

**YANGON UNIVERSITY OF ECONOMICS
MASTER OF PUBLIC ADMINISTRATION PROGRAMME**

**A STUDY ON THE EFFECTS OF EDUCATION REFORM
IN MYANMAR**

**MAY MYINT MYAT KHAING
MPA – 14 (17th Batch)**

MAY, 2019

**YANGON UNIVERSITY OF ECONOMICS
MASTER OF PUBLIC ADMINISTRATION PROGRAMME**

**A STUDY ON THE EFFECTS OF EDUCATION REFORM IN
MYANMAR**

A thesis submitted in partial fulfilment towards the requirements for the degree of
Master of Public Administration (MPA)

Supervised by

Dr. Pwint Phyu Aung
Lecturer
Department of Economics
Yangon University of Economics

Submitted by

May Myint Myat Khaing
Roll No - 14
MPA 17th Batch
(2017 - 2018)

MAY, 2019

YANGON UNIVERSITY OF ECONOMICS
MASTER OF PUBLIC ADMINISTRATION PROGRAMME

This is to certify that this thesis entitled “**A STUDY ON LIVING CONDITIONS OF INTERNATIONAL MIGRANT WORKERS' FAMILIES IN THE RURAL AREAS OF KAYIN STATE (CASE STUDY: SELECTED VILLAGES IN KAWKAREIK TOWNSHIP)**” submitted as a partial fulfillment towards the requirements for the degree of Master of Public Administration has been accepted by the Board of Examiners.

BOARD OF EXAMINERS

1. Professor Dr. Tin Win
Rector
Yangon University of Economics (Chief Examiner)

2. Professor Dr. Ni Lar Myint Htoo
Pro-Rector
Yangon University of Economics (Examiner)

3. Professor Dr. Phyu Phyu Ei
Program Director and Head of Department
Department of Applied Economics
Yangon University of Economics (Examiner)

4. Professor Dr. Tin Tin Wai
Professor
Department of Applied Economics
Yangon University of Economics (Examiner)

5. Daw Khin Chaw Myint
Associate Professor (Retd.)
Department of Applied Economics
Yangon University of Economics (Examiner)

May, 2019

ABSTRACT

Education, which plays a vital role is a lifelong process and stands a dominant role in economic development. Shortage of education or lack of education is the root cause of poverty within the society. The aim of this study is to analyze the effects after the implementation of new education policy reform in the period of 2011-2016 and examine the challenges and barriers of education system in Myanmar. Descriptive method is used to show the findings of secondary data from various government official reports, journals, seminar, workshop reports and international reports. The first finding is due to implemented new policy reform in 2011, the government expenditure on education rose 3 times than previous years. And that impact positively on students enrollment rates and number of schools. Besides, there still have so many challenges and barriers to address on Myanmar Education system like huge differences in literacy rate between rural and urban areas for example, not getting quality education, gender inequality in education sector and teacher's qualifications. To cover all of the issues mentioned above the government's investment on education sector is the one and most important solution in Myanmar.

ACKNOWLEDGEMENTS

The path toward this dissertation has been circuitous. Its completion is thanks in large part to the special people who supported and guided me along the way.

I am tremendously fortunate to undertake this postgraduate course. First and foremost, I would like to express my sincere thanks and deep appreciation to Professor Dr. Tin Win, Rector of the Yangon University of Economics. Immeasurable appreciation and deepest gratitude for the help and support to Professor Dr. Phyu Phyu Ei, Programme Director of Yangon University of Economics. And heartfelt thank goes to Professor Dr. Cho Cho Thein for the encouragement, motivation and guidance helped me in all time.

Moreover, my utmost appreciation goes to my supervisor, Dr. Pwint Phyu Aung, Department of Applied Economics who has given her time and effort in advising and patience during the period that I was preparing for this thesis. In addition, I would like to thank all Professors, Associate Professors and lecturers for imparting a great variety of knowledge during the study period of MPA Program.

Apart from all the teachers mentioned above, I wish to acknowledge the kindness, helpfulness of my friends and classmates from MPA 17th Batch and extend by deepest gratitude to them.

TABLE OF CONTENTS

	Page
ABSTRACT	i
ACKNOWLEDGEMENTS	ii
TABLE OF CONTENTS	iii
LIST OF TABLES	v
LIST OF FIGURES	vi
LIST OF ABBREVIATIONS	vii
CHAPTER I INTRODUCTION	1
1.1 Rationale of the Study	1
1.2 Objectives of the Study	2
1.3 Method of Study	2
1.4 Scope and Limitations of the Study	3
1.5 Organization of the Study	3
CHAPTER II LITERATURE REVIEW	4
2.1 Education Policy and Implementation	4
2.2 Importance of Education in Human Resource Development	7
2.3 Overview of the Education Related Laws	12
2.4 Review on Previous Studies	14
CHAPTER III INSTITUTIONAL CONTEXT OF MINISTRY OF EDUCATION	18
3.1 Overview on the History of Education in Myanmar	18
3.2 The Education of Myanmar in Pre-independent Era	19
3.3 Education System Reform: 1988 Onwards	21
3.4 Review of Policy and the Legal Framework	25
CHAPTER IV ANALYSIS ON THE EDUCATION SYSTEM REFORM	28
4.1 Restructuring Organization	28
4.2 Achievements and Progress of Myanmar's Education Reform	29

4.3	Challenges and Barriers in Myanmar's Education Reform	35
4.4	Policy Options	43
CHAPTER V	CONCLUSION	44
5.1	Findings	44
5.2	Recommendations	46
REFERENCES		

LIST OF TABLES

Table No	Title	Page
4.1	Restructuring Organization in Ministry of Education.	28
4.2	Number of Basic Education Schools, and Students (AY 2007-2008 vs. AY 2013-2014)	32
4.3	The Increasing Number of Teachers during 5 Years from Academic Year 2011-2012 to 2015-2016	32
4.4	Literacy Rate at Urban and Rural Level, 2016	35
4.5	Percentage of Youths who have Reached the Various Levels of Education in Urban and Rural Areas, 2015	36
4.6	Student-teacher Ratio Compared with Neighboring Countries, 2014	36
4.7	Teacher by Academic Qualification	38

LIST OF FIGURES

Figure No.	Title	Page
3.1	The Process of Educational Policy Reform	25
4.1	Government Expenditure on Education from the Fiscal Year 2011-2012 to 2015-2016	29
4.2	Myanmar's Education Expenditure as a Percentage of GDP	30
4.3	Net Enrollment Rate in Basic Education	31
4.4	Male/Female Teacher Ratios in the Basic Education Sector	42

LIST OF ABBREVIATIONS

ASEAN	Association of Southeast Asian Nations
AY	Academic Year
CCA	Child-Centred Approach
CESR	Comprehensive Education Sector Review
DFID	Department for International Development
ECCD	Early Childhood Care and Development
EPIC	Education Promotion Implementation Committee
FESR	Framework for Economic and Social Reform
FY	Fiscal Year
GDP	Gross Domestic Product
GPI	Gender Parity Index
ICT	Information and Communication Technology
ILO	International Labor Organization
JICA	Japan International Cooperation Agency
KG	Kindergarten
MOE	Ministry of Education
NESP	National Education Sector Plan
STEM	Strengthening Teacher Education in Myanmar
TCSF	Teacher Competency Standards Framework
TVET	Technical Vocational Education and Training
UNESCO	United Nations Educational, Scientific and Cultural Organization
UNICEF	United Nations International Children's Emergency Fund

CHAPTER I

INTRODUCTION

1.1 Rationale of the Study

“Education is the most powerful weapon which you can use to change the world.” (Nelson Mandela). The purpose of education is to broaden understanding so that men may make the fullest use of their innate potential, the spiritual, intellectual, or physical. Education is necessary for the full development of the human personality and it is grounded in respect for human rights and fundamental freedom. Much of our economic growth can be explained by increased investments in land, labor and capital. The rate of economic growth has far exceeded the returns from increased inputs in these conventional objects of investment. This difference is very likely due to the added investment in the education of people. Educated human resources invested in economic activity generate increased wealth therefore, education has a direct impact on economy through the stock of knowledge. And on the other hand, wars, crime, environmental destruction and corruption, all these problems can be traced to one single root that is quality of education.

As democracy develops in Myanmar, it is crucial for all sectors to be upgraded to meet the standards required of a democratic system. Myanmar education reform began in 2011 when the country’s government system changed from a military government to democracy for aiming the development of human resources. These days, the new government of Myanmar also focusing education reform as a national priority. As Daw Aung San Su Kyi mentioned in Myanmar Sustainable Development Plan (2018-2030), “Myanmar’s most valuable asset is our people”.

In order to find solutions to the challenges and gaps in the current education system, since July 2012, the government, in collaboration with development partners, has embarked on a Comprehensive Education Sector Review (CESR) (UNESCO. 2014a). Significant achievements of the major education reforms until now include, an increase in the budget for education, the publication of a new education law and the removal of public school fees. Starting from the school year 2015-2016, education

enrolment is free for high school students. Enrolment in primary schools was made free in 2010-2011 and middle schools followed in 2013-14. In addition, policies and laws have been laid down as part of the process of the education system reform. The most recently enacted laws are the National Education Law in 2014 and the Amendment of the National Education Law in 2015.

Education policy was laid down in 2011 according to the guidelines of the former president. Given that effective reforms take time to be successfully accomplished, many challenges are yet to be addressed. Although the current expenditure on education in Myanmar is higher than before, it is still low compared with neighboring countries. Furthermore, pupil to teacher ratios are significantly higher in Myanmar than they are in neighboring countries, such as Thailand, at both primary and secondary levels. The country did reform its curriculum once between 1995 and 1999 and that curriculum has been used continuously up until the academic year 2015-2016. However, other countries revise their curriculums on a much more frequent basis.

1.2 Objective of the Study

The objectives of this research are to study the effects of increasing the expenditure on education due to upgraded education reform and to review the associated policies and laws.

1.3 Method of Study

Descriptive method is used with the information and collected secondary data from various government official reports, journals, seminar, workshop reports and international organization reports have been used as sources of information. The sources that mainly used for secondary data of this study is from Ministry of Education, Myanmar Times Journal, UNICEF Myanmar websites, Myanmar President Office, UNESCO official websites and also others international organizations.

1.4 Scope and Limitations of the Study

This study only focusses on the conditions which has improved and gaps of current education reform in Myanmar between the five years period from 2011-2016.

This study may not cover any problems and barriers that are not consider under the education policy reform of Myanmar. And also may not find out about the challenges and barriers of previous education policies and new implemented policy after the year of 2016.

1.5 Organization of the Study

This thesis is structured into five chapters. Chapter one is dedicated to introduction, objectives and hypothesis, methodology, significance of the research, scope and limitation and layout of the project. Chapter two explains the reviews and discusses relevant empirical literature. Chapter three offers the background studies of Myanmar, education reforms, policies and overview of the current educational system. Chapter four will present analyses and discusses the key findings of the study. And Chapter five concluded the paper with the summary of findings and conclusion remarks.

CHAPTER II

LITERATURE REVIEW

In the field of education, “implementation” is a complex term which has different meaning for different people. The lack of consensus on the definition is noticeable among scholars. The term “implementation” itself may convey a limited approach to the concept. Yet analysis suggests that the term may require taking into consideration a large variety of factors including the policy making process itself, in addition to context and the actual policy.

2.1 Education Policy and Implementation

Education Policy

Education policy can be formally understood as the actions taken by governments in relation with educational practices and how governments address the production and delivery of education in a given system. Admittedly, some promote a wider understanding of education policy that is acknowledging the fact that private actors or others institutions such as international and non-governmental organizations can originate educational policies (Espinoza, 2009). However, this paper focuses on the education policies generated by public authorities (be they at the central, regional or local level)for the delivery of public education. In this respect, the definition given by Rayou and van Zanten (2015) is enlightening: education policies are programmes developed by public authorities, informed by values and ideas, directed to education actors and implemented by administrators and education professionals. Education policies cover a wide range of issues such as those targeting equity, the overall quality of learning outcomes and school and learning environments, or the capacity of the system to prepare students for the future, funding, effective governance or evaluation and assessment mechanisms, among others (OECD, 2015). Although education policies may refer to programmes affecting the education system from kindergarten to tertiary education (Van Zanten, 2014), the analysis in this paper is limited to policies

at primary and secondary education. Implementation presents similar contexts and challenges at primary and secondary levels, while the issues differ significantly in vocational, higher and continuing education. In addition, it is important to point out that in this paper, we may use education “policy” or “reform” interchangeably, following the analysis in Pont (2017, pp.36-37), which elaborates on what is education policy and the differences with reform.

Implementation

The concept of implementation in education is not clear, as it can take on a range of meanings that include the strict concept of implementation or a much broader conceptualization that refers not only to the process but embraces those factors that surround it. “Implementation” thus suggests a direct object to action, be it a plan or decision. An interesting question is whether the education policy that gets implemented is the same as the one formulated by policy makers. The following distinction drawn in Adams, Kee and Lin (2001) allows for some reflection, “Rhetorical policy refers to broad statements of educational goals often found in national addresses of senior political leaders. Enacted policies are the authoritative statements, decrees, or laws that give explicit standards and direction to the education sector. Implemented policies are the enacted policies, modified or unmodified, as they are being translated into actions through systemic, programmatic, and project-level changes.”(Kee 2001, p.222). If the “implemented policies” correspond to “enacted policies, modified or unmodified”, then the implementation process can hardly be limited to executing a decision.

2.1.1 Key Determinant of Education Policy Reform

Four dimensions are crucial to take into account when approaching education policy:

- The policy design: the way a policy is debated and framed, the logic it suggests between the policy problem and the solution it offers and the feasibility of the latter determine to a great extent whether a policy can be implemented and how.
- The stakeholders and their engagement: education policies are implemented by individuals and organizations, making them central to the implementation

process both because of their own characteristics and thanks to their interactions with other determinants.

- The institutional, policy and societal context: the institutional setting comprises the formal and informal social constraints that regulate the implementation process in a given education system. The other policies in place in education and other sectors also need to be taken into account because they may facilitate or hinder the implementation process.
- The implementation strategy: the implementation strategy refers to the operational plan that guides the process to make the policy happen in effect.

Design of the Policy

In our concept of the policy implementation process, the design of the policy is understood in a narrow sense, as the object being implemented. It consists in the theoretical solution that policy makers design to answer an issue on the policy agenda. The nature of a policy solution, and the way it is formulated influence the “enactment” of a policy (Bell and Stevenson, 2015). The core attributes of a policy, the issues that were not raised during its formulation phase carry over to the implementation phase and may alter it (Fullan, 2015). Several factors linked to the policy itself should be considered in terms of how they influence and determine implementation.

An education policy is usually directed towards specific target groups of users and beneficiaries. Curricular reforms for instance can change the content and the pedagogical methods to enhance the quality of teaching and the learning performance. In this case the policy has two targets: teachers and students. Labelling targets often comes down to creating a group that was not consciously perceived as such. This may generate unexpected attitudes from the group itself or from other stakeholders, thus creating challenges to implementation (Honig, 2006). Therefore, for reform implementation to be successful, policy goals and targets must be clear and concrete. In addition, the causal theory(or theory of change) underpinning the policy is essential, because it tells the story of how and why the policy change takes place, and can contribute to get engagement and guide those involved (Fullan, 2015[21]). Mazmanian and Sabatier emphasize the importance of having a valid theory linking the policy problem to the behavioral changes policy makers expect to cause in the

groups targeted by the policy (1980). Overall, concrete goals, targets, and causal theory of an education policy are crucial to understand the challenges to implement, the shape the process takes and the results from implementation.

Education policies are implemented by people, making them central to the implementation process, both because of their own characteristics and thanks to their interactions with other determinants. It is widely acknowledged that stakeholders display some agency, which contributes to shaping the process and the outcomes of policy implementation. In the different determinant frameworks analyzed, “stakeholders” or “actors” may refer to individuals or collective entities, both formal (e.g. labor unions, implementing agencies) and informal (e.g. parents, political coalitions). Determinants relate to entities or actors (individual or collective) using or not their skills and resources to contribute or react to the implementation of the policy.

2.2 Importance of Education in Human Resource Development

Education has to be in the lead and play a major role in societal development. The main element of the education is centered on the human being and on human development. The future condition of the political, social, cultural and economic sector will depend on the contribution of the students of the schools.

Education must be future-oriented in the face of scientific and technological innovations and changes, unprecedented socio-economic challenge and opportunities. The education process of the individual is more complex than in the past. There are three main roles in the education of any country. They are the role of teachers, the role of parents and the role of students. The success or failure of the education process depends on the interaction of these three groups but above them, role of government plays the crucial role for implementing better policy.

Education and Human Resources

The use of the term ‘human resources’ by organizations to describe the workforce capacity available to devote to the achievement of its strategies has drawn upon concepts developed in Industrial / Organizational Psychology and System Theory. Human resources have at least two related interpretations depending on context. The original usage derives from political economy and economics, where it was traditionally called labor, one of four factors of production - although this

perspective has shifted as a consequence of further ongoing research into more strategic approaches. The first usage is used more in terms of 'human resources development' of the individuals within an organization, although the approach can also be applied beyond the level of the organization to that of industry sectors and nations.

The human resource of a nation defined the physical and mental aspects alternatively the quantity and quality of the people of a nation. The physical or qualitative aspects are essentially the demographic characteristics of the population. These include the size, density, age and sex distribution, geographic (including urban and rural) distribution, fertility, mortality, immigration, emigration and rate of growth of science and technology, culture, art and etc. Nowadays, the large size of population is seen as less and as an advantageous human resource condition: judgements on this issue will depend on individual circumstances.

Qualitative aspects of the population however seen as dividing factors for achieving, national development. Human resource development is thus seen as essentially as the development of the qualitative aspects, rather than the quantitative aspects of the population. Foremost factors among these qualitative aspects are the level of education and skills of the people (including factors such as housing, environment, welfare, etc.) of the people. It is only comparatively that human resource development is recognized as the most important factor for economic development. In the earlier days it was believed that accumulation of material capital was the most important. Later the mounting evidence demonstrating the crucial role played by education, science and technology, and social policy, economists adopted the concepts of "human capital" on adjustment to material capital, as a contribution factor. Nowadays, even the concept of "human capital" has been abandoned in favors of the more explicit concept of human resource development. In some quarters the more direct term "human capital" with more emphasis on quality of life variables such as pollution, mortality, gender equality etc., has gained popularity. This shift perspective has also revealed that economic growth is not synonymous. With development; a nation cannot be proved of its high per capita GDP if cities are racked with crime and its young people brought up in dysfunctional families.

Human resource development is the process of increasing the knowledge, the skill, and the capacities of all the people in a society. In economic terms, it could be described as the accumulation of human capital and its effective investment in the

development of an economy. In political terms, human resources development prepares people for adult participation in political processes, particularly as citizens in a democracy. From the social and cultural points of views the development of human resources helps people to lead fuller and richer lives, less bound tradition; in short, the processes of human resource development unlock the door to modernization.

During the twentieth century, education, skills and the acquisition of knowledge have become crucial determinants of a person's and a nation's productivity. One can even call the twentieth century the "Age of Human Capital" in the sense that the primary determinant of a country's standard of living is how well it succeeds in developing and utilizing the skills and knowledge, and furthering the health and educating the majority of its population.

As increasing the number of students complete their basic education, their demand for education at higher levels is similarly increasing. Educating girls and women is probably the single most effective investment that developing country can make, whether or not women work outside the home. It creates a multitude of positive remunerations for families including better family health and nutrition, improved birth spacing, lower infant and child mortality, and enhanced educational attainment of children. Countries in the Middle East are increasingly integrated in world markets for manufactured goods. Their ability to compete in these markets and in globalizing service markets will depend on the excellence of human capital they bring to the competition. Ensuring that all citizens are educated and numerate, that many possess a wide range of problem-solving skills beyond the basic level, and that some have world class professional skills will necessitate new curricula, improved teacher programs and academic methods that encourage higher order cognitive skills.

No country has achieved constant economic development without considerable investment in human capital. Previous studies have shown handsome return to various forms of human capital accumulation; basic education, training, learning by doing and aptitude building. In a distribution of education matters, unequal education tends to have a negative impact on per capita income in most countries. Investment in human capital can have little impact on growth unless people can use education in competitive and open markets. The larger and more competitive these markets are, the greater prospects for using education and skills.

Therefore, the problem of value education of the young is assuming increasing prominence in educational discussions during recent times. Government, parents,

teachers and society at large have been concerned about the values and value education of children in the country (Erwin, 1991). Whatever be the cause of present value crisis, there is no contradicting the fact that the weakening of moral values in social life is creating serious social and ethical conflicts. It is this changing context the declining moral standards in personal and public life on the one hand, and the national ideological commitment to the values of democracy, socialism and modernization on the other, that constituted the driving force behind the recommendations, stressing the importance of value education in educational institutions in the country.

The Aim of Education

Education is principally identified with schooling, though in theory it extends far beyond this, being concerned with intellectual and social development. The main emphasis within is on children, though there is clearly scope for education for all and lifelong learning. Education has been particularly significant as an instrument of social policy. The aim of education includes: (Singh, Raja Roy)

- (i) Liberal education: development individual intellectually and socially to that person fullest potential
- (ii) Socialization: education is a method of transmission of social norms and values. This is also sometimes seen as form of social control
- (iii) Education as ‘handmaiden’: the education system serves the industrial process and the economy by producing a trained workforce, and by providing services and
- (iv) Social change (or social engineering): the education system has been seen as a means of bringing about social change.

Education has a two-fold function to perform in the life of man and in society. The one is utility and the other is culture. Education must enable a man to become more efficient, to achieve with increasing facility the legitimate goals of his life.

Education must also train one for quick, resolute and effective thinking. To think incisively and to think for one’s self is very difficult. The function of education, therefore is to teach one, to think intensively and to think critically. But education which stops with efficiency may prove the greatest menace to society. The most dangerous criminal may be the man gifted with reason, but no morals. The broad

education will transmit to one not only the accumulated knowledge of the race but also the accumulated experience of social living.

Formal and Informal Education

Education is one of the most important factors in fostering human resource development. Human capital improvement mainly encompasses health and education. Education can be categorized as formal education and informal education. Both have significance in each own face but in this paper, only formal education will be analyzed. Formal education generally means educating at school and/or institutions which will enhance the ability and skill of the participants. Informal education is obtaining skill by the environment and condition such as learning by doing, learning by experience, accumulating knowledge by doing jobs and acquiring skill by seeing.

Informal education is the knowledge and skill gained by seeing or hearing or doing. The purpose of education for individuals both male and female is to develop the powers and capacities latent within them, so that they may contribute their share to an ever-advancing civilization.

Women in Education

In early period, women were not allowed to get education, they have to content their life in their communities by doing house works. But in the modern worlds, women can get equal chances to become educated person like men. Education of girl has also been shown to be one of the most effective means of improving local health standard. By Endogenous theory, it focuses on the human capital as it has enormous effect on the economic growth. The quality improvement in human resources not only benefit to the private, but also to the public as it has spillover effects (Todaro, Michael P., and Stephen C. Smith). For instance, in country, the more educated person has, the more the country will get development. This is quality improvement in human resource to the public.

In a family, when mother becomes more educated, it has much influence on the living standard of her family and especially on the children. The educated mother can promote and control their children's life in education, health and other important factors. Education is central to the knowledge-based society because it is the human being who is the creator, the preserver and sometimes tragically, the destroyer of the knowledge.

Education may be seen as at the crossroads of development choices. To get development, there are so many trends. The general formative trends are both positive and negative. The positive one is knowledge explosion, science and technology, the development quest of the nations for better quality of life. The negative impacts are problems of mortal danger to mankind such as science and technology applied to destructive purpose, environmental degradation, population growth and a crisis of human values (Singh, Raja Roy. 1991). Therefore, education is important for human brings but need to right used in right ways.

2.3 Overview of the Education Related Laws

In terms of the related laws for the education in Myanmar, most of the laws had not been amended for a long time ago and do not really suitable to apply and implement in the current situations. In particular, Basic Education Law of 1973, Technical and Vocational Education Law of 1983 and the University Education Law of 1973 do not support to take actions for the development of education. Moreover, in the education reform of Myanmar, the 30 Year Long Term Education Development Plan was applied differently in each sector. According to the University Education Law 1973 which was amended in 1998, all the ministries are supposed to cultivate the individual to be part of the nation building process and in accordance with the meet of the economic demand and be able to manage public administration. Moreover, all the universities need to ensure to enrich the education and the training which cover not only arts but also sciences and need to arrange to be equal amount of intellectuals and skilled workers for both fields (University Education Law 1973).

In expressions of the Higher Education Administration which is established by referring to the University Education Law of 1973 and there has been a complex management structure like if in case the National Education Committee could act like the central coordinating body for higher education. The two Departments of Higher Education which is Lower Myanmar (DHEL) and Upper Myanmar are mainly responsible for the allocation and management of the higher education budget (University Education Law 1973). In which, the higher education institutions are managed by each department and there is controversial issues to allot the financial management authority to the respective higher institutions and it has not implemented and legally accepted yet.

The Impact of Education in Labor Markets

However, higher education should not only focused on the need of local market but also aware of international demand and change of market and intellectual society. Nowadays economy does not only play in local concept at all but extend to sustainable development, innovative products and transnational cooperation. Therefore, to follow those steps and rapid change, small management of each institution with full autonomy will be easier to catch up in short time and to develop unique and competitive human resources for market and society in the long term than national policy of long implementation process. Especially, when ASEAN initiates the ASEAN Economic Community, Myanmar need to ensure the decent human resource for sustainable economic development and compatible bargaining power in free market society. In order to produce the skilled labors and technicians, there is a pressing need to implement Technical Vocational Education Trainings so that which could supply the needs of the economic development and the industrial sectors. Furthermore, the cooperative among the ministry of education and the private sector is still weak, therefore, the respective laws need to be prescribed so as to improve the role of the participation of private sector in Higher Education Reform of Myanmar. With the main purpose of building the standard capacity of students, there is a need to network with other international universities and create scholarship and exchange programs and need to upgrade the English Language Proficiency skill of both students and teachers. In conditions of technical and vocational education and training (TVET), there are no major institutions to manage policies, rules and regulations and supervise the respective institutions effectively. TVET institutions need to be implemented in order to provide alternative higher education for the living of students. On the other hand, it could fill the gap of skilled labors, technicians and specialists for the industrial and economic sectors which indirectly support the economic development of Myanmar. There are different types of institutions for TVET such as some are for skill development and some could be rated as Higher Education institutions as they provide academic degrees combined with TVET.

For the entrance of the universities, it all depends on the score of the matriculation examination and it is varied based on gender as well especially the female students need to acquire high marks than the male students even in order to enroll the same specialization. In particular, the entry requirements, and the schooling years could be vary from one university to another too. The students who have

already passed matriculation examination could take either day or distance schooling. Distance education is common for the unaffordable students from the rural areas or the ones who have to work for their survival or their family. Even the students earned the degree from distance learning, the critics pointed out that it is not really an effective education system and the students do not receive any qualifications or skills except the degree certificate. Moreover, those distance learning students are not normally continue their education to the advanced levels such as Master or PhD and they are required to attend additional trainings such as Languages, Computers and other technical trainings in order to get jobs.

For the day schooling students, they have to spend long time for commuting to and from the universities as the universities are far away from the main residence areas. As the past pressing experience, most students are not willing or interested to take the specializations concerned with Arts and they prefer most of the Sciences subjects. There is a critical issue for the graduates from Higher Education Institutions in Myanmar which is they are not qualified enough to get jobs which is relevant with their specialization subjects and most of the graduates do not make living with their specialization subjects. It can be assumed that the number of graduates from Higher Education is higher and could fully supply the gap of the industrial labor force and however, the capacity and qualification of those graduates are not strong enough to be intellectuals, technicians and skilled labors. In particular, the curriculum of higher education and institutions for vocational education and training are outdated and lack of practical abilities. The human resources from information and technology fields are also scarce and most of the excellent intellectuals and resource persons prefer to work abroad because of the competitive advantages and benefits from other countries.

2.4 Review on Previous Studies

According to the Myanmar Sustainable Development Strategy Goal (4.1), improve equitable access to high quality lifelong educational opportunities, Myanmar's most invaluable asset is people. In acknowledging this fact, the MSDP notes the critical role played by the education system as being indispensable to a healthy economy. The main elements of education are centered on the human being and on human development. The future condition of the political, social, cultural and economic sectors will depend on the contribution of the student of the schools.

There are five main capitals for a human being to survive, they are human capital, social capital, natural capital, physical and financial capital. Education development plays a leading role to accumulate those capitals and increase the capability, knowledge and employment opportunities which lead to human capital and consequently it could reduce the poverty rate with integrating and utilizing other capitals. The development of educational institutions and practices and the best practices in education system make the nation develop. Educational development could address the social, economic, cultural, environmental problems that are occurred in the country. There are many models and theories which help to observe the education reform through different approaches.

Fullan (2001) suggested that the state holders must comprehend both the small and the big pictures in order to achieve greater meaning. He presented that the small picture concerns the subjective meaning or lack of meaning for individuals at all levels of the educational system. Fullan also mentioned that educational change after all is a sociological process. Furthermore, Carr-Chellman (1999) defined systemic change as the interrelationships and interdependencies among the parts of the educational system with the consequence that desired changes in one part of the system are accompanied by changes in other parts that are necessary to reach an idealized vision of the whole. Hence, he referred to a systemic change as to recognize “the interrelationships and interdependencies between the educational system and its community, including parents, employers, social service agencies, religious organizations, and much more, with the consequence that all stakeholders are given active ownership of the change effort.”

OECD countries adopted no fewer than 450 education reforms between 2008 and 2014 (OECD, 2015). Considering the fast-paced economic, social and demographic environments that surround education, efforts for education systems to adjust, improve and drive the future appear warranted. There is little evidence of whether education reforms have an effect, however, because educational impacts are challenging to assess and seldom evaluated. Even when reforms do have an impact, stakeholders are easily dissatisfied with the outcomes and they tend to hold policy makers accountable for them (Gallup, 2017; Corbier, 2017). Similarly, there is little knowledge about the actual processes that produce, or are supposed to produce the desired outcomes. These processes “between the establishment of a policy and its effects in the world of action” (O'Toole, 2000) are commonly referred to as policy

implementation, even if there is no consensus on the definition. There is indeed a difference between passing a policy bill or a strategy and turning it into daily practices for teachers, school administrators and local communities. Implementation details may be left for administrations and educators to figure out, effectively leaving the reform process half-way through (Hess, 2013). Observing that policies often do not get implemented as planned, or not with the desired outcomes, governments, experts and international organizations have come to acknowledge the need to focus more on implementation processes. (Gurría, 2015; Wagstaff, 2013; Pont, 2008; OECD, 2016)

Challenges to implementing education policy include coordination issues, inadequacy of organizational resources, actors' capacity or reactions against reforms. But as the education sector has become more complex, the challenges of putting change into practice have also evolved. Education stakeholders are increasingly diverse and growing more vocal and ambitious about what education systems should look like. The use of technologies contributes as well to making education systems more complex.

Interactions between actors and between the various levels of education systems (national, regional and local) weigh more in the policymaking process. New questions are emerging about who is responsible to do what in the systems, how to hold them accountable and how the implementation process itself can contribute to enhancing education (Burns, Köster and Fuster, 2016). In fact, "education policy implementation" refers to different realities for different people: educators and students may consider policy implementation as the changes they bring to their everyday practices of managing schools, teaching, and learning. For national policy makers, implementation may refer to what needs to be executed to bring their new policy down to districts and schools. For regional or local policy makers, it may mean making choices about changing priorities, and use of resources.

The different definitions of education policy implementation found in the literature convey specific perspectives on the policy process (Datnow and Park, 2009). Traditionally, policy makers see education policy implementation as a technical stage of the policy process in which the decision they have taken gets executed by the administration and educators throughout the system. Although they observe implementation failures, their solution is often to instigate more rational public management practices and monitor the implementation processes more closely.

This top-down perspective on implementation is challenged, especially in the case of more complex education systems. Scholars now tend to define implementation rather as an iterative, political process wherein actors influence the outputs and outcomes of the policy. Literature that focuses on “bottom-up” perspectives does not look at implementation per se, but at the policymaking process as one intricate political game. Such perspectives are essential to understand the complexity of implementation, but are challenging to integrate in practical advice for education policy actors, especially those making policy at the national level. If policy makers and stakeholders want policies to be effective and improve education, they need to share a common understanding of implementation to be able to work together on the process. Between top-down and bottom-up approaches to policy making, this paper shows that education policy implementation is actually quite a complex process but “thorough implementation of policy change in education is actually possible”, in spite of this complexity (Mason, 2016).

CHAPTER III

INSTITUTIONAL CONTEXT OF MINISTRY OF EDUCATION

The ancient educational systems are Monarchies Period Economic System, Colony Period Education System and Parliament Democratic Period Education System. But the Monarchies Education system was very far to be traced. It is needed to study the history of Educational System while analyzing the institutional context of Ministry of Education.

3.1 Overview on the History of Education in Myanmar

The education in Myanmar has long been regarded as important and significant. Traditionally, boys were taught at monastery schools, where they would learn Burmese and basic arithmetic skills. In the past, all boys eight to ten years of age would begin attending school in a nearby Buddhist monastery, where they would learn about Buddhism and be taught to read and write. Those schools gradually gave way to public schools, but many young men continue to receive some education in monasteries. Under that system, few women were educated; their education took place mainly at home as they learned how to perform domestic tasks.

Modern education began under King Mindon (1853–1878), who built a school for an Anglican missionary. British colonial rule caused a shift towards a Westernized education system. Christian missionary schools in Yangon, Mandalay and other major cities served as preparatory schools for the upper classes. During this period Burmese universities were thought to be the most prestigious in Southeast Asia.

Under the British, secular education spread and the country achieved a relatively high level of education. During British colonial rule, educational access for women improved tremendously. In the pre-colonial era, male education was emphasized in the traditional Buddhist monastic education system. The number of female students enrolled in school rose 61 percent (by 45,000 students) from 1911-1921, and another 82 percent (100,000 students) from 1921 to 1931 with expansion of the colonial and private education system, primarily in the form of all-girls schools.

This was mirrored by an increase in female employment. From 1921 to 1931, there was a 33 percent increase in employment of women in public administration, law, medicine (96 percent increase), education (64 percent increase), and journalism sectors.

3.2 The Education of Myanmar in Pre-Independent Era

The European colonialists invaded the Asian countries including Myanmar, rapidly. The Christian missionaries were also included among the pioneers. The Christian missionaries penetrated the outdated educational system of Myanmar and it is noticed that they brought the updated Western Education to Myanmar. The Christian missionaries used to give of education as one of the mission strategies. They opened mission schools and taught Christian religious education general knowledge. And they persuaded the native people to do as well as mission work.

Approximately, the Christian education was brought to Myanmar during the Nyaungyan Era. The pioneer missionaries were from Barnabas Society of Italy. The most famous missionary was Father Calchi who arrived to Myanmar during the time of Lord of Sunday (1714-1733). Later on, British, French and American missionaries came to Myanmar respectively and they opened the mission schools and did mission works. Before the coming of the invaders to Myanmar, the British Roman Catholic missionaries were there already. Some scholar suggest that the missionaries could settle down in Myanmar since 1721. It finishes that they opened mission school only at the mission level Head Quarter but later they extended their field gradually. Among the English missionary, Adoniseum Johnson was the most famous one.

Not only basic education, higher education or university education was initiated at Yangon Government High School in 1878 to sit for Intermediate Examination of Calcutta University. At the University expanded its scope for higher education, four colleges were further extending and affiliated. They are the Medical College, the Teachers' Training College, the Agriculture College and the Intermediate College Mandalay. When the Second World War broke out in 1941, the Rangoon University was closed on 15th January, 1942. After Japanese occupied the whole of Burma, they opened the University at the St. John Girl's School (Present: State High School No.2 Latha).

The British colonists penetrated the Asian countries in the name of the so-called traders but they later colonized those countries and they also forced slavery

system to those countries. When India was occupied by the East India Company, the Indians became the forced labors. At that time, the purpose of the educational system of the East India Company was to introduce the western literature and education system to India and Myanmar through the missionaries.

The purpose was one of the strategies of establishing colonial countries and to hold on that power longer than longer. The purpose of establishing colonial countries was to get more interests from other countries. They took the raw materials from colonial countries by a very low price and sold back to the other countries with very high price after transform from raw material good to finish goods.

So, the British colonists trained and employed the native people who would be faithfully served them. This is the purpose and the policy of the colony education. The British invaders believed that they would be able to keep all the native people under their authority after imparting the western literature and culture. Because imparting of literature and culture to others is one of the best ways to influence other people. Therefore, the British colonists sent the missionaries to teach their culture and literature to other countries and in this way, they began the history of colony education.

The British Government drew the system only which was beneficial to them. As it is mentioned above, at that period, people are only getting the colony education system.

3.2.1 The Conditions of Education in Post-Independence Era

In the 1950s, Burma was one of the richest countries in Asia with a high literacy rate. When Burma gained independence in 1948, the government sought to create a literate and educated population, and Burma was believed to be on its way to become the first Asian Tiger in the region. However, 1962 coup d'état isolated and impoverished Burma. All schools were nationalized and educational standards began to fall. Burmese replaced English as the medium of instruction at Burmese universities in 1965, with the passing of the New University Education Law a year earlier. This led to a rapid decline in English proficiency among the Burmese. English was reintroduced as a medium of instruction in 1982. In 1977, the 2-year regional college system was introduced by the Burmese government, as a way to disperse college students until they were about to graduate (the third and fourth years were spent at a traditional university), a system that was ended in 1981.

3.2.2 Education System Under SLORC/SPDC Period

Due to students' protest of 8888 Uprising, all universities were closed around Burma for 2 years. Since 1990s, new structure of education system was weak as government faced crisis to universities' clash and set up a 6th months term for an academic year. The SPDC government arranged irregular commencement dates for universities and colleges, however, students were still in que and clash. Another series of students' strike in 1996 and 1998 resulted in another 3 years of closure. After the re-opening of universities and colleges in 1999, the government scattered universities in different regions. The relocation of certain universities was made under relative ministries. New system had been made that the university term was shortened by one year, providing a bachelor degree for just three-year course. However, improvement was rapidly made despite the early disturbances. In 2005, the Ministry of Foreign Affairs officially announced that Burma education was reaching an international standard and the government had fully entitled to 156 universities and colleges in Myanmar.

3.3 Education System Reform: 1988 Onwards

After Myanmar introduced the market-oriented economy in 1988, there were many changes in all sectors and fields of development. Development is a process of structural change in the economic, political, social and cultural domains. The broader goal of development is to bring the entire population into the mainstream of the national development process, both as contributions and beneficiaries. "Education is the most virtual of all resources for development and it is no longer limited to either schooling or the production of entrepreneurs capable of increasing the gross national product, but rather aims at the development of human resources for a wide range of purposes. The concepts of development and the role of education system are determined by the socio-economic and political features and cultural patterns of each nations.

Also, the goals of education are societal goal that extend beyond the sector boundary of education. Thus, ideas for reform may originate not only from within the education sector but also from other external sectors. More after than that, such ideas come from areas outside of education or from the society at large. In Myanmar, the

Ministry of Education laid down basic strategies for necessary reforms with regards to governmental policies and measures in various aspects so as to secure such education would be compatible with the social changes and cultural development of the country. The market-oriented economic environment is undoubtedly congenial to development and reform process of higher education. The country's chief macroeconomic indicators called for urgent and extensive reform and development process in higher education.

3.3.1 Education System under New Democratic Government

On 30 March 2011, as prioritized tasks for upgrading the quality of education, at the first regular session of Pyidaungsu Hluttaw, the President of the State gave guidance to give special focus on the implementation of following tasks for the upgrading the quality of national education.

- To implement free compulsory primary education system
- To increase the enrollment rate in basic education sector
- To nurture new generation as intellectuals and intelligentsia in human resource development
- To improve qualities of teachers in both basic and higher education sectors
- To utilize teaching aids more effectively
- To upgrade the quality and the socio-economic status of educational personnel
- To provide scholarships, stipends and awards both locally and internationally
- To promulgate relevant laws for the participation and contribution of private sectors in education services
- To collaborate with local and international organization including the UN, NGOs and INGOs; and
- To upgrade education standard to international level.

Since 2011, the government initiated critical reforms for politics, economics and social sector. The first wave of reforms emphasized on solidifying national reconciliation, building good governance and clean government. The second and third waves of reforms were launched in 2012, and 2013 respectively, focusing on speedy improvement of economic and social well-being of the people of Myanmar. The

government formed a National Economic and Social Advisory Council (NESC), while the leading figures in core economic ministries were recruited with scholars, academicians and technicians. The NESC laid down the Framework for Economic and Social Reforms (FESR) for further development of respective sector.

3.3.2 An Overview of the Education Reform Process and Progress in Myanmar

With the vision of creating an education system that will generate a learning society capable of facing the challenges of the Knowledge Age (CESR. Myanmar Comprehensive Education Sector Review [Online]), the Myanmar government is implementing long-and short-term plans to improve the country's education system. As the educated population and workforce are demanding economic growth and poverty reduction, the government of Myanmar has made many efforts to strengthen the education sector. Since 2011, the civilian government, led by the former president, made nation-wide reforms particularly in the education sector in order to upgrade human resources. The newly democratic government of Myanmar, which was formed in March 2016, has also made the overhauling of the education system a national priority with the purpose of meeting the increasing need for human capital.

In Myanmar, the Ministry of Education (MOE) is the main provider of education. The MOE is primarily responsible for the provision of the basic education sub-sector, which is divided into three levels: primary, lower secondary and upper secondary (KG+12 (5-4-3)). Besides the MOE, there are some other ministries such as Ministry of Defense, Ministry of Health and Sports, and Ministry of Religious Affairs and Culture that are responsible for the provision of the higher education sub-sector, and the Ministry of Science and Technology takes responsibility for vocational education at the tertiary level. (MOE)

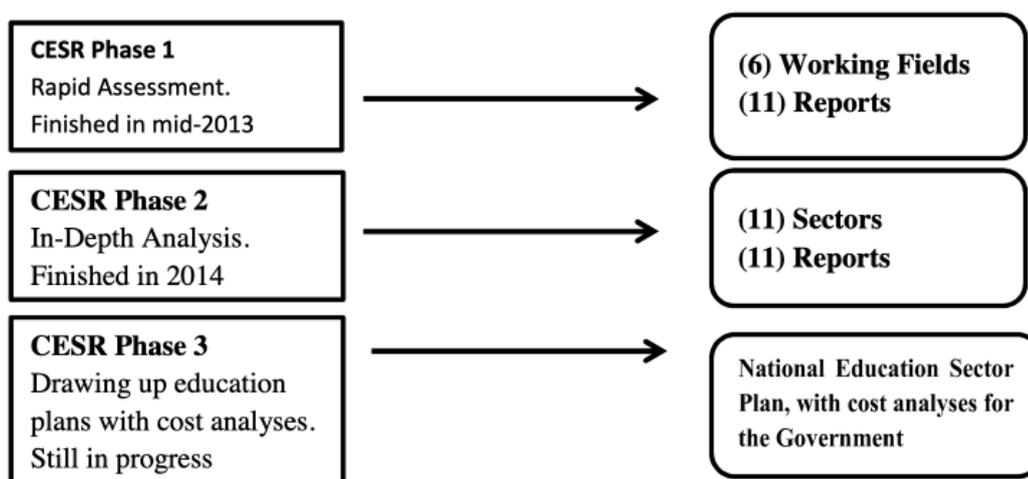
3.3.3 The Process of Myanmar Education Reform Building a Good Education System is a Long-term Process

Therefore, successive governments of Myanmar have implemented not only short-term plans but also long-term plans to improve the education sector. The Ministry of Education formulated the Special Four-Year Education Development Plan from the 2000-2001 Fiscal Year (FY) to the 2003-2004 Fiscal Year (FY) to develop

the education sector and to strive for the development of highly qualified human resources. In addition, in 2001, as a long-term plan, the Myanmar government set up the 30-Year Long-Term Basic Education Plan (FY 2001-02 to FY 2030-2031) to be implemented in six phases each of five-years duration. The 30-Year Long-Term Education Development Plan contains 10 programs for basic education with the purpose of promoting greater access to, and quality of, basic education, and 36 programs for the higher education sector which focus on six areas that will generate qualitative development of higher education and contribute to national development endeavors and the preservation of national identity and culture (MOE). Moreover, in February 2012, to initiate the pragmatic reforms in the education sector that are the most important factors in the development of the country, the Conference on Development Policy Options with Special Reference to Health and Education Sectors was organized by the government and development partners. As a result of this conference, an official launch of the Comprehensive Education Sector Review (CESR) followed in July 2012 with the collaboration of development partners and internal and external experts. This was the second time a CESR had been formed; the first was in 1992. The aim of a CESR is to set up a plan to understand what the current situation is and a strategy to achieve quality improvement and development in the education sector.

CESR focuses on the following areas: (1) policy, legislation, management and finance; (2) basic education; (3) teacher education; (4) non-formal education; (5) technical vocational education and training (TVET); (6) higher education; and (7) information and communication technology (ICT) (UNESCO, 2014a). CESR's process is an in-depth analysis of education to develop a strategy to improve the access to, and quality of, education throughout the country. There are three phases in CESR: Phase 1-Rapid Assessment; Phase 2-In Depth Analysis; and Phase 3-Development of one overall National Education Sector Plan, with cost analyses for the government.

Figure (3.1) The Process of Educational Policy Reform



Source: Ministry of Education Myanmar

Then, in October 2013, the government formed an Education Promotion Implementation Committee (EPIC) and 18 thematic working groups to formulate policies and plans for pragmatic education reforms. The main task of CESR is to develop recommendations for reform of the education system, and the main purpose of EPIC is to draft policies for the implementation of educational reform. At present, the CESR team and the EPIC working groups are collaborating to develop an education reform agenda. CESR and EPIC come together to work on Phase 3 of CESR and they have already drawn up the following two plans:

- (i) A two-year plan covering 2014-16
- (ii) A five-year plan covering 2016-21 (UNESCO, 2014a)

The CESR is now in the last stage of implementing a sector-wide costed National Education Sector Plan (NESP), with the overall goal of improving teaching and student learning achievement in all schools and educational institutions by 2021.

3.4 Review of Policy and the Legal Framework

A country needs to adopt good policies to improve its education sector so that it can produce better outcomes. In view of this, the former governments of Myanmar tried to improve education by introducing a new education reform agenda to the sector. The most significant elements of Myanmar's education reform were started by the previous government, such as introducing the 10-point education policy as mentioned above, and prescribing the laws relating to education. The Comprehensive

Education Sector Review (CESR), which, as discussed above, started in 2012, was established along with the Framework for Economic and Social Reform–FESR (focusing on poverty reduction). The CESR Phases focused initially on a rapid assessment and in depth analysis to support the EPICE education Promotion Implementation Committee (EPIC). Eighteen thematic working groups were established to formulate the policy, which aimed to achieve quality improvement and the development of the education sector, (MOE, 2014). Another significant step in the reform process in the education sector can be seen in the process of enacting the laws relating to education-drafting laws relating to education is an ongoing process in the parliamentary legislative calendar.

3.4.1 Previous and Current Legal and Policy Foundation

The fundamental law of Myanmar is the Constitution of 2008, which serves as the foundation for the nation’s transition towards democracy and the reform of its education sector. The Constitution of 2008 describes the obligations and duties of the Union with regard to education, and the right of all Myanmar citizens to education. Most importantly, in clause 366, the Constitution describes its obligation to citizens regarding their right to education (in Chapter 8: Citizens, Fundamental Rights and Duties of Citizens): Article 366 stipulates that: “Every citizen shall, in accordance with the educational policy laid down by the Union:

- (a) have the right to education;
- (b) be given basic education which the Union prescribes by law as compulsory; and
- (c) have the right to conduct scientific research, explore science, work with creativity and write, to develop the arts, and conduct research freely with other branches of culture.”

Again, in Chapter 1, the Constitution describes the obligations of the Union in respect of the provision of education, which is linked to the health sector: “The Union shall:

- (a) earnestly strive to improve the education and health of the people;
- (b) enact the necessary laws to enable the Nation’s people to participate in matters of their education and health;
- (c) implement a free compulsory primary education system; and

- (d) implement a modern education system that will promote all-around correct thinking and a good moral character, contributing towards the building of the Nation. Moreover, in support of democracy, the government is required by the Constitution to enact necessary laws to ensure that citizens have the opportunity to participate in matters relating to improving the education system.

3.4.2 Previous and Current Government Policy and Programs to Improve Access to Education

A particularly significant step in the reform of the education sector was the previous government's reform agenda on education. The President's 10 points education reform agenda was announced at the first regular Session of the first term of Pyi Daung Su Hluttaw on 30 March 2011, and this served as a strong initiative to speed up the reform process in the education sector. To support education reform, the 20-Year Long-Term Plan called the "Basic Education Sector National Education Promotion 20-Year Long-term Plan 2011-2031" was written and reflects the President's 10-point education policy as well as listing the key points of the 30-Year Long-Term Education Plan. The 20-year plan also includes key policy measures currently being implemented for enhancing access to education such as, implementation of the free, compulsory primary education program, and the awarding of stipends for students from needy families. Furthermore, the school grant program can be seen as another significant step in the reform process for enhancing access to education and speeding up the decentralization of the administrative structure for basic education. The current government set up the 16 point reform agenda, which is still in force, to implement quality assurance systems in all educational sectors, to promote inclusive education for all citizens and to promote decentralization.

CHAPTER IV

ANALYSIS ON THE EDUCATION SYSTEM REFORM

4.1 Restructuring Organization

In 2015 April, the Ministry of Education has been restricted as shown in Table (4.1). To enhance the effective management system, the (9) numbers of Departments under Ministry of Education has been reorganized into (7) numbers of Departments.

The two Departments of Higher Education for lower and upper Myanmar has been merged into one, names as Department of Higher Education, and three Departments of Basic Education No.(1),(2) and (3) have also been combined into one department. The department of Educational Planning and Training has been divided into two departments, namely Department of Teacher Education and Training and Department of Human Resource and Education Planning for emphasizing the quality of teachers and teaching methods.

Table (4.1) Restructuring Organization in Ministry of Education

Sr.	In 2014-15	Sr.	In 2015-16
1	Union of Minister Office	1	Union of Minister Office
2	Department of Higher Education (Lower Myanmar)	2	Department of Higher Education
3	Department of Higher Education (Upper Myanmar)		
4	Department of Myanmar Language	3	Department of Myanmar Language and Linguistics
5	Department of Basic Education No.(1)	4	Department of Basic Education
6	Department of Basic Education No.(2)		
7	Department of Basic Education No.(3)		
8	Department of Educational Planning and Training	5	Department of Teacher Education and Training
		6	Department of Human Resource and Education Planning
9	Department of Myanmar Educational Research	7	Department of Myanmar Educational Research
10	Department of Myanmar Examinations	8	Department of Myanmar Examinations

Source: Ministry of Education

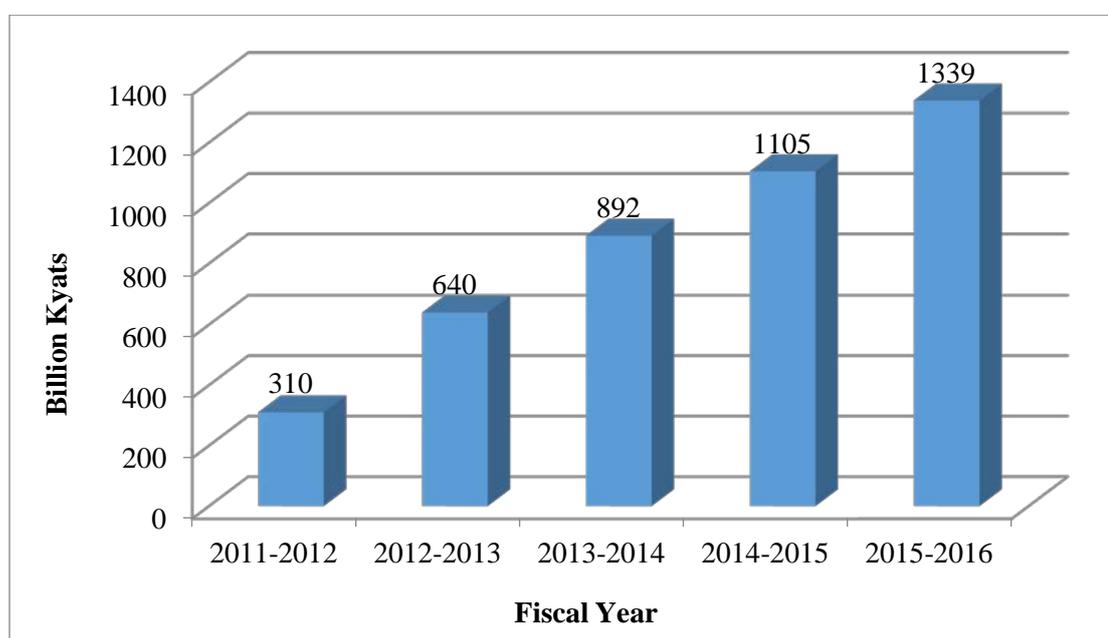
4.2 Achievements and Progress of Myanmar's Education Reform

With the upgraded education policy reform in 2011, there are many improvements gained in various parts of education sector. Due to the increased amount of expenditure, student's enrollment rate and number of schools around Myanmar were rapidly gained.

4.2.1 Education Expenditure

There are much progress which is being achieved by the Myanmar government's Education Reform Program since it has been in operation for five years. For example, the government has made a commitment to a substantial increase in the overall education budget, and, as Figure 4.1 shows, it has already been increasing since 2011.

Figure (4.2) Government Expenditure on Education from the Fiscal Year 2011-2012 to 2015-2016



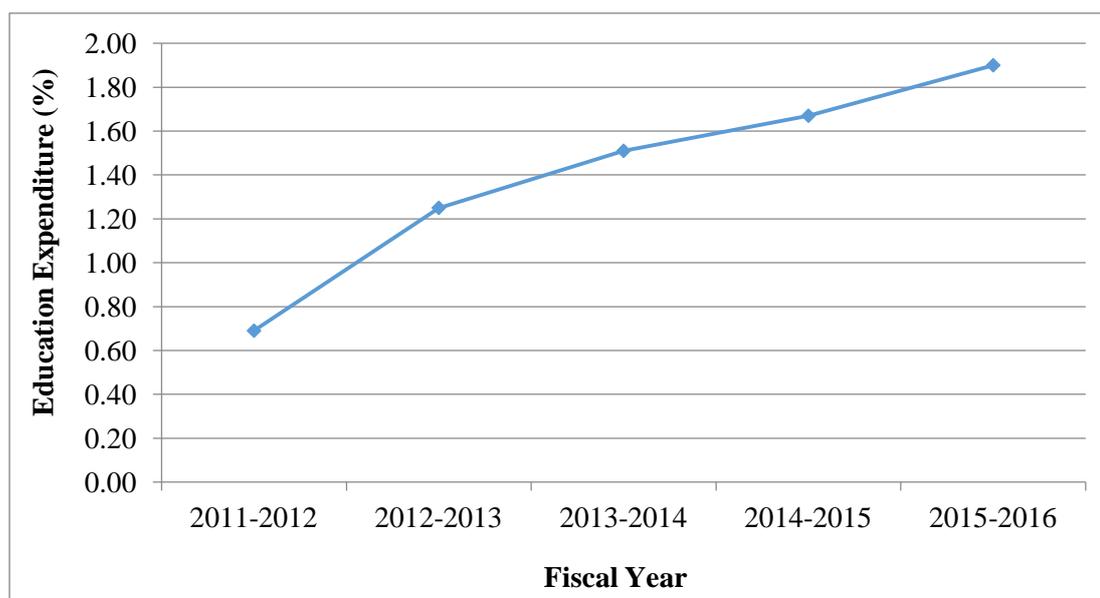
Source: Myanmar President Office

Figure (4.1) above shows that government expenditure on education in fiscal year 2015-2016 was four times that of fiscal year 2011-2012. This rapid rise in government expenditure can also be seen in a comparison between fiscal year 2011-2012 and fiscal year 2012-2013, during which it increased by more than 100 percent.

And also the government invested USD 100 million in a school grants and stipends program. School grants rose to a minimum of 800,000 kyats, equal to nearly USD 700 per school, and students tip ends have also increased. There is also an extension to the scholarship programs, and to the scouts and girl guides programs. The government provides a free school uniform for kindergarten (KG) students, a free school uniform, free textbooks and six free exercise books for primary school students, and free text books for secondary and upper secondary students.

4.2.2 Education Expenditure as a Percentage of GDP

Figure (4.2) Myanmar’s Education Expenditure as a Percentage of GDP



Source: Government’s significant efforts in respect of education 42 and Ministry of Planning and Finance, Public Centered Development

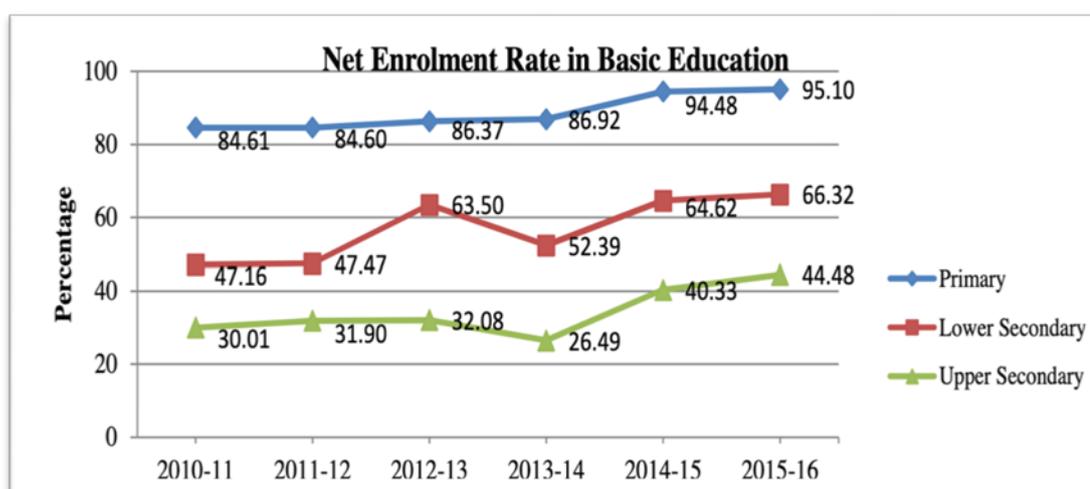
Government expenditure on the education sector increased fourfold from 2011-2012 fiscal year to 2015-2016 fiscal year. However, as a percentage of GDP, there was a smaller, albeit steady, increase. Currently, spending on education is almost two percent of GDP. The amount of annual budget spent on education has been increasing but when compared to the annual budget as percentage of overall government expenditure there has been only a small difference.

As part of the basic education reform program of the Ministry of Education, anew basic education structure of KG+12 (kindergarten plus 12 years) was introduced for the Academic Year (AY) 2016-17. In order to conform to the basic education

structure of other countries in the ASEAN region, the previous education structure (5-4-2) (grade 1 to 5 for primary level, grade 6 to 9 for lower secondary level, and grade 10 to 11 for upper secondary level) was transformed into the KG+ (5-4-3) structure. The new basic education structure KG+12(5-4-3) consists of kindergarten, five-year-schooling for primary level, four-year-schooling for lower secondary level and three-year-schooling for upper secondary level. The new KG is for five-year-old (the official school age starts from the age of six) and it was launched with a new curriculum.

These KG students will be promoted to Grade-1 next year, and they also have to learn in accordance with another new curriculum, which has already been drawn up. One of the most significant achievements has been eliminating entrance fees for high schools starting from AY 2015-2016. The entrance fees were eliminated for primary schools from AY2010-2011 and for middle schools from AY 2013-2014. Primary education is free and compulsory in Myanmar.

Figure (4.3) Net Enrollment Rate in Basic Education



Source: Ministry of Education Nay Pyi Taw (2016)

The enrolment rate in basic education rose in AY 2015-2016 compared with the previous years. As the government eliminated entrance fees for every level, the enrolment rate rose at every level of education in AY 2015-2016. Moreover, implementing the free compulsory education system for primary students, and providing stipends and scholarships are also reasons behind the increasing student enrolment rate.

4.2.3 Comparing the number of Basic Education Schools, and Students between AY 2007-2008 and AY2013-2014

Table (4.2) Number of Basic Education Schools, and Students (AY 2007-2008 vs. AY 2013-2014)

Sr. No.	No. of Schools, and Students	AY 2007-2008	AY 2013-2014	Increase (%)
1	Basic Education Schools			
	Upper Secondary (High) Schools	1,095	2,795	155.3
	Lower Secondary (Middle) Schools	2,159	3,748	73.6
	Post-Primary and Primary Schools	36,144	36,638	1.4
	Total	39,398	43,181	9.6
2	Students			
	High School	657,108	745,946	13.5
	Middle School	2,077,024	2,586,270	24.5
	Primary School	5,042,016	5,265,132	4.4
	Total	7,776,148	8,597,348	10.6

Source: 2015 Education for All, National review report

The number of schools and students has increased dramatically compared with 39,398 basic education schools, and 7,776,148 students in AY 2007-2008, there were 43,181 basic education schools (a 9.6 percent increase), and 8,597,348 students (a 10.6 percent increase) in AY 2013-2014. In addition, the government opened more new schools in neglected and remote areas to achieve a balance between the number of students and the number of classrooms.

Table (4.3) Increasing Number of Teachers during 5 Years from Academic Year 2011-2012 to 2015-2016

Sector	2011-2012	2015-2016	Increased Number
Basic Education	277,644	331,619	53,975
Higher Education	11,074	13,307	2,233
Teacher Training	1,334	1,868	534
Total	290,052	376,188	86,136

Source: Ministry of Education 2016

Another significant achievement of the education reform over a five-year period was the substantial increase in the number of teachers. To reduce the teacher-pupil ratio, the government recruited more teachers for every level of education. In rural and remote areas, university graduates who are residents of these regions were appointed as primary schoolteachers in 2013 and 2014 to increase the numbers of teachers. As more schools have opened around the country, more teachers have been appointed. As Table (4.3) shows, 53,975 more basic education teachers, 2,233 more higher education teachers and 534 more teacher trainers were appointed in AY 2015-2016 than in AY 2011-2012. Some achievements can also be seen under the category of policy and law. The Private Schools Registration Law was enacted in 2011, the National Education Law was approved in 2014, the Amendment of the National Education Law was passed in 2015. Since the Private Schools Registration Law was passed in 2011, 335 private schools have been allowed to open. The current government of Myanmar set up a 100-day plan for every ministry, and the Ministry of Education laid down eight main processes such as upgrading schools, more efficient programs for school enrolment, and assessment programs for teachers in giving lectures in order to promote the education sector. During this period, to accomplish the eight main processes, the MoE has upgraded schools and carried out programs for school enrolment, sanitation, health and development.

Moreover, the ministry has relaxed some rules for faculty members of universities and colleges to enable them to attend doctorate courses. The ministry also instituted Alternative Education to give a second chance to learn for children who, for a variety of reasons, were unable to finish their formal education. Assessment programs for teachers giving lectures in the education and training sectors were also

created, and the ministry worked with 18 other ministries and 14 regional governments to open short-term vocational training schools in Nay Pyi Taw, Yangon and Mandalay.

4.2.4 Capacity Building Support for Quality Education

Teachers perform a crucial role in education and that is why the government is planning to enhance their skills. Teachers who graduated and have higher qualifications, and those who are particularly motivated, are selected for teacher training programs.

Teachers are trained in different subjects depending on the level at which they will be teaching. For example, more than 20,000 primary school teachers have been trained in the Child Friendly School and Child Centered Approaches, 4,254 Grade 1 teachers have been trained to help children to make the transition from home/Early Childhood Care and Development Center-ECCD (which was formed by the Early childhood care and development law in 2014 with the objective of development of children in all sectors such as physical, mental and social sectors) to school, and 16,390 secondary teachers have been trained in Life Skills Education. As a further strategic approach to capacity building, the development of a National Teacher Education strategy that includes the design, capacity development and management of the teacher education system, teacher qualifications and continuing professional development has been initiated. As Myanmar raises the quality of its education system, it needs teachers with the right values, skills and knowledge to be effective practitioners. Therefore, Myanmar needs a strong system of teacher education, with program that provide the theoretical foundations to produce graduates with the kinds of professional knowledge, understanding and skills associated with the role of the teacher and the process of teaching. That is why the Myanmar Teacher Competency Standards Framework (TCSF) have been developed by a group of national professional education experts and UNESCO education specialist so year a period of eight months in 2015-2016. UNESCO through the Australian aid funded Strengthening Teacher Education in Myanmar (STEM) project, provided technical assistance in developing the framework. The main objective for the development of this framework is to establish an agreed set of teacher competency standards to support improvement in the quality of teachers and teaching in Myanmar. The independent development organization, VSO International, in partnership with the

British Council, is also providing teacher development training in Myanmar. A project funded by the Department for International Development (DFID), provided two years of teacher training in education colleges, led by foreign education professionals, in 2014. English was taught in the first year of the program, and followed by teaching methodology.

4.3 Challenges and Barriers in Myanmar’s Education Reform

Myanmar is trying to make overhauling the education reform a national priority for human development with an enlarged budget, a new national education law and the removal of public school fees. However, significant challenges remain. Below are some of the initiatives taken by the government to deal with these challenges.

4.3.1 Literacy, General Education Level of Youths and Student-teacher Ratio

Literacy and educational attainment have strongly influences on employment prospects. Some 20 percent of households in Myanmar at the national level have no members of working age who can read or write a simple message. This figure shows as low as 11.6 percent in urban areas but rise to 23.4 percent in rural areas. The percentage of households with females of working age, none of whom are literate is 18 percent.

Table (4.4) Literacy Rate at Urban and Rural Levels, 2016

Characteristics	Urban	Rural
% of households with no literate members	11.6	23.4
% of households with no literate female members	10.3	21.0

Source: ILO, the survey in March 2016, by the Ministry of Labor, Employment and Social Security and the Central Statistical Organization of Myanmar with the support of ILO

Table (4.5) Percentage of Youths who have Reached the Various Levels of Education in Urban and Rural Areas, 2015

Domain	Percentage of Youths with Level of Education								High school and above	Literate below high school
	Not literate	Below primary	Primary	Middle	Vocational certificate	High school	Under graduate diploma	Bachelor degree and above		
Urban	2.4	7.8	23	36	0.7	13.5	4.8	11.8	30.1	67.5
Rural	6.9	16.6	37.1	27.7	0.2	7	1.3	3.1	11.4	81.6

Source: ILO, the survey in March 2015 by the Ministry of Labor, Employment and Social Security and the Central Statistical Organization of Myanmar with the support of ILO.

According to the table above, there is a significant difference between urban and rural areas in respect of the numbers of young people who complete education at the level of high school and above-30.1 percent in urban areas as opposed to 11.4 percent in rural area. Below high school level, there is 67.5 percent of youths in urban areas versus 81.6 percent in rural areas. So there are more students in rural areas who are below high school level than urban areas.

Table (4.6) Student-teacher Ratio Compared with Neighboring Countries, 2014

	Myanmar	Brunei	Cambodia	Indonesia	Laos	Thailand	Vietnam
Primary	28:1	10:1	45:1	17:1	25:1	15:1	19:1
Middle (Lower Secondary)	36:1	10:1	20:1	17:1	19:1	21:1	16:1

Source: UNESCO, pupil-teacher ratio by level of education

According to the table above, there is a significant higher student-teacher ratio in Myanmar compared with other countries in the region. At the primary level, Myanmar has the second highest in student-teacher ratio at 28:1 compared with Brunei's 10:1 which is the lowest in the region. The highest country in student-teacher ratio is Cambodia as 45:1. At the secondary level, Myanmar's student-teacher ratio is the highest at 36:1 while Brunei is the lowest at 10:1. Myanmar's student-teacher

ratio is almost four times that of Brunei. Overcrowded classes are detrimental to effective teaching. The student-teacher ratio is an important indicator of the level of investment in education.

The Department of Basic Education under the Ministry of Education is trying to solve this problem. To reduce the teacher-to-pupil ratio, the government recruited more teachers for every level of education. In rural and remote areas, university graduates who are the residents of these regions were appointed as primary school teachers in 2013 and 2014 to increase the numbers of teachers. As more schools have opened around the country, more teachers have been appointed. And another way to reduce high student-teacher ratios is through the government announcing that teachers who graduated from the Education College will be recruited as permanent teachers and teachers who have 10 years' experience in the middle school post will be promoted to temporary high school posts with three year contracts.

4.3.2 Constitutional and Legal Support for the Education of Ethnic Groups

It is estimated that there are more than 130 ethnic groups in Myanmar, though the government usually identifies only eight as the major ones. In the Constitution the nation is responsible for supporting the language and literature of "National races" but it does not provide exact definitions, so that legislation is needed to ensure government support for educational opportunities, including non-formal education for children who live in areas of conflict or in remote, hilly regions. Education law relating to indigenous languages needs to be drafted to ensure that children who speak a language other than Myanmar receive teaching and can read literature in their own languages, and so that the languages and culture of ethnic minorities are maintained.

According to Chapter 1, clause 22, of the 2008 Constitution of Myanmar, the Union Government of Myanmar is committed to assisting in developing and improving the education, health, language, literature, arts and culture of Myanmar's "National races." "The Union shall help:

- (a) to develop language, literature, fine arts and culture of the National races;
- (b) to promote solidarity, mutual amity and respect and mutual assistance among the National races; and
- (c) to promote socio-economic development including education, health, economy, transport and communication, and so forth, of less-developed National races."

4.3.3 Teacher Qualifications and the Quality of Education

The quality of education mainly depends on the teachers' qualifications, competency and level of professional development, as well as other relevant factors such as the student-teacher ratio, the curriculum, learning materials and infrastructure.

4.3.4 Teacher Qualifications

Inadequately trained teachers can have a detrimental effect on teaching and learning. In general, a university degree is needed to be a primary level teacher in Myanmar. In some places where there are not enough university graduates, teachers at the primary level are required to have a level of education higher than matriculation, and to have completed one or more teacher training sessions. However, some teachers have never attended any teacher training sessions, but after gaining some teaching experience, they are permitted to attend that training. However, there are still not enough teachers in two-thirds of schools especially in crowded rural schools. To combat this issue, the government is planning to give pre-service and in-service teacher training.

Table (4.7) Teacher by Academic Qualification

Period	Graduates	Non-graduates	Total
2007	229,702	24,450	254,152
2008	237,080	22,252	259,332
2009	243,895	12,577	261,472
2010	255,642	17,339	272,981
2011	253,299	24,345	277,644

Source: Central Statistical Organization, Ministry of Planning and Finance, teachers by academic qualifications

4.3.5 Curriculum Reform and Teaching Methodology in Myanmar Education

A proper curriculum is fundamental to good teaching, and is required at every level of education. Upgrading Myanmar education standards to reach an international level is one of the tasks for the enhancement of national education laid down by the former president. To achieve this, there are vision of the school curriculum, which has been used for over a decade, has been required. The primary education curriculum

was revised in AY 1998-99 and its introduction began in AY2000-01. The upgraded curriculum for the upper secondary level was implemented in AY 2000-01, and for the lower secondary level in AY 2001-02. The Seminar on Upgrading Curricula and Syllabi of the Basic Education High School Level was held in April 2006, with the aim of modifying and upgrading the high school curriculum to the international level. The currently used upper secondary school curricula and syllabi were implemented in AY 2008-09. Subjects designed for every level from primary to lower secondary are compulsory.

As for upper secondary, Myanmar, English and mathematics are compulsory, but students then have a free choice of any three elective subjects from physics, chemistry, biology, geography, history, economics and optional Myanmar. Since the objectives of the primary curriculum should include basic life skills such as literacy, numeracy, hygiene, and thinking and reasoning, the topics of General Studies (natural science, moral education and civics, and life skills), Aesthetic Education (painting and music), Physical Education and School Activities have been added to the lower primary education curriculum. Social Studies (geography, history, moral education and civics, and life skills), Basic Science, Aesthetic Education (painting and music), Physical Education and School Activities have been added to the upper primary education curriculum as co-curricular subjects. Lessons on human rights education are taught under Moral Education and Civics from Grade 6 to Grade 10 and personal hygiene/health education and environmental education are imparted in all basic education schools through various subjects. Life skills education is taught as part of the national curriculum for the purpose of encouraging the students to be able to live harmoniously with the environment—healthily, physically and mentally. Moreover, students' personal skills, interpersonal skills and communication skills are motivated through the life skills curriculum, through the use of child-centered activities and through a participatory and interactive approach.

In Myanmar, teachers are used to textbook-based teaching, and examinations and assessments of students are also textbook-based. However, educational achievement cannot truly be attained through traditions and practices such as rote-learning, teacher-centered approaches, and so on. For the improvement of the acumen, creativity and critical thinking of the students, the government is planning to apply the child-centered approach to teaching nationwide. However, lack of teaching and learning materials, insufficient teachers, overcrowded classrooms, high teacher-

student ratios, overloaded curriculums, rote memorization and exam systems are the reasons for the failure of the Child-Centered Approach (CCA), which has been applied since AY2004-2005 with support from the Japan International Cooperation Agency (JICA) and UNICEF. Teachers sometimes cannot apply CCA, despite their willingness, because of the above mentioned barriers. Furthermore, although teachers are urged to apply the Child-Centered Approach, some still just focus on teacher-fronted 'chalk and talk' and the old exam based system. Although textbooks are provided to enable students to discuss subjects individually or in groups, and to learn to think independently, teachers are eager to finish the textbook exercises or the chapter end tests. So, students lack the skills of critical thinking because the emphasis is on memorizing the lessons learned from the classroom just to pass the exam. Hence, most people agree that the teaching methods of the Myanmar education system still need to be improved.

Improving the quality of basic education is one of the programs to be implemented under the Thirty Year Long-Term Education Development Plan (FY2001-02–FY 2030-31), starting from Academic Year 2016-17, KG + 12 (KG + 5-4-3) is being implemented in the basic education sector. Kindergarteners are being taught using the new, well modified curriculum to meet the changing needs of the current situation. Teachers think that the new curriculum for kindergarten is different from the previous subject based curriculum because the new one will ensure that the kindergarteners understand the whole world and how to behave well in society, based on a teaching approach that uses music, dance, poems, games and storytelling. They believe that this is the best way to create a more enjoyable education environment for these young children. A senior official, who has already participated in the Comprehensive Education Sector Review, said that the updated curriculum will discourage the practice of rote-learning and will ensure that students grow as independent thinkers with their own sense of creativity.

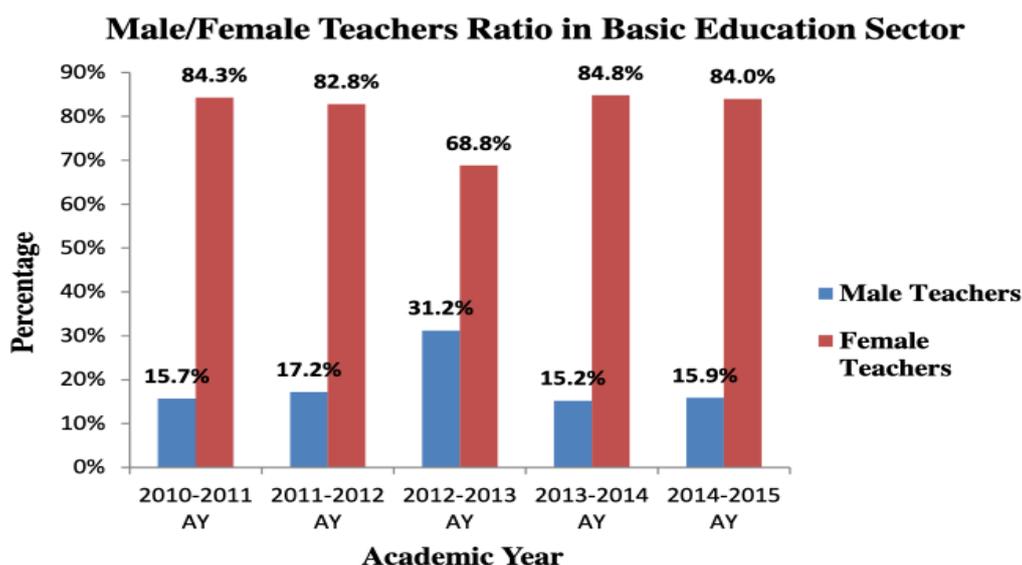
For the secondary education sector, the Myanmar Comprehensive Education Sector Review(CESR) Phase 1 recommended that curriculum reform should be conducted; to meet the needs of a technology-based society facing rapid socio-economic development, to improve quality, reduce overload, remove overlap and gaps in content coverage, and ensure continuity in the current curriculum, to align with the planned restructuring of school grades, and to align the Myanmar curriculum to the ASEAN regional standard.

For the preparation of new curriculum from Grade 1 to Grade 12, primary, lower secondary, and upper secondary level, frameworks for each subject are being designed. Those curriculum frameworks will be submitted to the curriculum committee, and then the Commission of National Education Framework will approve them. Curricula will then be drawn up in accordance with the curriculum frameworks for primary level, lower secondary level and upper secondary level, and they will be used for teaching.

4.3.6 Gender Equality in Education

According to the 2014 Myanmar Population and Housing Census showed that literacy rate for people aged from 15 years and older is 89.5 percent. However, the male literacy rate is higher than that of females at 92.6 percent and 86.9 percent, respectively. According to Article 348 of the Constitution of the Republic of the Union of Myanmar, “The Union shall not discriminate against any citizen of the Republic of the Union of Myanmar, based on race, birth, religion, official position, status, culture, sex and wealth”. Hence, both girls and boys are given the same right in respect of school enrolment in Myanmar, and women have the same right of access to education at any level, either general education or professional education. According to the World Bank, the Gender Parity Index (GPI) of primary school enrolment in 2014 was 0.97 and the GPI of secondary school enrolment in 2014 was 1.02. Therefore, it can be considered that the enrolment rates for girls and boys are almost the same. Moreover, the United Nations Sustainable Development Goal (5) is to achieve gender equality and empower all women and girls. It is, therefore, a requirement for Myanmar to comply. However, gender disparity can be found in the teaching profession. Because of disincentives such as lower salaries, and insufficient accommodation and facilities, most male breadwinners do not choose teaching as their profession and thus, as shown in the chart below, the number of female teachers are higher than that of males.

Figure (4.4) Male/Female Teacher Ratios in the Basic Education Sector



Source: Ministry of Education Myanmar, 2016

4.3.7 Equity

Due to their socio-economic status, most young people from rural areas have few chances to continue their studies. According to the Myanmar Population and Housing Census, for children aged 10 to 15 years from urban areas, the enrolment rate was 76 percent, while for children of the same age from rural areas the enrolment rate was under 53 percent. The census data also shows that for children aged 10 to 15 from rich and financially average families, the school enrolment rate was 85.5 percent, while for children of the same age from poor families the rate was only 28.2 percent. The 2014 Myanmar Population and Housing Census reveals that out of 33.9 million people aged 15 years and over, 30.37 million reported that they were able to read and write. Thus, the literacy rate for Myanmar is 89.5 percent. Literacy rates are higher for males (92.6 percent) than for females (86.9 percent). The labor force has a participation rate of 67 percent of all people who are of working age (15-64), with the proportion of males in the labor force much higher (85.2 percent) than that of females (50.5 percent). Although both the literacy rate and workforce participation rate of males are higher than those of females, in higher education students and teaching professionals are 86 percent female. The teaching profession is traditionally regarded as a female occupation in Myanmar not only for reasons of 'dignity', but also because male students tend to have financial

responsibility for the family and they do not want to enter the teaching profession because of the lower salaries it offers. Despite the positive steps introduced in the government's agenda and in the law covering the rights of people with disabilities (2015), the education system still needs improvement in catering to the needs of the disabled if it is to be all-inclusive. In addition, ethnic-language teaching outside of school hours, which was initiated in AY 2014-15, still needs upgrading if the school curriculum is to remain culturally relevant to indigenous tribes.

4.3.8 Quality of Education

One of the most significant challenges for the education system in Myanmar is quality assurance. The district and township offices are responsible for supporting and maintaining the quality of the school system for basic education. In practice, however, these offices focus mainly on the demands of MOE policies and regulations, and are weak in terms of school and teacher inspections. Although matters relating to vocational training are already covered by the national education law, there is no unifying national qualifications framework for TVET and the higher education sector. In the process of reform, a quality assurance system for universities under the Ministry of Education, along with Internal Audit Teams, has been formed and internal assessments for quality assurance at the program level have been made.

4.4 Policy Options

Strengthening the policy of maintaining the quality assurance system to speed up the reform:

The district and township offices have the responsibility for controlling and maintaining the quality of basic education. However, in the process of reform these offices have been mainly concerned with the demands of MOE policies and regulations, and are still weak in terms of school and teacher inspections. In respect of matters relating to vocational training, these are already covered by the national education law, but there has been no unifying national qualifications framework for TVET and the higher education sector up until 2017. In the process of reform, a quality assurance system for universities under the Ministry of Education, along with Internal Audit Teams, has been formed and internal assessments for quality assurance at the program level have been made (Asian State of Education Report, 2013). In

practice, the government should explain to those offices that have the responsibility to apply and implement government policy to establish quality assurance systems, what the anticipated results and advantages of implementing the policy would be, and also to motivate the host office by giving them an understanding of the expected results of applying this policy. This would encourage those involved to conduct their duties and responsibilities more effectively.

Increasing budget allocation to meet the needs of the education reform:

Increases in education expenditure still need to be greater because limited budget allocations cause significant difficulties in education reform. Most graduates are not interested in teaching as a profession because of low salaries, and this leads to overcrowded classes which are detrimental to effective teaching. Myanmar has thus become the country with the highest student-teacher ratio in the ASEAN region. To combat this problem, the government needs to recruit more teachers to reduce the student-teacher ratio. Furthermore, according to a survey conducted by CESR, most schools have many failings, such as insufficient infrastructure, inadequate classroom sizes, and few libraries, and so on. While the government is trying to solve those kinds of problems by increasing the budget, it also needs to be transparent and accountable in the allocation of the education expenditure. Thus, the MOE should be setting up a systematic transparent portal for education, and taking accountability on that portal is the relevant way to solve those issues.

Upgrading ethnic literature in the school curriculum:

The Constitution and the national education law guarantee the protection of the languages, literature and the cultures of Myanmar's National races. So ethnic-language teaching outside of school hours was initiated in AY 2014-15. Therefore, upgrading and maintaining the indigenous languages and literature in an official way is preferable to the practice whereby each generation hands over the literature and culture to the next in an unofficial way. If the government includes indigenous languages in the school curriculum as a minor subject for use in respective states and regions all the records that have been created and the good practice that has been introduced by the government, will have the long-term benefit of maintaining ethnic languages and can also help to advance study and research in these topics in the future.

CHAPTER V

CONCLUSION

5.1 Findings

From 2011, since Myanmar became a democracy, the government has been implementing pragmatic reforms to create a better education system that can match those of other countries in the region. As the reform period has now lasted for more than five years, it can clearly be seen that there have been benefits in many parts of the education sector. For instance, the enrolment rate has increased as the government has eliminated entrance fees for every level of students. Because of the reform, the budget for education has risen higher than it was before. As a result of the increasing budget, the numbers of schools, students and teachers have also risen. Some policies and laws have also been enacted to improve the standard of education. The most significant education reform of recent times has been the alteration of the school structure of 5-4-2 to KG+12 (5-4-3) starting from AY 2016-2017. Also important is the fact that teachers are now required to undertake pre-service and in-service training so that they can familiarize themselves with new curricula and teaching methodology. Although the government is maintaining a focus on the education sector and trying to upgrade it so that it does not fall behind those of other countries in the region, there are still many challenges and barriers to overcome in the process of education reform in Myanmar. Even though government expenditure on education has noticeably increased, more is required to improve the education expenditure to meet the needs of the education reform. Moreover, in the implementation of curriculum reform, ensuring that teachers and students are familiar with the changes is also very challenging since they are used to the previous education system of chalk-and-talk teaching and rote-learning. Applying the Child-Centered Approach successfully requires that the high student-teacher ratio is lowered, poor infrastructure and teaching methodology, and limited teaching aids must be addressed in order to have an effective education system. To be able to overcome the abovementioned challenges,

the government needs to keep focusing on its ongoing process of education reform in cooperation with local experts and international development partners.

5.2 Recommendations

Education is very important to the economic development of Myanmar. Only when the education system is good enough will the workers needed for the country's manufacturing and services sectors that support the development of the economy be improved. First of all, the level of expenditure of education from government expenditure should be increased because this is still very low comparing with other countries for that kind of quality education. In Myanmar, education expenditure, the curriculum, infrastructure, learning materials and the attractiveness of the teaching profession are related. If those elements, and especially the budget allocation, are limited, the education environment will not be conducive to effective teaching and learning. Limited budget allocations cause significant difficulties for education reform. Most graduates are not interested in being teachers because the low salaries offered to them are not attractive. According to a survey conducted by CESR, teachers reported that most schools do not have enough desks and chairs for classrooms, the classroom size is inadequate and there are no toilets in the schools. Moreover, many classes are crowded into the same room without any walls or partitions between them. These kinds of problems are mostly the result of inadequate budget allocation. This is why if governments used more spending for education sector year by year, most of the barriers and gaps will be decreased.

REFERENCES

1. *Asean State Of Education Report*. (2013). Jakarta: The ASEAN Secretariat Jakarta. February 2014.
2. *Education Systems in ASEAN+6 Countries*. (2014a). A Comparative Analysis of Selected Educational Issues. Education Policy Research Series. The United Nations Educational, Scientific and Cultural.
3. Aarons, G., M. Hurlburt and S. Mccue Horwitz. (2011). "Advancing a Conceptual Model of Evidence-Based Practice Implementation in Public Service Sectors", *Administration and Policy in Mental Health and Mental Health Services Research*, Vol.38, pp.4-23.
4. Adams, D., G. Kee and L. Lin. (2001). "Linking research, policy, and strategic planning to education development in Lao People's Democratic Republic", *Comparative Education Review*, Vol.45/2, pp.220-241.
5. Adams, D., G. Kee and L. Lin. (2001). "Linking research, policy, and strategic planning to education development in Lao People's Democratic Republic", *Comparative Education Review*, Vol.45/2, pp.220-241
6. *ASEAN State of Education Report* (2013). Jakarta: ASEAN Secretariat: ASEAN. February 2014.
7. AYE AYE MYINT, M. W. (2016). The implementation of the Myanmar teacher competency standards framework. *Global new light of Myanmar*.
8. BANK, T. W. (2016). *World Development Indicators* [Online]. The World Bank.
9. Barber, M. (2015). *How to run a government so that citizens benefit and taxpayers don't go crazy*, Penguin Books, London.
10. Barrett, S. and C. Fudge. (1981). "Examining the policy-action relationship", in Barrett, S. and C. Fudge (eds.) *Policy and action: essays on the implementation of public policy*, Methuen, London.
11. Bell, L. and H. Stevenson. (2015). "Towards an analysis of the policies that shape public education: Setting the context for school leadership", *Management in Education*, Vol.29/4, pp.146-150.
12. Brewer, G. and P. De Leon. (1983). *The Foundations of Policy Analysis*, Dorsey Press, Homewood, Ill.
13. BUREAU, M. E. R. (1992). *Education Sector Study Phase I*. Yangon: 81.

14. Busemeyer, M. and J. Vossiek. (2015). "Reforming Education Governance Through Local Capacity building: A Case Study of the "Learning Locally" Program in Germany", OECD Education Working Papers, No.113, OECD Publishing, Paris.
15. CESR. Myanmar Comprehensive Education Sector Review.
16. Cooperation. (2011-2015). *Midterm review report. UNICEF: UNICEF.572014b.* Early childhood care and development law. Myanmar.
17. EDUCATION, M. O. (2013, 2014). *Annual report.* Nay Pyi Taw, Myanmar.
18. Espinoza, O. (2009). "Reflexiones sobre los conceptos de politica, politica publicay politica educacional", Archivos Analiticos de Politicas Educativas" Vol.17/8
19. GROUP, C. D. W. (2008). Constitution of the Republic of the Union of Myanmar.
20. GROUP, O. B. (2015). *The Report: Myanmar.*
21. GROUP, O. B. Changes to Myanmar's education sector needed [Online]. Oxford Business Group.
22. Honig, M. (2006). "Complexity and Policy Implementation Challenges and Opportunities for the Field", in Honig, M. (ed.), *New directions in education policy implementation*, State University of New York Press, Albany, NY.
23. IMMIGRATION, M. O. (2014). *Myanmar Census 2014.*In:DATA, D. O. P. A. S. (ed.)
24. IMMIGRATION, M.O. (1984). *Myanmar Census.*
25. JOINT PUBLIC ACCOUNTS COMMITTEE. (2016). Government Expenditure in 2014-2015 Budget Year.
26. LO, M. O. L., EMPLOYMENT AND SOCIAL SECURITY AND CENTRAL STATISTICALORGANIZATION. (2015). Myanmar labor force, child labor and school to work transition survey 2016.*Executive summary report.* ILO.
27. MINISTRY OF EDUCATION. (2004). Development of Education in Myanmar.
28. MINISTRY OF EDUCATION, M. (2012). Education for All: Access to and Quality of Education in Myanmar.
29. MINISTRY OF PLANNING AND FINANCE 2015. National Development: Second Five-Year Short Term Plan (2016-17 FY-2020-21 FY). Myanmar: Ministry of Planning and Finance.

30. MINISTRY OF PLANNING AND FINANCE. (2015). National Development: Second Five-Year Short Term Plan (2016-17 FY-2020-21 FY). Myanmar: Ministry of Planning and Finance.
31. MOE. (2014). *National EFA Review Report Myanmar*.
32. MOPF. (2015b). The second term of five year plan for national development Nay Pyi Taw, Myanmar: Ministry of Planning and Finance.
33. Myanmar President Office. Available: <http://203.81.89.211/2015m3/?q=issues/education/id-9931>, *ibid*.
34. OECD. (2015). Education policy outlook 2015 : making reforms happen., OECD Publishing, Paris
35. OECD. (2016). Economic Outlook for Southeast Asia, China and India 2016. OECD.
36. OO, J., MINOLETTI, PHYU, SAW, WIN, PORTER, OYE, SMURRA. (2015). Fiscal management in Myanmar. Philippines: Asian Development Bank.
37. PRESIDENT OFFICE OF THE REPUBLIC OF THE UNION OF MYANMAR. The significant improvements of Myanmar Education Sector.
38. Rayou, P. and A. Van Zanten. (2015). Les 100 mots de l'éducation, Presses universitaires de France, Paris,
39. Singh, Raja Roy. (1991). Education for the Twenty-First Century Asia-Pacific Perspectives, UNESCO Principal Region Office for ASIA and the PACIFIC, Bangkok, Thailand. P-6.
40. Todaro, Michael P., and Stephen C. Smith, *Economic Development*, Eighth Edition, Pearson Education Limited, p-146.
41. UNESCO. (2014d). Education Systems in ASEAN+6 Countries: A Comparative Analysis of Selected Educational Issues.
42. UNESCO. (2014a). *Education for All 2015 National Review Report: Myanmar*
43. UNICEF Government of the Republic of the Union of Myanmar-UNICEF Country Program of Cooperation 2011-2015, *Midterm review report*. UNICEF: UNICEF.
44. Van Zanten, A. (2014). Les politiques d'éducation, Presses universitaires de France, Paris.

Websites:

1. <http://en.wikipedia.org/wiki/Human-resources>
2. http://www.myanar-education.edu.mm/dhel/myanmar-higher_education-policy/higher-education-policy (accessed on March 2016)
3. <http://en.wikipedia.org/wiki/Human-resources>
4. <http://www.myanmar-education.edu.mm/dhel/education-system-in-myanmar/introduction/> 5 January, 2017.