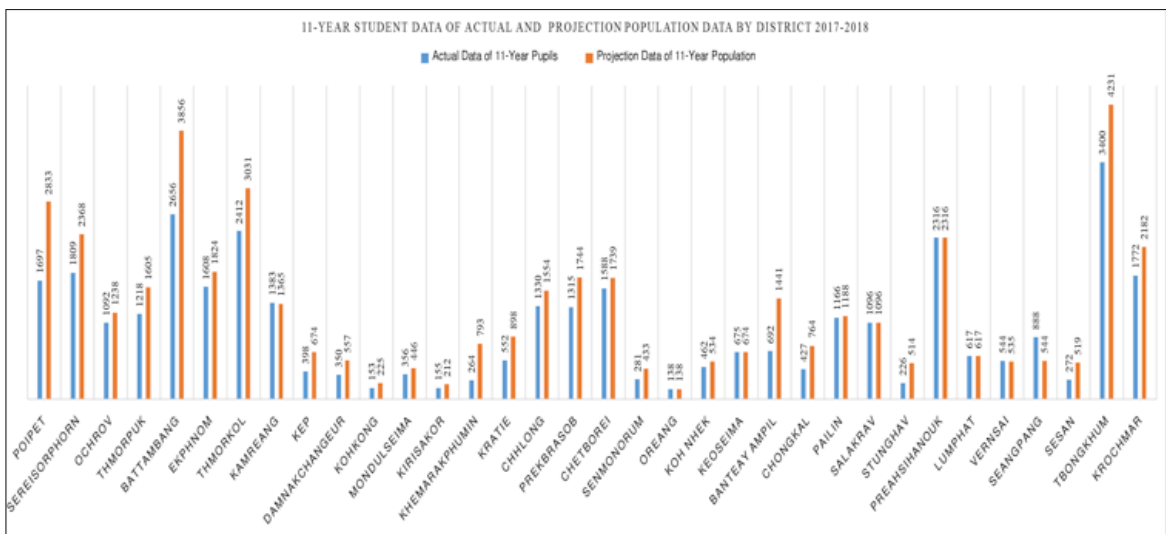
The main reasons for low completion rate are because of students' poverty, while the second reason is migration and the third one is dropout. For the fourth reason, it is caused by the repetition and overaged enrollment. Some other reasons are minor ethnic students (facing strict tradition), students with disabilities, social reason, living standard (poor) reason, students intended dropout, statistic error, poor infrastructure, teacher reason (for example, ignorance with duty), parents reason (for example, force children to work for family income rather than send them to school).

Culture can be regarded as a factor that bring about low completion rate too. For minor

ethnic students, cultural pressure on them is for early age marriage. Some parents prefer sons to daughters to be sent to school or vice-versa. Some parents regard education as low in value and instead they send their children to work for additional incomes or help in house chores.

Another noticeable factor is geography. Many schools are located in disadvantaged areas or disadvantaged geography, such as mountainous area, areas with poor road systems, flood or marsh areas. As a result, students find themselves difficult to travel to and from schools and this, in turn, resulting students' frequent absent and, and for serious case, dropout.

Actual completion rates reported by most DoEYS are higher than data from EMIS with few exception in few districts that show opposite)actual data is lower than EMIS data(. Of all students enrolling to study in grade 1, only 20% of them are able to continue their study at lower secondary school and only 1-% continue to upper secondary school (PISA-D).

Problems still persist with highly level are students' povety, dropouts, migration, repetition, and overaged enrollment. Previous study found that in Cambodia male students who repeat grade is 1.4 times higher than femal students, and repetition is highly correlated to poor performance students. Data also show that for students from grade 7 to grade 12, femal students perform much better than male students. Cambodian students age 15 years old who study grade 7 to grade 12 are only 28.1% of total Cambodian population of 15 years of age. This implies that 72% of Cambodian youth (age 15) dropout or poor perform, especially for male students (PISA-D).

Some parents ignore to send children to schools, while some prefer to send only daughters or sons, and some other are not aware about education benefits. Another problem is that some families are unwilling to send children to schools because of security concern, especially daughters. Some parents do not know how to read and write or have no vision or poverty and they decide to force their children to dropout.

Another concern is tradition. Some parents prioritize tradition and get their children married in early age instead of sending them to school. Some parents prefer to send only sons , and they think that daughters are not worth to go to schools. These parents usually think that only sons should go to schools because they can work or travel far away from home, while they think that daughters cannot go far from home and should help in house chores,

take care of parents and other tasks involving work at home.

Social environment also plays an important role in bringing about school dropout (male students in particular). These social environment include drug abuse, friendship with bad people, materialism (vehicle, phone, etc).

Nowadays, the calculation of completion rate is based on students data from state schools but not include private schools. Some students change their schools from state schools to private schools and some vice-versa. This results in difficulty in collecting and managing students data and miscalculation of completion rate. Moreover, EMIS does not collect data from medical schools, vocational schools, and fine art schools.

In addition to problems mentioned above, one more problem presents, that is, school with incompleted grades. This problem exists in many primary schools. In Cambodia, the province with highest number of incomplete primary schools is Rattanakiri with 76 schools. The second highest is Tbongkhmum (65 schools); the third is Kampongthom (43 schools); and the forth is Pusat (41 schools). In contrast, Kep province is the only province of which all schools are completed grade.

Besides incomplete grade primary schools, there are also many incomplete lower secondary schools. Otdarmeanchey ranked the first province with highest number of incomplete lower secondary schools (6 schools), while runner up is Preahvihear province (4 schools); the third place is Banteaymeanchey (3 schools). Overall, of 25 provinces and capital, only 7 provinces in which there are no any incomplete lower secondary schools. The 7 provinces are: Kampong Thom, Kampot, Kep, Mondulkiri, Phnom Penh, Sihanouk, and Stung Treng. These incomplete grade schools result in low completion rate.

Graph 1.16 Schools with incomplet grades by Provinces/capital School year 2017-2018

Number of Incomplete primary and secondary schools by Provinces, School Year 2017-2018

■ Number of Incomplete Primary Schools   ■ Number of Incomplete Lower Secondary Schools
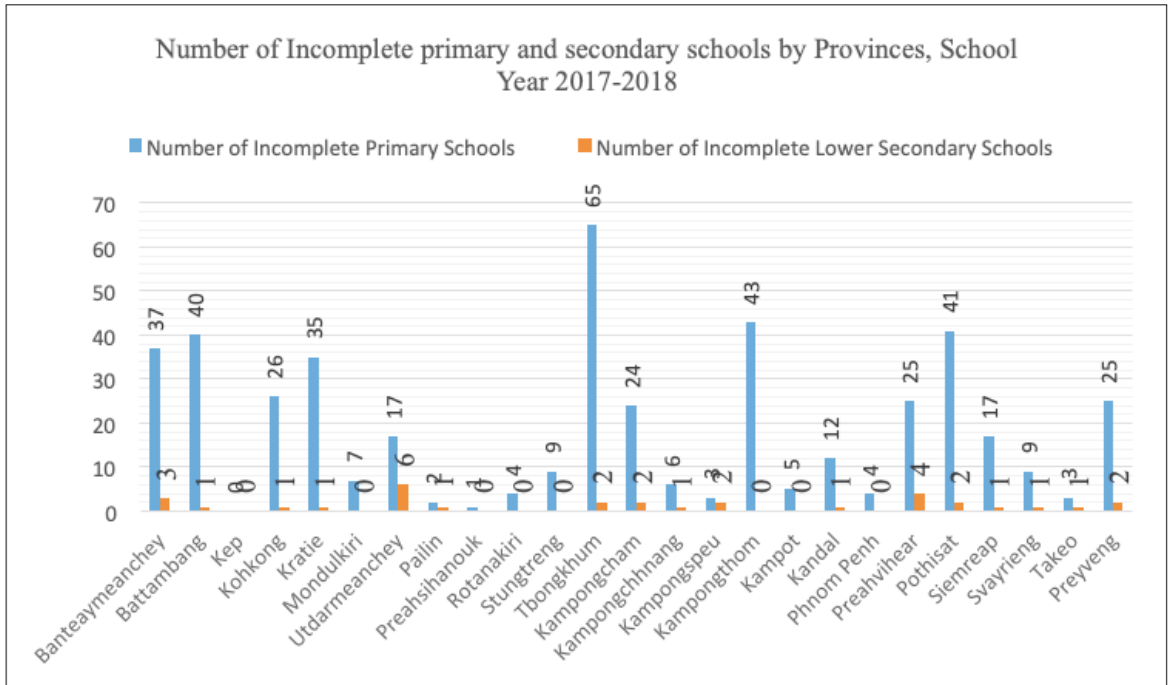
6.2 Recommendation

The main purposes of the research are to find out: changes of population and number of students in target areas, gender ratio on completion rate at primary schools and lower secondary schools, and suggest interventions to solve the problems of low completion rate in target primary schools and lower secondary schools. Based on research analysis and findings, research team would recommends as below:

6.2.1 Change in Population

Population change is the key variant for calculating various indicators of education, such as enrollment rate, dropout rate, promotion rate, completion rate, etc. It is recommended that all stakeholders in education sector should cooperate with the National Institute of Statistics (NIS) in order to project population figure after 2019 population survey; and also collaborate (at all level) in all activities of statistical collection and analysis to obtain clear and reliable results. Statistics on population should be categorized into Ethnicity groups, handicapped population, age group and geographic situation. Moreover, statistics used should be obtain from the same source (a specific source).

6.2.2 Change in Students Number

Currently completion rate is calculated by using data of students from state schools, but not include data of students from private schools. To obtain reliable and accurate completion rate of the data for calculation should be also included the data of students from private schools, students from schools run by the Ministry of Religion and Cult, and also the students from schools of Culture and Fine Art. Moreover, some other activities should be carried out to lower dropout rate and repetition rate at primary and lower secondary schools; also all incomplete schools should be upgraded to complete ones. EMIS should collect data from local levels, such as from schools, local authorities, PoEYS and from DoEYS so that data obtained are reliable and accurate. In addition, date used should be obtained from the same source rather than from various sources to ensure validity and reliability.

6.2.3 Gender Ratio in Completion Rate

Gender ratio is calculated to find out ratio of femal to male for any given indicator. To achieve ideal ratio (close to 1 in value) in completion (both primary and lower secondary schools), the MoEYS and other involved parties in education sector should increase completion rate of femal students at lower secondary schools in all areas in which completion rate of femal students is low. Moreover, all gender activities should be enhanced and promoted in all communities and schools with effectiveness. In addition, female students council should be created in each school. And also in areas with poor people, the scholarship should be provided or increased as much as possible so that completion rate can be improved.

6.2.4 Intervention

Based on overall findings of the research, the following interventions should be implemented by the MoEYS and other stakehoders to increase completion rate:

- Increase scholarship for students and offer it to students on time;

- Provide training courses for technical officials of PoEYS, DoEYS and schools on data management;

- Povide training courses on computer for new school principals on leadership, management, and school planning;

- Increse activities of monitoring and evaluation for officials of DoEYS and schools;

- Build infranstructure and health centers to ensure hygiene and good school environment in all schools;

- Build more dormitories for students and teachers (especially for females) in disadvantaged areas;

- Offer budget for data collection to PoEYS, DoEYS and schools;

- Build capacity of teachers on innovative teaching methodology so that their capacity can answer to the demands of good teaching;

- Send enough specialised teachers for all subjects and all schools;

- Collaborate in all levels with the National Institute of Statistics (NIS) to project the population census (after 2019) and also categorize data in according to sex, ethnicity, disability, age group and geography;

- Build enough school buildings for those lacking buildings and also equip with material and teaching tools;

- Supply textbooks suficienly and on time and also establish model library in each shool;

- Enhance collaboration in data collection and concretely updating local data.

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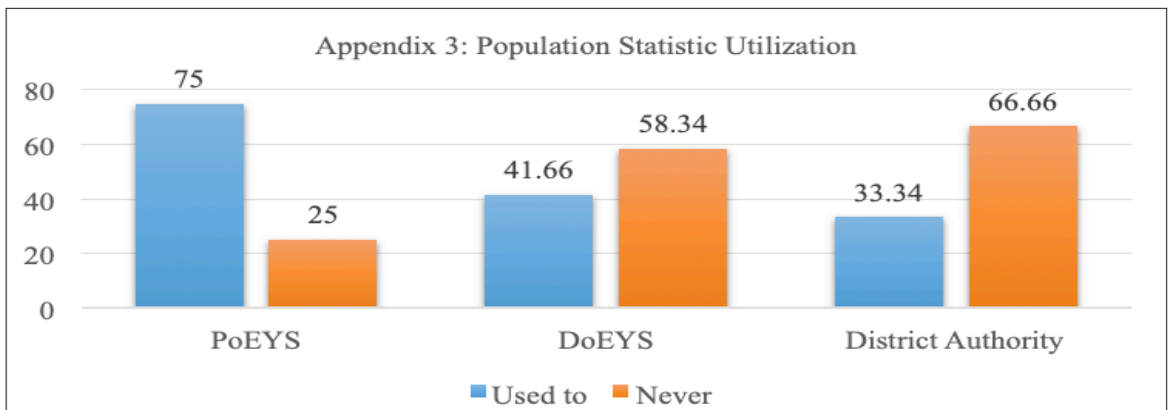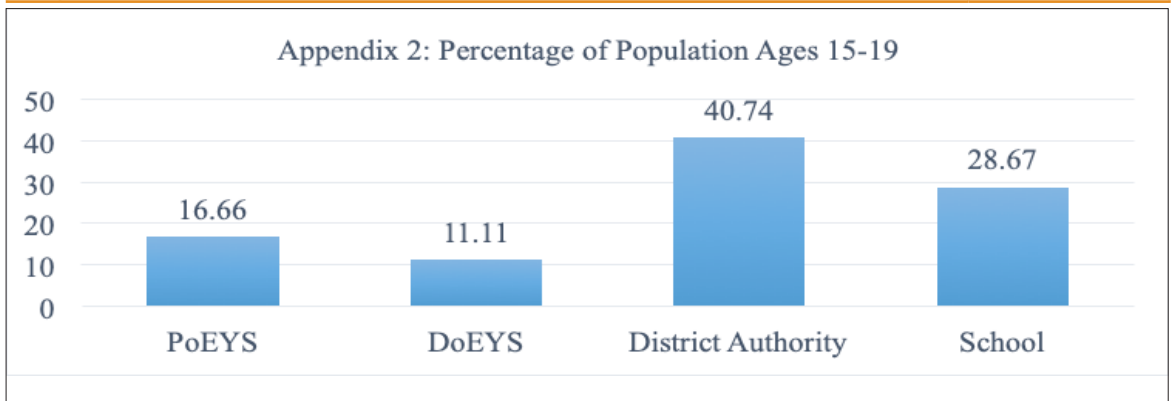
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Appendix

Appendix 1: Types of Informants

No	Correspondents	Sample size
1	Province of Education, Youth and Sport (Director or Deputy Director)	12
2	District of Education, Youth and Sport (Chief or vice chief)	36
3	District authority	27
4	Local authority (commune)	88
5	School principals or school deputy principals of primary and lower secondary schools	143
6	Teachers of primary school (grade 6) and lower secondary schools (grade 9)	144
7	Parents of pupils grade 6 and 9	116
8	Parents of children ages ٥ :٢٠-١٣ people per school	634
	Total	1200

Appendix 2: Percentage of Population Ages 15-19

- PoEYS: 16.66
- DoEYS: 11.11
- District Authority: 40.74
- School: 28.67

Appendix 3: Population Statistic Utilization

	Used to	Never
PoEYS	75	25
DoEYS	41.66	58.34
District Authority	33.34	66.66

Appendix 4: Statistics of students grade 6 by province

Male | Female

Battambang: 21710 / 10926
Pailin: 1294 / 676
Mondulkiri: 1556 / 799
Kohkong: 2192 / 1133
Preahsihanouk: 3868 / 1950
Rotanakiri: 3932 / 1893
Tbongkhmum: 15108 / 7584
Kratie: 6764 / 3226
Stungtreng: 2380 / 1270
Banteaymeanchey: 12505 / 6418
Otdarmeanchey: 4551 / 2258
Kep: 702 / 343
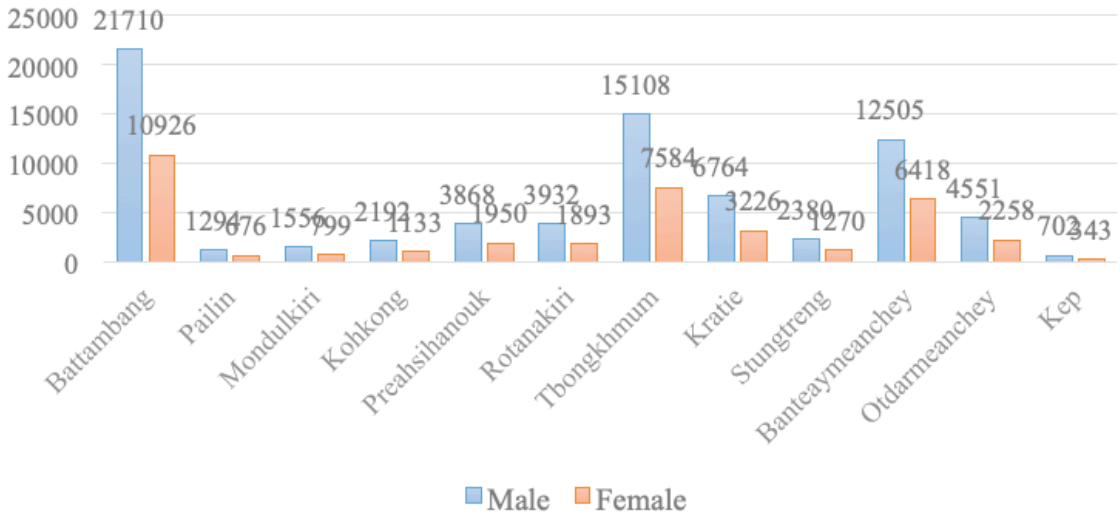
Appendix 5: Population Projection Utilization

Used to | Never

PoEYS: 75 / 25
DoEYS: 41.66 / 58.34
District Authority: 33.34 / 66.66

Appendix 6: Statistics of Children Aged to Study

Appendix 6: Statistics of Children Aged to Study

- PoEYS: 61.8
- DoEYS: 18.05
- District Authority: 18.75
- School: 1.4

Appendix 7: Training on Completion Rate Calculation

Appendix 7: Training on Completion Rate Calculation

- PoEYS: 91.66
- DoEYS: 72.22
- School: 53.84
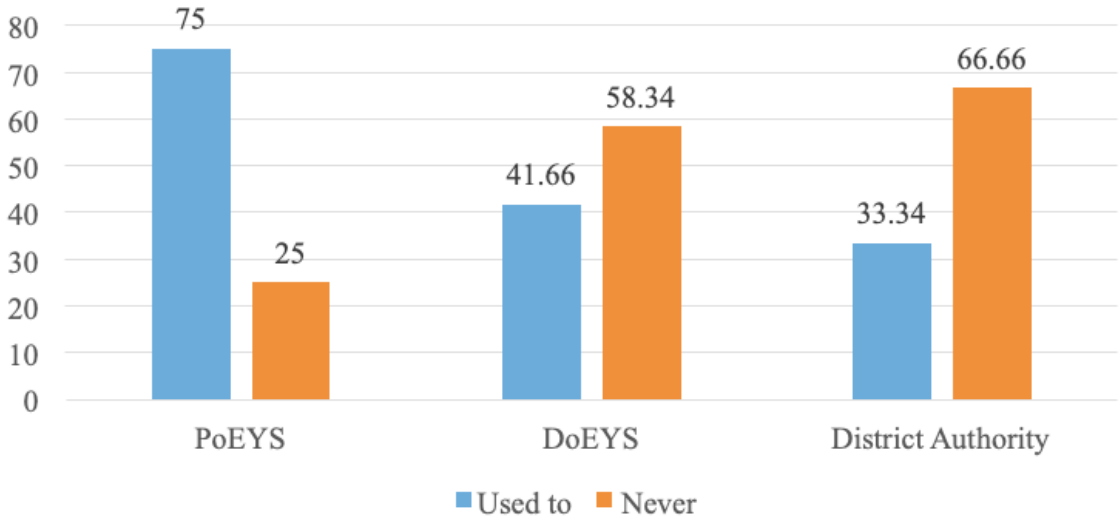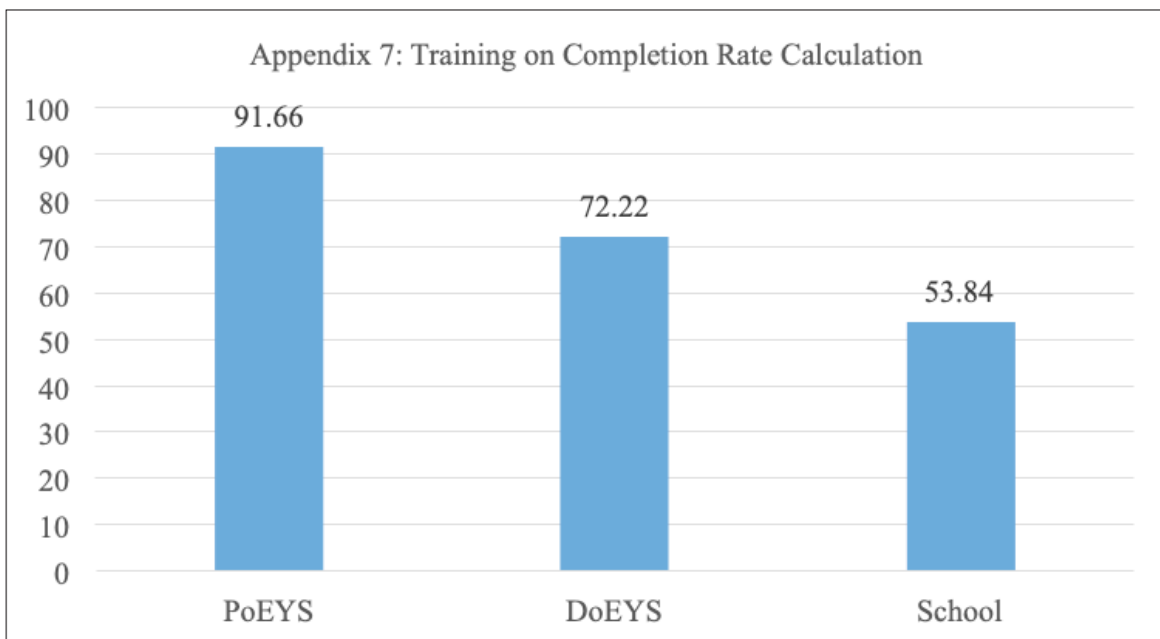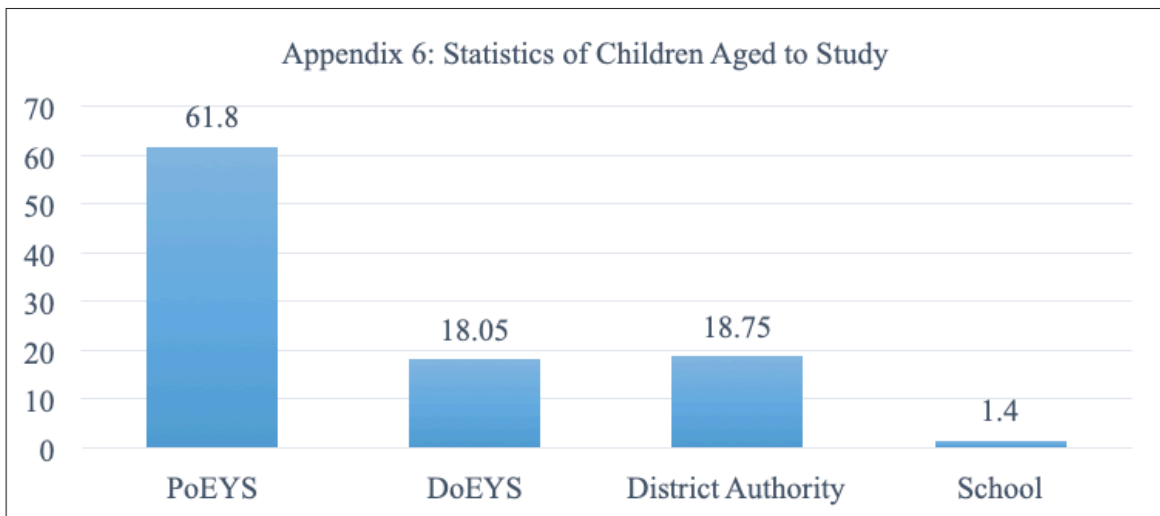
Appendix 8 : Perceptions of Completion Rate

The results of qualitative analysis on data collected from the 12 PoEYS show the perception by PoEYS on giving the definition of completion rate as follows:

1. percentage of completion rate of children age 14; 2. number of students completing primary schools and persue their study at secondary schools, 3. number of students who attend class at the last grades of each academic level, 4. percentage of students who com-

plete primary school, lower secondary school or upper secondary school, 5. ratio of students completing any academic level compared to population of the same age group, 6. percentage of student in the age cohort which are 3-5 years exceeding the standard age of students completing any academic year, 7. number of students who completed any academic level, 8. number of students who persue study at each academic level (primary school, lower secondary school or upper secondary school, 9. percentage of student who attend class at last grade of academic year (excluding students who repeat grade) compared to population of 11 years old age group, and 10. number of students of the same age group who attend class at the same school year (not taking into account that students repeat the grade, dropout at the last grade).

Perceptions of DoEYS giving the definition of completion rate are: 1. number of children whose age corresponding to any given academic level and completed that academic level, 2. data expressed as percentage, 3. completion rate, that is, students who pass exam to promote to next academic level, 4. percentage of students studying at any given academic level compared to number of child population with age group appropriate to that academic year, 5. number of students who pass exam, 6. students who pass exam and promote to the next grade, 7. percentage of students completing any academic level compared to population of children of the age group corresponding to that academic level, 8. number of students completing last grade of any academic level, 9. number of students of both sexes who pass exam of grade 6 and 9, 10. the information about quality and effectiveness of education service in each academic year, 11. percentage of student completing each academic level, 12. percentage of students studying at last grade of any academic level compared to population of children age 11 or 14, 13. children age 14 who complete grade 9, 14. children who attend class at the right age and complete academic level at the right age also (primary and lower secondary school), 15. students who complete academic level in comparision to right age of any level (if the result is higher than 100%, that means students attend class overage, 16. students who attend class at last grade of any academic level excluding students who repeat grade, 17. percentage of new students of grade 6 and 9 (excluding students who repeat grade) in T school year in comparison to population of children age 11 and 14 years old, 18. students who complete any academic level and persue their study at the next academic level, 19. percentage of students who study at the last grade of academic level; for example, students who will study at grade 7 of the next school year, 20. number of children who study

at grade 6 and find out the number of students who complete primary or secondary shool, 21. number of students who completed any academic level with appropriate age and without grade repetition or overage enrollment, 22. number of children age 11 who completed grage 6 or students age 14 who completed grade 9, 23. children age 11 who enroll to the grade 6, 24. percentage of new students at grade 7 who promote from grade 6 of previous school year, 25. efficiency of education reflecting family's resource ultilization for students at the end of each academic level (if students at right age or not), 26. student who complete grades 6, 9, 10 and 12 and persue study at next grade level, 27. ratio in percentage of new students (not include students who repeated grade) compared to population of children in a given village or community, 28. percentage of new students enroll at grade 6 or 9 in any school year (excluding students who repeat) compared to population of children ages 11 or 14 in the same year.

Data collected from 143 school principals, the definitions of completion rate are: 1. the students who promote from primary school level to lower secondary school level, 2. completion of primary school or upper secondary school, 3. students who complete 6 years of primary school and persue study at lower secondary school, 4. good performance of students at primary school and promote to next academic level, 5. number of children age 11 who complete primary school, 6. number of students age 14 who complete lower secondary school, 7. children age 15 who complete grade 9, 8. students who complete primary school, number of dropout students and number of students at grade 6 in comparision to age, 9. result of academic level completion in each school year calculated as percentage, 10. dropout rate of students who fail to complete grade, 11. number of students who promote to next academic level, 12. pecentage of number of students who promote to grade 10 compared to overall population in village or community, 13. number of students who complete academic level, 14. number of new students (excluding those who repeated grade) who study at grade 6 of T school year and promote to grade 7, 15. ratio of new students completed in new academic year compared to number of students in last school year, 16. percentage of students completed any given grade, 17. comparision between students at grade 6 with population on the map and age 12 of primary level, 18. students who complete academic level, 19. number of students completed primary school and promote to grade 7 divided by number of students grade 6 of last school year and then multiplied by 100, 20. number of students who completed grade 6 and promote to grade 7 of new school year, 21. number of student pass

grade 9 divided by total number of student at grade 7 of new school year and then multiplied by 100, 22. number students who enroll or promote from grade 1 to grade 6, 23. number of students who graduate compared to students in previous school year, 24. number of students age 6 who enroll at grade 1 to 6 before promoted to grade 7 in this school year, 25. ratio between number of new students grade 9 and number of population age 14, 26. ratio between number of students studying at next academic level and number of students complete study at last grade of previous academic level and multiplied by 100, 27. percentage of students take exam in new school year in comparision with students whose age correspond to last grade of academic year of this school year, 28. percentage of students at grade 9 who pass exam compared to number of population age 14, 29. percentage of new studens (excluding students who repeat grade 6) compared to population of children age 11, 30. percentage of study result at the end of each school year, 31. percentage of students who promote grade, repeat grade and dropout, 32. result of study of of students who pass exam of last grade of academic year, 33. annual study result, 34. ratio of number of new students at grade 6 (excluding those repeated grade) in T school year compared to population of children age 11 of T school year, 35. number of students completing each academic level, 36. percentage of student completing each academic level, 37. population of age 14 in community who fail to complete academic level, 38. ratio (in percentage) of number of new students at last grade of any given academic level (excluding those repeated grade) in last school year compared to population of the same age group in this last school year, 39. percentage of students graduate from the last grade of each academic level, 40. percentage of students completed grade 6 in primary schools, 41. percentage of students who promote to next grade compared with number of students at the beginning of school year, 42. those students who completed grade 7 to grade 9, 43. number of overall children in commune who completed grade 6, 44. each student obligate to education in lower secondary school grade 7 to grade 9, 45. students who finish study in 1 year of each grade, 46. ratio between all students at grade 9 divided by population age 14 in commune multiplied by 100, 47. number of students at grade 1 and 6 after pass exam for primary school, 48. indicator to tell about the number of children attending school and those who do not, 49. students who pass graduate axam and persue study at next grade, 50. students who pass primary graduation exam (grade 6) and promoted to lower secondary school, 51. students who graduate from primary school at age 11 and successfully prmoted to secondary school, 52. student who complete grade without taking into account the study result, 53. number of students who study at grade 9 of last school year, 54.

students of both sexes who complete basic requirement of education (complete grade 9) and also pass lower secondary school exam, 55. students who study at grade1 to grade 12, 56. percentage of tudents who study at last grade of each academic level compared to population whose age correspond to last grade of each academic level, 57. students who complete grade 12 and pass upper secondary school exam, 58. students who completed all grades and 59. percentage of students completed grade 6 compared to all students who study grade 6.

For teacher correspondents of 144 sample size, 27.77% do not at all know about the completion rate. However, other teachers gave answers about perception of completion rate: 1. completion of academic level, 2. completion school year, 3. children age 11 who graduate primary school, 4. percentage of children age 6 who enroll grade 1 and graduate primary school 6 year later in comparision with students studying in primary school level, 5. number of students age 15 who complete grade 9, 6. number of all children who complete grade 6 at age of 11, 7. ratio of new students studying at last grade of academic level, 8. percentage of students who complete class, 9. percentage of students who promote ot next academic level and percentage of students who repeated grade, 10. number of students who dropout, 11. number of students graduate form a given academic level compared to total number of student who study at that academic level, 12. number of all new students of grade 6 (excluding those repeate grade), 13. number of students who dropout, 14. percentage of student who pass exam and those who fail to pass exam, 15. ratio in percentage of student studyin at first grade of academic level compared to students who graduate, 16. percentage of students graduate from any given academic level both increase and decrease, 17. percentage of students who graduate, 18. percentage of student who pass any academic level exam, 19. percentage of student at the end of school year, 20. percentage of students grade 1 to 12, 21. annual performance result, 22. percentage of students age 14 who study at last grade of primary level, 23. the method of measuring students knowledge, build future and participation in society of students, 24. students who complete primary school, 25. percentage of children who study grade 1 until 6 without dropout, 26. competion rate of both male and femal students, 27. percentage of students who pass exam compared to all students who apply for exam, 28. percentage of students in new school year in comparision with students in old school year, 29. Percentage of student who pass completely in period of school year, 30. percentage of students who pass exam, 31. academic result of students at the end of school year, 32. students who promoted to secondary school, 33. student who complete

study by grade and by academic level, 34. students who complete academic level and those who dropout, 35. all students who complete grade or academic level and pass exam, 36. all students who pass exam with good result both quantitatively and qualitatively, 37. students who complete basic education, 38. students who graduate from a academic level and promote to next academic level, 39. students who dropout, 40. student who not dropout, 41. percentage of students who pass academic level exam in comparision with total number of students at the beginning of school year, and 42. percentage of students who took exam.

For students' parents, out of 116 sample size, 63.37% of parents know nothing about completion rate. For those who can somewhat perceive the definition of completion rate give answers as the following: 1. students complete grade 12, 2. students studying in any academic level, 3. statistics of students completing educaton, 4. number of students who dropout, 5. number of students completing grade, 6. the comparision between students completing education and those who are still studying, 7. period of school year, that is, period between the date students start school year and the date of finishing school year, 8. students completing all grade and continue their education at higher education or vocational training, 9. students finish academic level, and 10. annual study result of students (for the whole school year).

Appendix 9: Matrix illustrating reasons of low completion rate and intervention

Based on research findings and results of group discussion show that factors bringing about the low completion rate, the research team build matrixs illustrating reasons why low completion by proposing the interventions to increase completion rate, and responsible stakeholders for increasing completion rate and proposed support from the Ministry of Education, Youth and Sport.

1. Province of Education, Youth and Sport

Reasons for low completion rate	Proposed interventions to increase completion rate	Responsible stakeholders for increasing completion rate	Proposed support from MoEYS
1. Student factor	• Provide extra classes for low performance students (establish learning club, extra learning course on Thursday) • Increase scholarship quota • Administer upgraded exam	• Students' parents • Teachers • DoEYS • PoEYS	• Offer scholarship for students • Offer school meal • Provide learnig materials • Establish library for all schools
2. Students' parents factor	• Raise awareness of parents about importance of learning • Enhance smooth and close relationship between teachers and parents	• Students' parents • Community • Local authority	• Establish compulsary education law
3. Community factor	• Inspire school committee board	• Community • Local authority	• Support and enhance school committee board

4. Inaccurate stastistics|/information	• Encourage using data from EMIS	• Community • School • DoEYS • PoEYS	• Strengthen mechanism of education data collection and data entry • Train all stakeholders on ultilizaton and analysis of education data
5. Social factor	• Enhance moral and ethic of stakeholders • Prevent drug abuse by meant of enforcement and dissemination • Ensure safety and security for students	• Teachers • Community • Concerning authorities	• Issue law (along with guideline) • Enforce effective implementation
6. Teacher factor	• Enhance qualification of teachers • Work regulation • Improve professional ethic of teachers	• School Principal • Teachers • DoEYS • PoEYS • MoEYS	• Train teacher on new methodology and curriculum (all subjects) • Offer incentive for primary school teachers of foreign lauguage
7. Geographic factor	• Find appropriate location for establishing schools • Build dormitories for teachers and students	• Authority • DoEYS • PoEYS • MoEYS	• Build enough school buildings to meet local needs

8.Social factor	• Enhance moral and ethics of stakeholders • Prevent drug abuse by meant of enforcement and dissemination • Ensure safety and security for students	• Teacher • Community • Concerning authorities	• Issue law (along with guideline) • Enforce effective implementation
9.Labour market in some provinces (Preah Sihanouk, Kep, Bantay-menchey, Odorme-anchey, Pailin, Koh Kong)	• Prevent illegal modification of Birth Certificate (which intends to exploit children laour) • Enforce employment law (prohibit hiring children in labor market)	• Concerning authorities	• Establish more vocational secondary schools so that each province has at least one such secondary school

2. District of Education, Youth and Sport

Reasons for Low Completion Rate	Intervention to Increase Completion Rate	Responsibilities of DoEYS to Increase Completion Rate	Suggested Support from MoEYS
1. Statistics: inconsistency among schools, commune, DoEYS, PoEYS as indicator calculation is not consistent with reality.	• Organize consultative meeting among stakeholders to decide on agreed statistical data on population with specific age group • Discuss among PoEYS and MoEYS on using population statistics based on actual population data rather than forcasting data	• Disemination meeting annually in every August of each year conducted by school principals. The meeting is about gathering stastistical data on children based on household • - Categorize population statistics based on age group (from 0 to above 45) and also categorize based on sex and those in school or out of school • With agreement with village, chiefs and head of communes, school principals set schedule for data collection • Summarize population data and send to PoEYS • Some schools request data from chiefs of villages, and other allocate budget to teachers for data collection from household to household	• Design tools for data collection on population census with crear age group caterization (such as ICS (International Child Support), Childfund for Senmonorom town) • Provide budget for data collection • Use actual statistics of population in district and province to calculate indicators

2. Geography: primary and lower secondary schools are far from each other, which are the distributions of students dropout	• Build more lower secondary schools on location close to primary schools • Build dormitories for teachers and students • Upgrade incomplete schools to complete ones	• Submit proposal requesing needed lower secondary schools, school buildings, and dormitories • Consult with local authority on location to build school buildings	• Provide school buildings and dormitories • Provide new teachers
3. Living standard factor: Some parents with poverty force children to dropout and help in household chore and/or help for earning	• Offer scholarship to poor students with right targets and timely • Consult with local authority on career path to make poor parents generate income for family • Collaborate with authority, community and parents to push for sending children to schools and also create environment for students to attend class regulary • Create foundation to support poor household	• Monitor the process of scholarship provision to poor students • Raise awareness of students' parents about value of education • Discuss with school committee board on targeting poor students and students who will dropout •	• Increase quota and amount of scholarship and timely provision of scholarship

4. Migration: parents who migrate and take children with them resulting in decreasing the number of students	• Prevent migration of students' parents • Offer vocational training for students' parents so that they are able to start their careers in community instead of migration	• Raise awareness of parents about risks associated with migration such as being cheated and losing academic learning of their children • Survey on vocational training demands of people in community	• Widely disemminate the risks of migration to community • Create vocational training along with budget needed to traing people in community • Provide buildings to meet the needs and standard
5. Illegal modification of Birth Certificate especially minor Ethnicity	• Strictly prevent modification of birth certificate	• Raise awareness of students, parents and community about risks and problems of birth certificate modification	• Issue guidance for students (especially minor ethnicity) about problems of birth certificate modification
6. Poor performance students tend to dropout	• Offer extra course to students with poor performance (Khmer literature and mathematics for primary school and physics, mathematics and Khmer literature for lower secondary school)	• Discuss with parents of students with poor performance and community about how to help them • Promote extra courses to help poor performance students in regards to AOP • Encourage school proncipals to establish learning group so that students can help one another • Encourage school principals to create learning club and group of student-help-students	• Increase budget for extra courses for poor performance students

7. Teachers do not administer testing to determine level of students competence and also do not consult with students' parents (as a result students perform badly, repeat and /or dropout)	• Push teachers to administer the test to determine students' competency. The test should be done at the beginning of school year and monthly • Meet with students' prarents to show the test results	• Push school proncipals and technical leaders to conduct the standardized test monthly • Monitor and evaluate the test	• Send national level of key trainers to technically help the schools to conduct standardized mothly test • Support budget to help DTMT group
8. Overage enrollment (from grade 1 of ages 7 or 8 years)	• Campaign to collect children whose age appropriate for enrollment of grade 1 (6 years)	• Push school to broadcast to community the information of school enrollment	• Request all relevant organizations/ministries to participate in mobilizing children to enroll
9. Studets move from schools in rural area to schools in urban area which results in mis-calculation of completion rate (rate calculated is too low)	• Update statistical data of population and students who change school	• DoEYS must accurately record data of students who change school •	• Record the statistic of students who change school into ASCF and EMIS table with accuracy based on guidline
10. Too early age marrigage and/or employment	• Enforce the wedding law and labor law (Students must attend school at least 9 years.)	• Raise awareness about wedding law and employment law	• Broadcast to school about weeding law and labor law

11. Children are under-nutrition	• Push parents to take their children to hospital for health check as often as possible	• Colaborate with health center • Meet with Women and Children's Affair Committee to broadcast about children health	• Cooperate with the Minitry of Health to timely provide nutrition to children
12. Shortage of school meal	• Offer school meal to pupils in disadvantaged areas	• Monitor the cooking of school meal as well as quality of food • Raise awareness to community to contribute resources for school meal	• Increase amount of school meal for pupils/ children
13. Poor school environment: lack of hygene and toilet resulting in pupils dropout	• Improve school environment	• Push school to submit proposal requesting school environment improvement, more toilets and clean water	• Increse budget for school environment improvement

3. School Principals

Factors for Low Completion Rate	Intervention to Increase Completion Rate	Responsibilities of School Principals to Increase Completion Rate	Support from Mo-EYS
1. Migration	• Consult with local authority • Offer employment to local people in community	• Raise awareness of students' parents about value of education	• Encourage students and parents by mean of offering scholarship • Prepare local career path
2. Family violence	• Report violence incident to local authority	• Raise awareness about negative results of family violence • Intergrate knowledge on domestic violence into learning lesson	• Provide document about domestic violence •

3. Poor family resulting in children help family in earning income	• Request for help from involving stakeholders •	• Encourage students and offer more scholarship • Raise fund for supporting poor students	• Provide additional scholarship •
4. Location and Geographic	• Establish new schools close to community to provide enabling environment for students to study • Build dormitories for teachers and students • Offer vehicles for travelling from house to school • Build and/or improve local infrastructure	• Submit request for new buildings , dormitories for teachers and students, and vehicles for students • Facilitate document about moving of students from other schools	• Facilitate preparation document of students moving from other schools (especially those move from other provinces) • •
5. Inaccuracy of statistics from local authorities and schools	• Ask local authority to accurately collect statistical data on population cencus	• Collect statistical data from community and prepare map by houses and map for study	• Cooperate with the Ministry of Interior on local statistical data
6. Students performed poorly in primary school resulting in poor foundation for study at secondary school	• Raise fund for extra courses for students with poor performance •	• Offer extra courses for poor performance students and administer test for completion • Expand friends-help-friend program by mean of broadening learning club	• Increase budget for exstra course for poor performing students •

7. Language barriers of ethnic minority	• -Ask local authority to mobilize teachers from ethnic minority	• Add more bi-language teachers for schools lacking such teachers	• Train teachers from local ethnic minority
8. Shortage of teachers	• Recruit more teachers and employ contract teachers • Employ teachers teaching two time shifts and (for primary school) employ two-class-in-one teacher •	• Add more teachers and employ teachers specialized in other subjects • Recruit and employ contract teachers (for primary school) • Employ teachers with two time shifts and (for primary schools) employ two-class-in-one teacher	• Train more teachers and deploy them to different areas as needed • Increase incentive for teachers in remote areas and disadvantaged areas to 50% of their salary
9. Health problem of local students	• Broadcast guidance on health care to all stakeholders • Collaborate with local authority, health care centers and control, monitor and check regularly on snack stalls in community as well as in school	• Broadcast on health care • Cooperation with health care centers, create first aid box in all schools • Control and monitor on all snack stalls inside school and sign clear contract with snack sellers	• Issue guidline about control measurement on snack/food sold inside schools • Collaborate with all involved ministries/organizations to prevent the import of unsafe or unqualified food/snack

10. Insecurity in local areas	• Strenghten the implementation of security village and commune	• Report problems to local authority and cooperate with them • Raise awareness of students about security and enforce the implementation of school regulation • Amplify and enhance activities of school committee board • Record a list of phone numbers of all relevant people involved with students	• Cooperate with the Ministry of Interior
11. School environment do not yet meet the requirement of student-friendly school	• Raise fund from local charity and relevant partners for further develop school	• Enhance implementation school principals of student-friendly school • Improve both internal and external school environment • Improve quality of education • Raise the fund from local charity and involved partners for development of school further	• Increase budget for school support • Evaluate and encourage schools in all provinces
12. Students' parents do not value education	• Collaborate with local authority to help raise awareness of people in community about value of education	• Encourage students' parents and build close and strong relationship with them	• Create education compulsary law

13. Negative behavior and morality of teachers	• Report to management team by hierarchy • Give comments and advice	• Comment and raise awareness of teachers about professional ethic and sign contract to not repeat the action • Enforce the implementation of decree number 256	• Delegate authorized decision-making to school principals
14.Limited capacity of school committee board	• Training school committee board	• Enhance capacity development of board on responsibilities, management and leadership	• Train school principals on responsibilities, management and leadership • Increase salary for school principle
15. Students did not attend kindergarten	• Select teachers from local community	• Establish community kindergarten in local community	• Train teachers
16. Negative impact of local tradition	• Cooperate, educate and disseminate	• Educate and disseminate	• Cooperate with involved ministries
17. Ovarage enrollment of students	• Cooperate with local authority, mobilize children to enrol into school • Create mechanism to prevent school dropout	• Disseminate education law	• Disseminate • Create compulsary education law