

**“Monitoring the Implementation of the Education For All
Action Plan in Myanmar”**

Thesis submitted for the degree of Doctor of Education
Doctor of Education at the University of Leicester

by

Shwe Zin Hla Shwe
School of Education
University of Leicester
UK

April 2008

Acknowledgement

I came back to Myanmar, my native country, to collect data for my thesis. I assumed it would be easy and convenient, finishing the thesis within the allotted time frame and with a budget I can afford. I found out how wrong I was in making those assumptions. It was extremely difficult and nearly impossible to get the required data and without help from my parents and friends this thesis would not be possible. It was to them that I would like to dedicate my thesis and express my sincere and heart felt gratitude.

I would also like to express my thanks to Professor Paul Cooper, my supervisor, for his never ending patience with me and his invaluable advice and comments in undertaking this project. Likewise I am also thankful of Dr Chris Comber for the knowledge regarding research he shared with me.

Dr William Crawley from Charles Wallace Trust and the trustees from the Gil Christ Educational Trust also deserve special thanks for their funding support without which I would find it difficult to complete my internship at UNESCO Bangkok and the travel costs back to Myanmar.

I also owe my gratitude to the staff of AIMS Unit of UNESCO Bangkok, especially Nyi Nyi Thaung, for getting me interested in EFA and giving me invaluable support and advice in carrying out my research.

My gratitude also goes to my aunt, Dr Khin Hla Shwe, who has supported me physically, psychologically, financially and continuously encouraged me

in my studies. She has been a pillar of strength during my stay in UK and I would not be where I am today without her support. Thank you Khin Daw.

Finally my thanks goes to Mr Hartfried Schmid, as his understanding, encouragement and support gave me the strength to go on.

Thank you everybody.

Shwe Zin Hla Shwe

Abstract

The present study tried to find out the implementation status of National Action Plan (NAP) for Education for All (EFA) in Myanmar by reviewing the achievement of EFA core indicators (CI). This was done by reviewing the EFA reports of the two latest years available, in this instance, the NAP 2003 and the only available later report, the Mid-decade Assessment Report 2007. This was supplemented by findings from, review of records and registers of five schools, household survey of an urban and a rural area, interview of a National EFA Team member, Focus Group Discussion (FGD) with teachers and community members and Field observations made by the researcher.

The selection of schools and areas for household survey were carried out by means of stratified random sampling. Purposive sampling was used in selecting participants for FGDs. It was found that out of the 18 CI, Myanmar was able to report achievement of the target in 10 even though some were of doubtful accuracy and reliability, could not achieve target in 4 and data was not available for the remaining 4. The data reported for Myanmar in the UNESCO Global Monitoring Reports were also used to check the achievements of CI. From these data Myanmar was found to be in the lower middle part of the worldwide spectrum of EFA achievement with the possibility of not achieving some indicators by the year 2015.

An interview of a member of the EFA team and Focus Group Discussions with selected teachers, PTA and community elders were also conducted to identify the difficulties, constraints and limitations met in implementation and monitoring the EFA activities. A feasible set of recommendations were then made based upon the difficulties, constraints and limitations identified above, with the aim of fostering greater achievement in coming years.

1. Introduction

This section will give a general overview of the thesis. It will indicate the importance of Education for All (EFA) in development of people and countries. It will also provide a general idea about the concept and principles of EFA as practiced by the United Nations (UN), how they relate to the efforts of the United Nations to promote the rights of people, especially children, eradicate poverty and produce overall development of nations by the year 2015.

Thus, a brief outline will be provided on the existing situation of the research topic - monitoring EFA implementation in Myanmar, including aim and objectives of the present study and methodologies to be used in carrying out research activities.

1.1. The purpose of the study

The main focus of this study is to monitor the achievement of EFA NAP to measure the actual progress made so far and also to identify difficulties, constraints and limitations faced by the educators - teachers and administrators in education, and give recommendations to try and correct them so as to increase achievement of EFA core indicators and through them the achievement of EFA goals as much as possible by the target year.

1.2. Education in Myanmar

The National Action Plan for EFA was first developed in Myanmar in 1993 stating targets for increasing primary enrolment from 62% to 100%, increasing primary education completion rate from 25% to 80%, reducing adult illiteracy rate from 22% to 11%, increasing early childhood care and development from 2% to 25% by the year 2000 (Ministry of Education,

Myanmar, 1993). By the year 2000, it was found that these targets were too ambitious. Even in 2002, gross enrolment rate was reported to be 90.8%, primary education completion rate could not be calculated but children surviving to grade 5 was 67%, percentage of children reaching at least grade 4 or equivalent competencies was 57.2% (Ministry of Education, Myanmar, 2003). A revised EFA NAP based upon the Dakar Framework for Action and with less ambitious targets was developed in 2003 for the years 2003 - 2015.

The Action Plan did look achievable and would certainly be possible if the country is not facing economic sanctions from the United States of America, the United Kingdom and the European Union. Even in countries which faced economic transition like the Central Asian Republics, let alone economic sanctions like Myanmar, the human cost had been high (Falkingham, 2000). She also wrote that "Children, far from being protected from its impact, have being amongst those who have suffered the most." The economic sanctions did produce reductions in the earning capacity of the people. In a country like Myanmar, agriculture is very labour intensive as mechanization is minimal and not applicable to the general rural population. The children were then expected to contribute towards the family economy in any way they can, working for wages or standing in for some work which was usually done by a labourer, like tending animals, elder children looking after younger ones while the parents work in the fields. Lately one can observe an increase of child workers in tea shops and as street vendors. All of these occurred to the detriment of the children's education. There were however no published studies to give as references. Han Tin (2000) wrote "financial constraints often discourage poor parents from sending some or all of their children to school. Often these parents keep their children gainfully employed to supplement the family income, or keep them at home to look after their younger siblings while both parents are away at work in the field or

elsewhere." These perceptions were resonant of the observations made by the author. However, Han Tin's perceptions were also quite subjective as he was not able to back up his perceptions with hard empirical data. UNICEF did carry out studies but all data were considered confidential and could not be quoted at the moment.

Primary Education is specified to be free and compulsory. In real practice the need for private tuition, school uniforms, texts, even donations for school furniture from the students all added up to a substantial amount so that many children from poor, rural families cannot attend or finish primary schooling. It appears that this is not peculiar to Myanmar alone but present in some developing countries as stated by Falkingham, 2000. In Myanmar, investment in the education sector and for that of the primary education level was much less than in the other sectors constituting only 0.4% of the GDP (Myanmar EFA NAP 2003), even than the calculations were based upon the budgeted amount not corrected for inflation. This decrease in investment would naturally produce drop in quantity or quality or both. The quality of education was also affected in Myanmar as learning has been related traditionally to religious teachings in Myanmar. Since there were only few written records during the ancient Buddhist religious and cultural developmental era Buddha's teachings were transferred from generations to generations through recitations learned from elders. This naturally promoted the acceptance of rote learning even from the earliest times and persisted to this day with the result that the quality of education offered to children leaves much to be desired in the present technological era.

Accusations were heard during the colonial British rule that the ruling British were simply providing education to produce clerical workers. This can again be heard at present that the military authorities were simply trying to produce people who would toe the line, carry out orders, and not

think independently and critically for their own empowerment and development of their lives. In the absence of hard evidence these accusations were hard to prove or disprove. The government tends to overstate achievements while opposition tends to exaggerate the failures. This study may shed some light on the real situation.

The present study will be using the targets stated in the revised NAP for the assessment of progress. However, based upon the personal experience of the researcher, serious doubts exist as to the accuracy and reliability of educational data reported by the government. Data collection and compilation was carried out by staff with none or very little training in monitoring. There were usually very limited facilities for data handling and storage at the peripheral level. This was also made worse by the fact that the local administrative authorities tend to see these reports as political in nature and would interfere in educational data management. These handicaps, technical or otherwise, can be expected to produce questionable data when it comes to reporting upon which monitoring is based.

Even though monitoring EFA is indeed a challenging task countries should make special efforts to carry it out so as to be aware of their implementation status and make modifications or changes in their activities as necessary. Monitoring is an essential part of any programme. EFA is no exception. UNESCO is fully aware of it and their monitoring results were published as EFA Monitoring Reports (GMR) mentioned above, year after year, all of which are cited as references for this thesis. Many of the challenges faced by UNESCO in carrying out the monitoring activities, as reported in these Monitoring Reports, are outlined in a paragraph above. These challenges are not exhaustive and the present study intends to identify some more in the context of Myanmar. Identification of these challenges is considered to be an important part of monitoring as the very

nature of monitoring is to find out the progress of the programme and make adjustments so that the objectives may be achieved as much as possible.

This applies especially to Myanmar where monitoring reports are indeed very scarce and unavailable for ready reference, even to educators, who are a part of the main stakeholders in education. Myanmar is also a country under a military government which is very reclusive, and secretive. As such, suspicions existed as to the authenticity of the claims made for EFA targets by the Ministry of Education, an organ of the military government. The present study therefore aim to assess the achievement of EFA NAP by reviewing the available EFA reports and also by conducting special studies so as to be able to cross check the accuracy and reliability of reported data. One specific objective of the present study is also to identify difficulties, constraints and limitations, in other words challenges, faced by the educators - teachers and administrators in education, and give recommendations to try and correct them so as to increase achievement of EFA core indicators and through them the achievement of EFA goals as much as possible by the target year 2015. These recommendations, even though given in Myanmar context, might be applicable to some other developing country(ies) and may then be useful in promoting the achievement of EFA goals in the country(ies).

1.2.UN Global Activities

Generally, every country in the world recognized that education is central to human development. Education has also been accepted as a fundamental human right. This acceptance was in fact adopted at the General Assembly of the United Nations in 1948 with the proclamation of the Universal Declaration of Human Rights. Article 25 of that Declaration was concerned with the health and well-being of the individual and his

family, including food, clothing, housing, social services and even old age. Mothers and children were mentioned specifically for special care and assistance. Article 26 was concerned with the right to education and the contents stated the right to free and compulsory elementary education, also directing education towards total development of an individual while promoting peace and harmony among peoples of the world. The statements being so comprehensive are reproduced below.

Article 26

(1) Everyone has the right to education. Education shall be free, at least in the elementary and fundamental stages. Elementary education shall be compulsory. Technical and professional education shall be made generally available and higher education shall be equally accessible to all on the basis of merit.

(2) Education shall be directed to the full development of the human personality and to the strengthening of respect for human rights and fundamental freedoms. It shall promote understanding, tolerance and friendship among all nations, racial or religious groups, and shall further the activities of the United Nations for the maintenance of peace.

(3) Parents have a prior right to choose the kind of education that shall be given to their children.

(Universal Declaration of Human Rights, United Nations 1948)

This acceptance of education as a human right became more evident with the declarations and resolutions made by nearly all United Nations (UN) member countries starting with the Declaration of the Rights of the Child (1959) and the Convention on the Rights of the Child (1989). Myanmar ratified the Convention on the Rights of the Child resolutions and enacted the Child Law in 1993. The provision in this Child Law stated that every child shall (i) have opportunities of acquiring education; (ii) have the right to acquire free basic education (primary level) at schools opened by the

State. The law also required the Ministry of Education to: (i) implement the system of free and compulsory education; (ii) lay down and carry out measures for regular attendance at schools and reduction of untimely drop-outs; (iii) make arrangements for literacy of children who are unable to attend schools for various reasons (Ministry of Social Welfare, Relief and Resettlement, Myanmar, 1993).

Internationally, the Universal Declaration of Human Rights, and based upon this the Declaration of the Rights of the Child and also the Convention on the Rights of the Child prompted the international community to adopt the World Declaration on Education for All in Jomtien, Thailand in 1990. This Declaration recognized that universal education is the key to sustainable development, social justice and a brighter future for all UN member countries. EFA goals were first declared in Jomtien, Thailand in 1990.

After a decade and after reviewing the achievements of EFA goals formulated in 1990 at Jomtien, Thailand, the Dakar Framework for Action was published in 2000 defining the revised EFA goals. The 2000 Dakar Framework for Action expresses the international community's commitment to a broad-based strategy with the aim that the basic learning needs of every child, youth and adult are met within a generation and sustained thereafter. The Dakar Framework for Action consists of six goals. These goals addressed areas such as expanding and improving early childhood care and education, ensuring access by all children especially girls to primary education by 2015, ensuring access to appropriate learning and life skills programmes by young people and adults, achieving 50% improvement in adult literacy by 2015, eliminating gender disparities in primary and secondary education by 2005 and achieving gender equality by 2015, and improving all aspects of the quality of education.

Another milestone in the UN effort for human development through education occurred with the approval of Millennium Development Goals (MDGs) by world leaders at the United Nations Millennium Summit in 2000 and published in 2001. MDG goal 1 is concerned with eradication of extreme poverty and hunger. This goal 1 could not be achieved without education which is a fundamental requirement for human development. Goals 2 and 3 made explicit reference to education, goal 2 being concerned with universal primary education and goal 3 with promotion of gender equality and empowering women. For each goal, one or more targets have been set to be achieved by 2015. EFA goals contribute directly to the Millennium Development Goals, especially goal 1 of eradicating poverty. The EFA goals, being directed specifically towards education sector, are more ambitious in terms of educational achievement than the Millennium Development Goals which did not mention 'free and compulsory' aspects of primary education. The target set for MDG goal 3 is also restricted to eliminating gender disparity in primary and secondary education even though the goal itself stated gender equality and empowering women.

All member countries of the UN revised their National Actions Plans for EFA based upon the goals stated above but mainly upon the goals contained in the Dakar Framework for Action. As such, EFA is an effort undertaken by the United Nations for development of nations throughout the world. It contains all good or beneficial aspects of "education" in the general concept of the word. EFA addresses not only formal education but also non-formal education and life skills learning by children, young people and adults so that they will be able to lead productive lives in society. EFA also take into consideration social conditions such as health status, cultural beliefs and practices, use of local languages in education, inclusion of marginalized people, educational status of families and

investments in education by the governments which will affect education and learning.

It is indeed difficult to assess EFA activities as they tend to have wide discrepancies in implementation and interpretation in different countries. The UN EFA team developed eighteen EFA core indicators (CI) to try and standardise education measurements in various member countries. These core indicators were mainly quantitative in nature even though attempts were made to measure some qualitative aspect such as education quality by again looking at quantitative data like number of teachers with training in pedagogy, number of teachers with basic education qualification as specified by the education authorities, and teacher student ratio. These are at best indirect indicators of education quality. Having teachers with higher qualification does not necessarily ensure education quality if they are using outdated curricula. If the system of education was such that it favoured rote learning the quality of students coming out of that system would be very questionable indeed. Even among the quantitative indicators some doubts exist as to whether the indicator really measure what it intend to measure. For example, Intake Rates and Enrolment Ratios were intended to show the overall coverage of an education system in relation to the school age population. They should also reflect the capacity of the primary education system and the participation of primary school-age children in primary education. The rates would certainly show the proportions of children enrolling in the primary education system but may not show whether they really attended the classes. In other words it may not show the real participation of children in primary education system. These technical constraints are compounded by the fact that teachers, who are responsible for collection and analysis of educational data being unaware of their importance or not trained in their usage in monitoring education progress or achievement, especially in developing

countries, made the indicators more difficult to identify and comparable across countries.

Countries made reports on the achievements of CI to EFA headquarters at UNESCO and based upon them EFA Global Monitoring Reports (GMR) were published yearly indicating their achievement status. The GMR also indicated the possibility of achieving EFA goals by the year 2015, the year intended for all countries to achieve the EFA goals. Some goals seemed quite ambitious taking into consideration the prevailing conditions in developing countries. According to GMR, countries were divided into three categories based upon their EFA goal achievements - high achievers, middle and low achievers. Myanmar appeared on the lower part of the middle category with the possibility of not achieving some goals even by 2015. Questions naturally came to mind as to the validity, applicability and feasibility of using these core indicators to assess EFA achievements as mentioned above. How accurate are the data reported by the countries? Are there more applicable indicators which can measure the existing situation more accurately? Even though there may be differences in accuracy and reliability of calculating such data, these indicators did provide a framework for estimating the education status of a country. The present study intends to find answers to these questions amongst others.

1.3.The role of Education in Development

There are many definitions of education. Some defined it as a process and some as an outcome. However it may be defined, all agreed that it is essential for improving the lives of the people, reduce poverty and transform their societies. This is especially true for the 'knowledge era' of the twenty first century. Proponents of this belief include the UN itself, its agencies like United Nations Educational, Scientific, and Cultural Organization (UNESCO), United Nations Children's Fund (UNICEF) and

International Organizations like Asian Development Bank (ADB) and World Bank (WB). This is evident from their publications where they pointed out that education is key to empowerment which leads to economically and socially marginalized adults and children being able to lift themselves out of poverty and become active community members (UNESCO 1990, 1997, UN 1999, ADB 2008). Their intentions were certainly laudable and the guiding logic was quite acceptable generally. They put forth that education is an essential requirement for human development, that it is an indispensable instrument for sustainable economic growth as economy depends upon the quality of human capital especially in an era of rapid advances in information and communications technology, that it plays an essential role in social development by facilitating and directing social change, that it is a powerful tool for introducing the system of government and the concept of governance. ADB in 2008 (p.57) stated that "the literacy and primary education enrolment rates (especially for women) of a country are the most effective proxy indicators of the country's overall level of human development.."

Bray (1986) commented on the declaration of the African Heads of State and Heads of Government at the African Commonwealth Seminar on UPE in 1980 saying that it made vague statements tinged with rhetoric only, notably lacking "references to empirical demonstration that compulsory education *does* ensure that the ablest go on to further education, that education *is* the only, or even the most important, path towards effective, integrated rural development, or that education of the type likely to be provided *would* guide creative imagination, accelerate economic transformation and rapidly improve living conditions."

It seemed that all of these statements were based upon the belief or acceptance that "education" is good and beneficial for people. They were looking at education from the positive side. Is it really good? The article by

Wilson (2002) brought out many things that need to be thought about and debated on the topic of "education." His comment that he wanted "a trained nurse rather than an educated nurse" also brought into question whether training is education or at least a part of education. Training may be considered as part of education or there would not be 'Teachers Training Schools' all over the world where people were trained to become teachers who may also be considered as educators. Training is to make a person or an animal learn something. To be able to do something they could not do before. It involves the domain of knowledge, skill and attitude. Education, like all things in life must have its good side as well as bad. People nearly always think of education in its good sense but with 'terrorism' coming into our lives it brought out the fact that people may also be taught, trained to do bad, destructive things. Education for the terrorists represents the bad side as it was directed towards producing death and destruction, instilling fear into people. This debate can go on and on but for the purpose of this thesis education will be taken to represent the good side, helping people to become better persons, who are able to better themselves and participate as contributing members of the society.

Education has been categorized as primary, secondary and tertiary education and also as basic education and higher education. EFA focused its activities on achieving universal primary education. Some studies throw into doubt whether the education necessary for human development could be represented by "primary education" as "universal (achievement of) primary education could only ever be a partial response to the educational challenges of development" (Wedgewood 2007). Wedgewood had shown that even though universal primary education was achieved in Tanzania by the 1980's it was insufficient to bring about economic development or widespread poverty reduction. The weakness on using primary education as a basis for social and economic development was also discussed by Bray

(1986). He cited the work of Jamison and Lau (1982) which showed that primary education can increase the productivity of farmers. He also cited Little (1984) who agreed that data on education and agricultural productivity were reasonably conclusive, but suggested that evidence on productivity in the urban sector was "too scattered to provide generalizations." He concluded that it would be wise to examine the rationale for Universal Primary Education(UPE) more carefully as it might not be a crucial goal and that resources may be better spent on adult education or outside the education sector. However, for Myanmar where agriculture constitute the main income for the people UPE could be a mean for development.

1.5. Research Orientation

Education forms a part of the social sciences even though one may also agree that it can also be a craft as well as an art. This statement indicated that the realm of education ranges from being an exact discipline - a science, to also being a craft where imparting education by an expert teacher may resemble an expert craftsman performing his trade, to also being an art where the value judgement and interpretation is subjective. This also indicated that the epistemology of education may range from being objective and quantitative (positivist paradigm) to subjective and qualitative (interpretive paradigm). The research questions to be addressed in this study also belong to both positivist as well as interpretive paradigms and hence the idea of using both quantitative as well as qualitative research methodologies led to an intense literature search to determine its suitability. This led to the article on the internet, Networked Learning Conference 2004 reporting the experience of Chris Jones (2004). Jones stated that "(being part of a PhD examination) ... one of the examiners, having accepted a thesis that combined quantitative methods

with qualitative methods, commented that though they used both methods themselves in empirical work they doubted whether they could be combined in a principled way as they amounted to different paradigms of research." Jones was pointing out the opinion expressed by the examiner, which apparently he did not share. Jones therefore explored the relationship by examining the available literature and also based on the experience from networked learning studies where Jones was a member, concluded that "...qualitative research and quantitative research are not competing paradigms."

Jones was just saying that they were not competing paradigms. However he was also implying that they are different. Based upon the ontological and epistemological stance, the positivist and anti-positivist or interpretive paradigms differ in how they approach understanding of social phenomena and reality. Positivists taking an objectivist approach in studying social phenomena focusing on quantitative analysis, surveys, experiments and the like. Anti-positivists used subjectivist approach to study social phenomena attaching importance to qualitative analysis like personal interviews, participant observations, focus group discussions, etc. Niglas (2001), confessing to be a pragmatist, presented an interesting scheme or diagram where the relationships between the paradigms and methodology were mapped out in three dimensions. The philosophy - methodology continuum was presented from top to bottom as a dimension and the quantitative - qualitative continuum from left to right as another. The third dimension goes from top/bottom to the center on the same scheme. The scheme presented by Niglas showed some areas of overlap between the underlying philosophical paradigms as it moved from positivist to interpretive paradigms for some of the methods. In other words, there is a connection between research paradigms and research methodology and appropriate methodology should be chosen after identifying the paradigms pertaining to the research questions. Niglas

(2001) went on to state "it is important to notice that the closer we move to the level of concrete methodology the more and more mixed is the influence of philosophical paradigms, which on the other hand means that the same methods can be used in various research traditions and philosophical frameworks." This appeared to agree with the observation made by Jones above. Sarantakos (undated) pointed out that quantitative and qualitative methodologies vary fundamentally from each other, but that they are equally valuable and useful in their own context. Taylor et. al. (1995, p. 632) also discussed that "unless human behaviour can be expressed in numerical terms, it cannot be accurately measured." However, "qualitative data provides greater depth, a richer more detailed picture of social life."

1.6. Research Methodology

Based upon the theoretical assumptions stated above it was decided that both quantitative and qualitative methods will be employed in the present study. The quantitative methods would provide empirical data to be used in assessing the achievements reported by education authorities while the qualitative methods would provide information so as to understand the existing situation more clearly and identify some of the associated factors influencing the achievement of EFA targets. Quantitative methods were applied in reviewing and analysing the EFA Reports, records and registers of selected schools, and household questionnaire surveys. These methods provided quantitative data where statistical applications were made as required. Qualitative methods in the form of interviews and focus group discussions were also carried out to add richness of in-depth data regarding subjective experiences and opinions of the EFA stakeholders in Myanmar. It was intended that combination of the different methods would provide a more accurate picture of the existing situation regarding EFA achievements and the difficulties, constraints and limitations met with

in implementing EFA activities in the country. Combination of the different methods will also provide opportunities for cross-checking the reported data and which will in effect be undertaking 'triangulation'.

The first part of the study was concerned with collecting, analysing and interpreting quantitative data. Initially two latest reports on EFA in Myanmar were to be used to monitor implementation status of EFA activities. The monitoring will be based upon achievement of the targets set for EFA core indicators. There is indeed a paucity of EFA reports in Myanmar, and this is stated repeatedly, time and again, as the researcher was handicapped by not being able to acquire adequate data needed for monitoring purposes. The first report was the EFA National Action Plan published in 1993 which served as a basis for the monitoring process. After that the only report available was the draft report of the EFA Mid-decade Assessment for 2005 produced in 2007, of which only limited editions were available. Comparison of the data from the two reports will show achievement of EFA activities. These findings were then validated by means of two other quantitative research instruments - review and analysis of school records and registers from randomly selected schools and a household questionnaire survey in an urban and rural area.

The qualitative part of the study was concerned with collecting, analysing and interpreting subjective data from some stakeholders of education - EFA team member, teachers in schools, PTA members and community elders. These persons, actually living, working and experiencing educational activities in the community were in a very advantageous position to give their opinions and feasible advice on educational activities. The qualitative methods used will be semi-structured interview of an EFA team member and focus group discussions with teachers, PTA members and community elders. The findings from these discussions were expected to supplement the findings from the quantitative study while

providing rich personal experiences and opinions regarding EFA implementation, identifying difficulties, constraints and limitations encountered in the course of their daily activities.

1.7. Ensuing section

Section 2 provided the findings from the literature search concerning the concept of education in general, UN declarations on human rights, child rights, research paradigms, research methods, the conception of EFA and the changes occurring over time, the core indicators used for assessing achievements, targets set for them and the progress made in countries worldwide year by year published in the form of GMR published yearly. Every effort was made to find reports and publications relating to EFA in Myanmar. There were very few publications available and nearly all of them produced by the government. UNICEF (Myanmar) conducted a number of studies but the data were not available for quotation.

Section 3 dealt with the research questions relating to monitoring of EFA NAP in Myanmar which were developed after going through the literature search. Section 4 stated the Aim and Objectives of the study derived from the research questions for which the study aim to find the answers. Section 5 presented the conceptual model of the research process to be undertaken. Section 6 described the research methodology, which were derived from the epistemological and ontological stances of the intended study, going into some details about the essential features of research - research design, theoretical considerations, questions of validity and reliability, country selection criteria, research methods, statistical applications including sampling and finally the ethical considerations involved in the study.

Section 7 would present the results obtained from the study reported in tables, diagrams, graphs, charts, and, narrative as well as bulleted form

for the findings from the interviews and focus group discussions. **Section 8** provided the discussions on the findings after making analyses and comparisons with relevant data from other studies and reports, especially relating to the achievements from other ASEAN countries. Achievements of Core EFA Indicators were discussed systematically from CI # 1 to CI # 18, grouping them into various categories, for example, CI # 9 - 14 can be grouped as *CI relating to human resources for PE*, CI # 9 and 10 with *quality of human resources*, and CI # 11 with *quantity*.

Section 9 gave the conclusion based upon the findings from the study. The recommendations were presented in **Section 10** the implementation of which were expected to increase the achievement of EFA goals in the future. **Sections 11 - 13** dealt with references, abbreviations and annexes.

2. Literature review

This section will be dealing with the review of literatures which were selected based upon the following criteria. (i) The relevance and importance to the thesis topic (monitoring EFA implementation) and provide information relating to the research questions of the present study. (ii) Ones which will provide information regarding the development of the topic over time. (iii) Those that were published by reputable scholars and organizations. (iv) Those that were available to the researcher.

2.1. Development of EFA concept

References regarding EFA and related topics exist in many forms and many volumes all over the world. Many of them existed as declarations, position papers, conference reports, country reports, global monitoring reports,

meeting minutes, reviews, communiqués, and technical guidelines. Most of them are published by UN agencies like UNESCO and in some countries, for example, Myanmar, by UNICEF. Many of them are on the internet sites like UNESCO, UN, UNESCO Institute for Statistics (UIS) websites as soft copies. Hardcopies in the form of books, manuals and periodicals are also available in libraries in universities, government departments, UN and NGO offices. Most of these publications are political, ideological documents produced by UN agencies. They are in the form of official publications like reports, meeting minutes and guidelines as stated above. The author was able to access only some research articles on monitoring EFA from Leicester Digital Library, E link and the internet. They are very few indeed. However, the Global Monitoring Reports (GMR), nearly all of the Reports starting from GMR 2002 to 2007 all of which were cited as references in this thesis, published by UNESCO, did contain excerpts from studies and research on EFA carried out in some countries.

As stated above many references on monitoring EFA are readily available in nearly all countries of the world. However in Myanmar, that was not the case. Not many references on the topic could be found in libraries which were accessible to the researcher. It would be quite difficult to get references without help from UN agencies, British Council library, United States Information Service library and the internet. There is indeed a dearth of EFA literatures and reports relating to EFA activities in Myanmar. A number of them were available, all published by the Ministry of Education or some related Ministry of the Government. Even then not all of them were accessible to the author. The following presentations gave summaries, some quotes and explanations of literatures accessed by the author.

The Universal Declaration of Human Rights (1948) consists of thirty Articles defining the inherent dignity, equality, and inalienable rights of people to

freedom, justice and peace. Article 26 was concerned with the right of people to education, elementary education being intended to be free and compulsory. This was reiterated in the Declaration of the Rights of the Child (1959) which consists of 10 Principles. Principle 5 was concerned with provision of special treatment, education and care for children who are physically, mentally or socially handicapped or disabled, while Principle 7 stated the entitlement of child to receive education which should be free and compulsory, at least in the elementary stages. The Convention on the Rights of the Child (1989) proclaimed protection for children's rights by setting standards in education, healthcare through legal, civil and social services. There were 54 Articles and 2 Optional Protocols. Article 23(3) was concerned with education, training and healthcare for disabled children, Article 28(1a) with making primary education compulsory and free for all, Article 29 with education to ensure development of child to the fullest potential.

These important documents brought out the fact that the international community started thinking about human rights and stated their resolve to work towards protecting it by publishing the Universal Declaration of the Human Rights in 1948, that is, immediately after the Second World War, where there were immeasurable and inhuman breaches of human rights conducted by the Nazis. The dictator manipulated the formal education system to produce Hitler Youth. Cooper (personal communication 2009) rightly pointed out that "Afterall, education, through the formal education system, Hitler Youth, and the state propaganda apparatus was used to reinforce and justify Nazi inhumanity" which again brought out possible abuse of 'education' as a tool for manipulation of the people, which was also discussed (training terrorists) in the introduction section of this thesis.

"Among the more important education challenges of the post cold war is the danger that education may be hijacked by political or religious

extremist creating threats to domestic social cohesion and to political security more generally" (Heyneman 20004, p638).

The right to education formed a part of the rights stated in the Universal Declaration of the Human Rights and the acceptance of the facts that education is the key to human development; education has to start from the youngest age possible; access to education has to be universal, for all children; education should be free and compulsory - at least for the primary education level, brought about the declaration and convention on Rights of the Child in 1959 and 1989. These claims made in the UN declarations and readily accepted by the international community were based upon the experiences of peoples and nations which have evolved and developed over the years. The acceptance of these claims could be seen in the articles of the Constitutions of nations throughout the world. To cite an example, the Constitution of the Republic of the Union of Myanmar 2008 stated the right to education for its citizens in Article 366. Knowledge explosion and rapid technological advancements in the later decades of the twentieth century also produce more focus on education as a tool for human development. All of these directed the world's attention to focus on education and strengthen their resolve to work towards a goal of achieving education for all people just like the Health for All (HFA) efforts started by the World Health Organization (WHO) an organ of the United Nations (WHO 1977, 1979), and the use of Primary Health Care approach in HFA (WHO 1978).

The result was that, the world conference on EFA held in Jomtien, Thailand, 1990, reaffirmed the notion of education as a fundamental human right. The conference produced the Jomtien Framework for Action to Meet the Basic Learning Needs which spelled out the targets and strategies to reach the EFA goal in year 2000 in 10 Articles. The key points were, universal access to education; equity in education; emphasis on

learning outcomes; expanding the scope and means of basic education; developing environment for learning; strengthening partnerships between governmental and non-governmental bodies involved with EFA; and resource mobilization.

2.2. EFA Core Indicators

It was up to the national governments to monitor progress made towards attainment of the 1990 Jomtien goals. However, Ko-Chih Tung (2006) wrote "it became clear that there was a lack of follow-through with investment in the long-term process of national capacity-building of this monitoring function." A review of the original EFA goals was undertaken in 1995, in Amman, Jordan - a review in which most countries received little help to prepare a status report (UNESCO 1996). The need for disaggregated data (to better identify disparity) was clearly highlighted, especially by UNICEF. There were also criticisms of UNESCO statistics at the EFA Mid-term Evaluation (UNESCO, 1996), stating "in particular the fact that the statistics presented there (basically the UNESCO Yearbook statistics) were several years out of date, and there were many countries for which little or no information was available." As the result, 18 core indicators in relation to the Jomtien goals "were developed after various consultations between all partner agencies, the UNESCO education sector, the then Division of Statistics and other UNESCO institutes, in an effort to accommodate the numerous requests of partner agencies, the need to measure the Jomtien goals and targets, and the concern to limit the number of indicators" (UNESCO Institute for Statistics, 2001).

The 18 EFA Core Indicators (UNESCO, 2000, 2001) are as follows:

1. Gross enrolment in early childhood development programs, including public, private, and community programmes, expressed as

- a percentage of the official age-group concerned, if any, otherwise the age-group 3 to 5.
2. Percentage of new entrants to primary grade 1 who have attended some form of organized early childhood development programme.
 3. Apparent (gross) intake rate: new entrants in primary grade 1 as a percentage of the population of official entry age.
 4. Net intake rate: new entrants to primary grade 1 who are of the official primary school-entrance age as a percentage of the corresponding population.
 5. Gross enrolment ratio.
 6. Net enrolment ratio.
 7. Public current expenditure on primary education (a) as a percentage of GNP; and (b) per pupil, as a percentage of GNP per capita.
 8. Public expenditure on primary education as a percentage of total public expenditure on education.
 9. Percentage of primary school teachers having the required academic qualifications.
 10. Percentage of primary school teachers who are certified to teach according to national standards.
 11. Pupil-teacher ratio.
 12. Repetition rates by grades.
 13. Survival rate to grade 5 (percentage of a pupil cohort actually reaching grade 5).
 14. Coefficient of efficiency (ideal number of pupil years needed for a cohort to complete the primary cycle, expressed as a percentage of the actual number of pupil-years).
 15. Percentage of pupils having reached at least grade 4 of primary schooling who master a set of nationally defined basic learning competencies.
 16. Literacy rate of 15-24 year olds.

17. Adult literacy rate: percentage of the population aged 15+ that is literate.
18. Literacy Gender Parity Index (GPI): ratio of female to male literacy rates.

It would be logical at this junction to think about using some alternative indicators AC Mehta (2002) suggested - using *Attendance rate* (students attending a class/level as percentage of total working days for a specified period of time in that class/level) in place of enrolment rate as enrolled students may not attend. He had shown that in India, even though the enrolment rate was 90% the attendance rate was just 65% giving an adjusted-gross enrolment rate of 62%. The *Attendance rate* may either be *Gross, Net or Age-Specific*. However, he admitted that attendance can depend upon many reasons - quality of teaching, pupil-teacher ratio, types of AV aids used, etc - it may not be possible to use it globally. He also proposed using *Completion rate* (children completing an educational level as percentage of initial enrolment in the first grade of that level four years back) as a measure of learning outcome. *Completion rate* is to be calculated separately for boys and girls. In addition he also proposed using either *Gross or Net Completion Ratios*. He then pointed out that completion does not indicate the level of competence or quality of output. It just shows that a student had completed that level. To take the quality of output into consideration he proposed another indicator - *Graduation Rate* (students who complete an educational level and fulfill graduation requirements (achievement tests) a percentage of total number of completers). Overall, Mehta stated that many countries, especially from the South Asian region, are not in a position to generate these rates on a regular basis. He went on to state that there are many limitations in the existing information system and attempts should be made through household surveys to make it more reliable.

2.3. Dakar Framework and Millennium Development Goals

The Dakar Framework for Action (DFA) is a commitment for action on the declaration made by the participating countries at the World Education Forum in Dakar, Senagal, in April 2000. The framework sets out six goals and targets which are quite comprehensive in providing opportunities for people of all ages to acquire literacy at basic level as well as life-skills through formal, non-formal and continuing education programs. The six goals of DFA are concerned with: (1) early childhood care and education (ECCE), (2) universal primary education, (3) equitable access of all young people and adults to appropriate learning and life-skills programs, (4) improving adult literacy, (5) gender parity and equality, and (6) improving the quality of education. These six goals and the twelve strategies for implementation derived from them should form the basis for countries to develop their National Action Plans (NAP) for EFA. Countries have the responsibility to try and meet these goals and targets through broad-based partnership within country (multi-sectoral approach), supported by cooperation with regional and international agencies and organizations.

The new goals and targets established in DFA reaffirm and integrate most Jomtien goals while extending some of them. The UNESCO Institute for Statistics (UIS) Expert Group meeting in 2001 reviewed the existing indicators in order to find out how they fit in to the new Dakar goals. Their finding will be summarized as follows. Indicator 1 and 2 fit into the *first goal* - ECCE. The largest set of indicators 3 to 14 fit into the *second goal* on access and completion of good quality primary education. The *fourth goal* was covered by the three literacy indicators 16 to 18. The *fifth goal* of gender disparity could be addressed by calculating GPI from existing data and indicators. The *sixth goal* of learning outcomes were covered by indicators 15 and 16. The *third goal* of equitable access to appropriate

learning and life skills programmes was expected to be covered by indicator 16. There can be no doubt that this indicator 16 will show the outcome of basic education process. However, as the third goal is also concerned with acquiring 'life skills', which will have different interpretation, definition, and, different implementation approaches in different countries, it may be difficult to develop a common indicator. Possible indicators may include the types and numbers of programmes in practice, number of persons attending the them, their quality as shown by the curriculum and teachers' qualification, the outcomes of such programmes as shown by the number of graduates, their employment rates, increase in income, improvement in health status, among many others.

In addition to the issues for the *third goal* discussed above, other issues not covered by the 18 core indicators include the followings. The terms 'continuing', 'adult' education need to be defined more clearly (as some religious schools may take up some form of them) so that they may fit into the present indicators. There were also few indicators to measure 'quality education'. Even though pupil-teacher ratio, qualifications of teachers may indicate the quality of education being provided, they cannot truly represent 'quality' as the term is indeed most difficult to measure. 'Learning outcomes' was expected to be measured using indicator 15, percentage of pupils reaching at least grade 4. It would be very difficult to get international agreement on it as 'learning outcomes' may be more than reaching grade 4.

In 2001 the UN produced the MDGs which include two goals on education dealing with achievement of universal primary education, promoting gender equality and empowering women. Goal 2 - Achieve universal primary education, defined the target as "Ensure that, by 2015, children everywhere, boys and girls alike, will be able to complete a full course of

primary education.” The existing status regarding this goal in developing regions of the world in 2001 have shown that five regions – Latin America & the Caribbean, Eastern Asia, CIS Asia, Northern Africa, and South-Eastern Asia were close to universal enrolment in primary education. In these five regions over 90% of the children were enrolled in primary schools, ranging from 91% (South-Eastern Asia) to 96% (Latin America & the Caribbean) (UN, 2005).

Goal 3 – Promote gender equality and empower women, defined the target as “Eliminate gender disparity in primary and secondary education, preferably by 2005, and in all levels of education no later than 2015.” The 2005 Millennium Development Goals Report indicated that in seven developing regions of the world, there were 93 (Northern Africa and Oceania) to 100 (Eastern Asia) girls per 100 boys in primary schools. The seven developing regions being Eastern Asia, CIS Europe, CIS Asia, Latin America & the Caribbean, South-Eastern Asia, Oceania and Northern Africa. Also in these regions, girls enrolment in secondary school in relation to boys (Girls per 100 Boys) ranges from 91 (Oceania) to 107 (Latin America & the Caribbean). The other MDGs do not address education directly. However, they are all, more or less, indirectly related to EFA goals, e.g., reducing child mortality, improving maternal health, combating HIV/AIDS, malaria and other diseases will certainly affect early childhood care and education. Likewise, reducing extreme poverty, ensuring environmental sustainability and developing global partnership will all contribute towards learning life-skills and adult literacy through better quality of education.

EFA and MDGs are two inseparable requirements for human development. Education in the broadest sense of the word, not just reading, writing and arithmetic skills, is necessary for getting employment, increasing income and reducing poverty, developing health, etc. Both of them are essential,

especially for sustainable human development. The Working Group for EFA (WGEFA) in its sixth meeting report pointed this out (UNESCO, 2005a). WGEFA also identified Literacy for Empowerment, Education for Rural People and Resource Mobilization and Aid Effectiveness as the areas needing more input for achieving both EFA and MDGs. Literacy not just for children and primary education but also for adults is necessary as only literate parents will encourage their children to acquire education, at least primary education.

WGEFA stated that the right to education of all people at all ages can only be exercised once literacy had been achieved. Literacy being linked to a range of other development issues is crucial to the attainment of the MDGs. They also discussed about the need to expand resource mobilization significantly to meet the needs of EFA through strengthening of the global compact formed by donor and receiving countries, tying country ownership of EFA to country responsibility, reducing debt burden, supporting capacity building, involving civil societies in policy making, implementation and monitoring of aid.

2.4. Education and Development

It would not be wrong to say that the idea of education as an essential requirement for human development was accepted since time immemorial.

Demir and Paykoç discussed in 2006 (p.641) that “supported by the publications and funding programs of the OECD and UNESCO, education came to be viewed as an important and crucial agent for rapid economic growth by imparting knowledge and skills that increase labour force productivity thereby increasing both individual and national incomes”. They also went on to present the argument made by Heyneman (2000) that economic purpose of schooling has been to produce certain norms

that make the government, the economy and the national community work better, and contribute to social cohesion. They also stated that Bourdieu|(1986) empahsizes social capital or individual attitudes and motivations, an indirect benefit of education for growth. They commented "viewed in this light, education represents a form of investment in economic and socio political development"(p641).

A unique research from the International Institute for Applied System Analysis and the Vienna Institute of Demography of the Austrian academy of sciences proves that "a population's education and health status plays a significant role in a country's economic development. Better education leads not only to higher individual income but is also a necessary precondition for long term economic growth". (IIASA, 2008, p2)

Effective literacy policies are those that link literacy to other aspects of development, such as income-generation, reducing poverty, agriculture and childcare. As Daniel A Wager highlighted in 1999 "There seems little doubt that the combined effects of education and literacy are strongly related to an individual's life chances of employment and income". He went on to comment that " the variety and range of evidence suggests that low literacy is a real impediment on the ladder to economic viability". (p21)

Heyneman (1998) wrote an article on the role of education in countries undergoing transition from Party/State to open democracy. This is particularly interesting as Myanmar is planning to embark on the same road in the not too distant future. It seemed his intention was to discuss the role of education against other sectors in meeting the challenges posed by the transition but his discussions were made mainly upon the economics of education citing many references. He produced literature which pointed out deficiencies in analytical techniques and generalizations being made

about investing in various levels of education - viz., primary, secondary, higher and vocational education. He argued, backed by valid references, that high priority should be given to investment in education as education will provide the skills necessary for speeding the transition; making system-wide quantum jumps in efficiency; assist social stability. He did not however give answer to the question " Education reform: slow or fast by comparison to other sectors?" that he posed himself.

Educational development would naturally endow people with a sense of identity and self-actualization, which will further promote the desire to know, to learn and to explore. These explorations and learning would result in acquisition of knowledge and the appreciation of human rights and values. All of these would finally lead to the desire for democratic principles and practices. This evolution of human value system based upon education in developing countries is quite inevitable. "The fact is that in a democracy, the public take the very active interest in fairness of its education system. If public does not trust the education system to be fair or effective, more may be sacrificed than economic growth" (Heyneman, 2004, p.638).

2.5. EFA Global Monitoring

Specific and explicit statement for provision of education as a right was made distinctly in the Declaration of the Human Rights of UN in 1948. This brought about efforts by countries to build up the education of their peoples. However, the Jomtien declaration came out as these efforts were not making significant progress in educational development. Renewed efforts were made by the countries and review carried out for them. One such review meeting was the Mid-Decade Meeting of the International Consultative Forum on Education for All in Amman, Jordan, 1996, which produced The Amman Affirmation in its report (UNESCO, 1996). The meeting reviewed the gains achieved and shortfalls on EFA activities by

countries six years after the Jomtien declaration in 1990. The report stated that there had been significant progress in basic education, not in all countries nor as much as had been hoped, but there was progress. There was an increase in primary school enrolment, the number of out-of-school children beginning to decline, there was growing emphasis on quality in education, these were the result of concerted efforts by governments and peoples while forming new partnerships and tapping new resources. There were also shortfalls like “excruciatingly slow progress” in closing the gender gap in education, early childhood care and education remaining “seriously under-developed and under-supported in many countries”, lack of support for out-of-school literacy programmes and education of adolescents and adults, not recognizing the link between basic education and teachers training and development of technical and vocational skills.

These topics and themes crop up time and again in the ensuing EFA Global Monitoring Reports (GMR) conducted by an independent international team based in UNESCO starting from 2002. These reports reviewed the progress of countries for the six Dakar goals and targets. Each report also had special themes or focused topic based upon perceived status of EFA in the world. These reports brought out the fact that education is central to human development. In other words, a country's development and progress depend on the economy of the country. The economy is again dependent upon the educational status of its people. One measure of the educational status is to use the composite EFA Development Index (EDI) (GMR 2007) for countries of the world where EFA is being implemented. EFA Development Index is a composite score of relevant easily quantifiable EFA indicators, namely, universal primary education (UPE), adult literacy, gender parity and the quality of education. Calculation of EDI and its interpretation will be discussed in more detail in the later part of this section.

Table 1: The EFA Development Index and its components of GMR 2007 (p.200) showed EDI of 125 countries for which the four quantifiable indicators mentioned above were available. The countries were grouped into three categories, High EDI, Medium EDI and Low EDI. The high EDI countries had EDI levels ranging from 0.951 to 0.994 (where 0 is the least and 1.0 being the highest attainable values). The Medium EDI had values ranging from 0.811 to 0.949, and, the Lowest EDI ranges from 0.428 to 0.797. There were 47 countries in the High group, 49 in the Medium and 29 in the Low EDI groups. The High group contains developed countries like United Kingdom, Slovenia, Finland, Kazakhstan, France, Belgium, Germany, Norway, Sweden, Republic of Korea, Latvia, Switzerland, etc., in descending order starting from United Kingdom in the highest position.

Myanmar was in the lower part, position eighty eight (88th), out of 125. Among the Association of South East Asian Nation (ASEAN) countries, Indonesia, Malaysia, Philippines and Viet Nam were also in the Medium group but in higher position than Myanmar. The Lower EDI group contains Cambodia and Lao PDR from the ASEAN region and included countries like Burkina Faso, Niger and Chad from the Sub-Saharan Africa region in the lowest position. Looking at these countries it can be seen that developed countries with strong economies like United Kingdom, countries from the European Union were in the High group. Nearly all of the countries in the High EDI group are educationally and thence technologically well developed countries with adult literacy rates of over 95% to 100% (GMR 2007). There can be no doubt that development of a country is closely related to the educational status of its people.

Looking at all countries in the High EDI group above (Table 1, EFA GMR 2007), one will find that nearly all of them are democratic states with admirable records in human rights. Even China (EDI 0.954 and ranked 43rd in the High EDI group), which is an exception among them, is gradually

evolving in the democratic direction even though it is just a start. The case of China is certainly disputable, especially after the Tiananmen Square incident, but looking back at China during Mao Zedong's era, again at Deng Xiaoping's era and the present era, one could not deny that generally there were some relaxations in State control over its people, especially in the area of "economic reforms starting from mid-1980s" (World Almanac 2004). Again looking at the ASEAN countries one will find that nearly all countries with higher EDI than Myanmar are more or less democratic states with thriving economies (GMR 2007). All of these would support the fact that education is an invaluable asset in human and national development, and, one can only appreciate and respect the United Nation's effort to promote EFA activities in all its member countries.

To understand the evolution of EFA activities and also their progress in member countries of the United Nations, Global Monitoring Reports were published every year since 2002. The GMRs provided consolidated data on EFA achievements based upon the country reports and special studies in over 160 countries worldwide. They are the authoritative reference that informs, influence and sustain genuine commitment towards EFA, tracked progress, identified effective policy reforms and best practice in all area relating to EFA (UNESCO 2009a). Each report was developed with expertise from an international Editorial Board drawing upon expertise from governments, NGOs, bilateral and multilateral agencies, UNESCO institutes and research institutions (UNESCO 2009b). As such, the reports contain relevant data relating to EFA goals from sources which are reputable and acceptable to UNESCO. Reproduction of such data would then be presented referring to respective GMR or under each GMR sub-heading as shown below, without identifying each source, as citing each individual source would simply inflate the reference listing.

The following presentations will summarise these reports while giving comments where-ever appropriate and present the definition of some of the terms and EFA indicators used in Myanmar EFA Mid-Decade Assessment Report (MOE 2007) as well as literature related to the research questions of the present study which also reflects the EFA goals. Some of the terms correspond to that given by UNESCO and used in its GMR reports while some were based upon the existing situation in Myanmar which made the term more relevant in country context but may make it difficult for comparison between countries.

2.6. Universal Primary Education (UPE)

Myanmar MDA defined it as enrolment of 100 percent of the children in the primary school-age group which is defined in Myanmar to be (5 - 9 years), i.e., 100 percent Net Enrolment Ratio,

This goal is measured by the Myanmar MOE, like other countries, with the indicators given in the 18 EFA CI list. To provide a more clear idea about UPE, available literature on the topic and its progress over the years will now be presented.

Regarding universal primary education (UPE), it is reported in GMR 2002 that number of out-of-school children of primary-school age decreased from 106.9 million in 1998 to 103.5 million in 2001. The pace of this decline is not sufficient to achieve UPE by 2015. Girls account for 57% of that figure in 2001 as against 59.5% in 1998. In many sub-Saharan African countries, several Arab States and Pakistan, net enrolment ratio (NER) were below 70%. Girls' participation in primary education remained substantially lower than boys in 71 out of 175 countries. All countries with GPI below 0.90 were in sub-Saharan Africa, the Arab States and South and

West Asia. More than 40 countries have gross enrolment ratio (GER) below 100% and NER below 90%, indicating the need to increase school system

Worldwide progress in primary education had been slow - NER in primary education increased from 1998 (83.6%) to 2002 (84.6%). However, primary school enrolments increased sharply in both sub-Saharan African and South West Asia with 20 million new students in each region. The report (GMR 2002) estimated that one-tenth of school age children of sub-Saharan Africa were expected to be orphaned by 2010 due to HIV/AIDS epidemic, other diseases and conflicts. GER was expected to decrease by 4% in East Asia and the Pacific partly due to decline in China's birth rate. Out-of-school children for primary education still numbered 100 million in 2002 despite increase in enrolments, 55% of them were girls. The percentage of repeaters in primary education was below 3% in 2002 in majority of countries with available data, though 15% to 20% was seen in some countries including Lao PDR from SEA.

Globally 47 countries out of 163 with available data have achieved universal primary education (UPE). Projections showed that 20 additional countries were on track to achieve UPE by 2015, which include Cambodia and Indonesia from SEA. Another 44 countries were making good progress but had low chance of achieving the goal by 2015, which include Lao PDR, Myanmar and Thailand from SEA. Another 20 countries at risk of not achieving the goal by 2015 include Malaysia and Viet Nam from SEA. Overall, steady progress has been made since 1998, especially towards UPE and gender parity among the poorest countries. However, the pace is insufficient to meet the Dakar EFA goals in the remaining ten years to 2015 (GMR 2006).

Even though total enrolment in primary education increased in general there was a drop in Net Enrolment Ratio from 96% to 93% in East Asia and

the Pacific (which includes nations from South East Asia) with China accounting for most of this (GMR 2003 Table 7.1). It had also been stated by the Mid-Decade EFA Assessment Meeting in Bangkok (2005) that enrolments in primary education had tripled since 1970, though coverage remains very low in most of the developing world. Primary school enrolments increased fastest between 1999 and 2004 in two of the three regions furthest from universal primary education: they grew by 27% in sub-Saharan Africa and 10% in South and West Asia, but only 6% in the Arab states. The world net enrolment ratio stood at 86%. Progress was being made in reducing the number of primary school age children who were not enrolled in school.

GMR 2002 reported about 154 countries for which required data concerning indices of primary net enrolment, levels of adult literacy, and gender parity in primary school enrolment were available. Out of them 83 countries have already achieved the three goals or have a good chance of doing so by 2015. 43 have made progress but at least one goal was likely to be missed by 2015. 28 countries were in serious risk of not achieving any of the goals. Countries from South East Asia region were in the second group of 43 countries. The high risk third group consisted primarily of countries in sub-Sahara Africa but also included India and Pakistan (GMR 2002 Table 7.19). Based upon 1999 data, 115.4 million children were out of school of which 56% were girls (GMR 2002, Annex Table 13).

A new index, Education for All Development Index (EDI) was developed for measuring progress. It incorporated indicators for Universal Primary Education (net enrolment ratio), adult literacy (literacy rate for age 15 and over), gender parity (GPI in primary and secondary education and adult literacy), and quality of education (survival to grade 5). It can be calculated for 94 countries, out of which 16 had EDI of 0.95 or higher, meaning that they have achieved or were close to achieving the indicators

included in EDI. 42 countries had EDI values between 0.80 to 0.94 and 36 countries with less than 0.80. EDI analysis for 74 countries with data for the required four indicators showed a clear but not universal progress towards EFA. EDI fall in 20 countries partly as the result of declines in survival rate to grade 5. It was reported that even the poorest countries could made rapid progress if there was commitment and appropriate policy (GMR 2005).

The above reviews and reports have assessed the progress of countries towards EFA goals and targets over the years and the prospects of achieving them by 2015. The countries should learn from these reviews and assessments and make use of the findings to implement the policies and strategies, making changes if necessary, toward the attainment of targets for the EFA goals. The 7th Annual EFA Coordinators Meeting and EFA Mid-Decade Assessment Planning Meeting held in Bangkok, Thailand, on 24-29 October 2005, undertake such an effort and identified the strategies and activities to be carried out to achieve the Dakar goals. Their report discussed and identified major issues and problems to be assessed relating to each EFA goal from technical and professional angle. These issues and problems, some of which will be reproduced below, will form the basis for data collection and assessment in this study.

The Coordinators Meeting and Mid-Decade Assessment Planning Meeting (MDAPM) identified some important issues prevailing in the member countries. One important issue that need to be discussed was the use of mother tongue in primary education. The above report stated that there are 6,000 to 7,000 languages spoken in the world today and that significant barriers remain in the provision of education in the mother tongue. Even in South East Asia, Indonesia have more than 700 languages, with Brunei Darussalam having the least, about 10, and Myanmar with over 100. Papua New Guinea had been cited as the country that had successfully

implemented a multiplicity of languages in primary education. In addition to the mother language it will be necessary for local schools to teach the official language of the country and also a language to be used internationally, e.g., English.

Another issue was the education of children with disabilities. Again the above report (MDAPM) stated that in 2003 98% of children with disabilities in developing countries are not in school quoting the UNESCO Director-General. It is quite logical that unless these children receive basic education, it will be impossible to achieve Education for All. The report posed quite a number of questions needing answers regarding this issue.

The absence of reliable correct data was also a constraint in monitoring EFA in many countries. The report (MDAPM) cited Nepal's Flash Reporting System for EFA monitoring and a mean of acquiring up-to-date data from schools. Nepal is practicing the system of Flash Report 1 - beginning of school year report, Flash Report 2 - end of school year report and consolidated annual school census report which can be used for monitoring.

It was pointed out in the report that children most likely to be out of school and to drop out live in rural areas and came from the poorest households. On average, a child whose mother had no education was twice as likely to be out of school as one whose mother had some education. Governments urgently need to identify the groups of children most likely never to enroll in school, in addition to those who drop out. Among measures to foster inclusion: abolishing school fees, providing income support to poor and rural households to reduce reliance on child labour, teaching in children's mother tongue, offering education opportunities for disabled children and those affected by HIV/AIDS, and ensuring that youth and adults get a second chance at education. School

fees were reduced or abolished in several more countries but were still far too common, a major obstacle to the enrolment and continued participation of the poor in primary schools.

Regarding teachers, MDAPM brought out that there were not enough qualified and motivated teachers to reach the EFA goals. Shorter pre-service training with more on the job practice and professional development, and incentives for teachers to work in remote and rural areas, were effective strategies for recruiting and retaining teachers, particularly in difficult contexts.

Moloi, Morobe and Urwick (2008) presented many points which could be of great help in the present study. Their study provided critique of the pedagogy of English and Mathematics teaching in purposely selected sample of schools in Lesotho. They identified a number of deficiencies relating to teaching-learning situations ranging from the curriculum used to classroom space to teachers' qualification. All of the issues identified by them are most likely to be quite prevalent in developing countries and Myanmar may not be an exception. They also pointed out that **UPE even though it is free may not be accessible to the students**

Universal Primary Education (UPE) is accepted as a mean of development and reducing poverty all over the world and is a goal defined in EFA. However the article by Wedgwood (2007) raised some thoughts on its effectiveness in reducing poverty in Tanzania. Regarding UPE in Tanzania, Wedgwood (2007) wrote "Tanzania came very close to achieving UPE in the early 1980s but by the end of the 20th century less than 60% of primary school-aged children were in schools." The national NER reached 95% in 2005 and even though the enrollment rates "soared" the drop out rates were high, 40% in some regions. Wedgwood paper reviewed the economic and social returns to education in the Tanzanian context and examines the

factors relating to realization of benefits from education because even though a high percentage of population had passed through primary school the country remained one of the poorest countries in the world.

Wedgwood reported that according to Integrated Labour Force Survey (2000/2001), the primary education graduates earned almost double the wages of those with no education while secondary graduates earned nearly four times more than primary graduates (732TSh per hour for secondary to 201TSh per hour for primary graduates). Regarding agricultural sector education made little difference to farm productivity in "non-modernizing" environments. The paper also stated that "achieving UPE without expansion of post-primary education will only have a limited effect on poverty reduction." Push for UPE was considered as the major cause of deterioration in quality at all levels of education in Tanzania. Primary teachers were drawn from those without secondary education and trained through distance training programmes. Lack of post-primary qualifications "reduced their level of authority and the status of teaching profession as a whole." The result was that parents lose faith in value of sending their children to school which made the initial progress towards achieving UPE unsustainable.

2.7. Gender parity

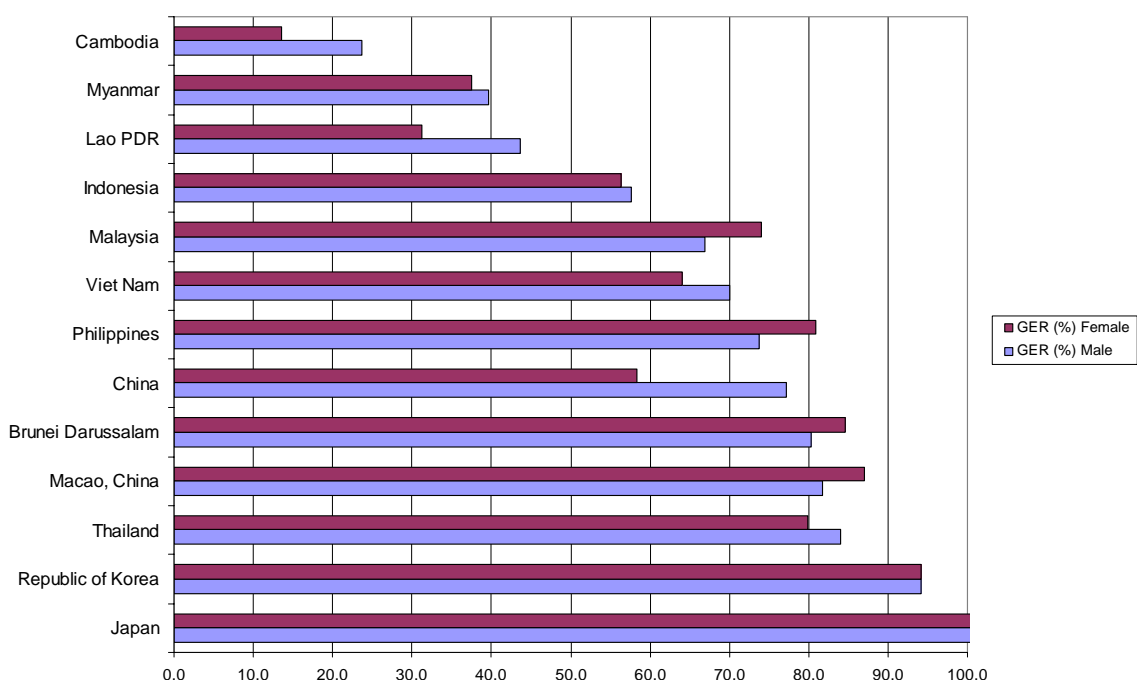
Myanmar adopted UNESCO definition for Gender parity defined as ratio between female and male values for any given indicator, with parity equals to one, measured by GPI. (GMR 2003/2004)

This definition reflected statistical implications only and MOE should be careful of making decision based only on this indicator as what Andrew Dean Ho wrote in 2008 "although no proficiency-based statistics is technically incorrect, very proficiency-based statistic is short sighted,

offering only a piece of the distribution-wide perspective that the analysis of high-stakes test score distributions requires". (p 359)

GMR 2003/4 "Gender and Education for All: the Leap to Equality." started with explanations of the term 'gender parity' as shown above. Globally, the GPI rose from 0.89 to 0.93, with the gap closing in East Asia and the Pacific. Gender disparity in intake rates were much reduced in secondary level compared to that of primary education. Countries with the lowest number of women teachers at the primary level were those with the highest gender disparities. For some countries from the South East Asia region, Indonesia has achieved the goal for both primary and secondary in 2000, Myanmar achieved parity for primary education in 2000 but at risk of not achieving the goal for secondary education, while Thailand was at risk of not achieving parity in primary education by 2015 but likely to achieve parity for secondary education by 2015. Lao PDR was likely to achieve parity for primary education by 2015 but unlikely for secondary by 2015 (GMR 2003).

Secondary Education: Progress is made, but disparities remain



As reported in GMR 2006, significant gender disparity favouring males still existed in many countries but in four [Botswana (GPI 1.07) , Jamaica (1.09), Lesotho (1.23), United Arab Emirates (1.07)] disparities favour females over males.

Regarding gender parity for primary education, GPI increased from 0.92 in 1998 to 0.94 in 2002 worldwide. GPI for developing countries increased from 0.91 to 0.93 while developed countries maintained GPI of 1.0 in the same period. Once enrolled girls tend to perform better than boys and survival rates were also generally higher than boys except in sub-Saharan Africa and Central Asia. Gender and educational quality measures were increasingly visible in national education plans (GMR 2003/4).

The above GMR also showed that the proportions of girls reaching 'desirable' mastery in reading literacy was higher than proportion of boys

in six countries and lower in only three; more girls than boys reporting very positive attitude and self-concepts on reading; girls were less confident about mathematics than boys in most countries

2.8. Gender equality

Gender equality means girls and boys offered the same chances to schooling, with same learning outcomes, equal job opportunities and earnings for similar qualifications and experience. (GMR 2003/2004)

GMR 2003/4 stated that Gender Equality (GE) is a complex notion and difficult to measure. Current indicators allowed only partial assessment. The complexity was illustrated by a comprehensive review of GE theories reported by Agassi (1989). She reviewed various theories ranging from socialistic and materialistic theories (Engels ([1884]1972; Brown 1970; Sanday 1973), modern sociological feminist theories (Blumberg 1984; Mason and Lu 1988), modern liberal feminist theories (Epstein 1981; Reskin 1988), modern anthropological theory (Schlegel 1977) and radical feminist views presented by Mackinnon (1987). Current indicators based upon these GE theories could not be validated (true) in different contexts in different communities.

All of the theories are directed towards the general population and the GE concept in general and not specifically for EFA or primary education. For the purpose of EFA, and exclusively for primary education, GE may reliably be measured by using the GPI and other EFA core indicators described in this section after correction for sex distribution. Indirectly the various ratios of female to male distribution among the teachers, the head teachers, the education supervisors and PTA members may be used as indicators.

During 2003 and 2004 female teachers have increased in numbers in almost all countries except in five African countries (GMR 2003/4). Afghanistan also had very few female teachers and was reported to be as low as 12% in rural areas (Guimbert et. al. 2008), which is quite the opposite of Myanmar as the majority of the teachers are females (Myanmar MDA 2007). According to the government in Myanmar, gender has never been an issue in education as well as in other works of life. However, if we take a closer look at statistical data published by DEPT, it shows that most of the teachers are females (86%) while most of the Assistant Township Education Officers and Township Education Officers (88%) are males (Myanmar MDA 2007; DEPT 2007). It is common knowledge that most of the people in Myanmar, men and women alike being guided by the religious and cultural beliefs, appeared to share the idea of Tiger and Shepher (1975) who stated that all attempts to attain gender equality will be in vain as they will be opposed by "biogrammer" differences between men and women.

GMR 2006 mentioned specifically that gender and educational quality measures were increasingly visible in national education plans.

2.9. Early childhood care and education (ECCE)

In Myanmar, ECCE is defined as nurturing children younger than 5 years, physically, socially, mentally and spiritually, referring to both preschool programmes and diverse child rearing practices and daycare programmes of children younger than 3.

Awareness of the importance of child care for children's development existed long before EFA as can be seen by the Alma Ata Declaration for Primary Health Care where child care was highlighted as part of Maternal

and Child Health services (WHO 1978). In 1992, Howes, Phillips & Whitebook discussed that studies have found the quality of child care setting can have important implications for children's development.

In Myanmar, the monitoring of ECCE programme is simply carried out by head counting of the number of children enrolled in ECCE programmes and the number of teachers with or without training in ECCE. Even the GMRs published by UNESCO monitored ECCE by looking at enrolment data in pre-primary education, across countries, over time (e.g., 1998 to 2002) and between sexes; and also measured quality in ECCE using pupil-teacher ratios (UNESCO 2002b). Their monitoring measured only education and not the care component of ECCE. Formal definitions of ECCE vary from area to area and between agencies but the 2007 GMR report adopted a holistic approach which included supporting children's survival, growth, development and learning - including health, nutrition, and hygiene, and cognitive, social, physical and emotional development - from birth to entry into primary school in formal, informal and non-formal settings.

Clearly more effective monitoring or impact study is needed in this area, starting from the definition of early childhood and specifically identify the age group of children involved in early childhood programmes as it include at present children with ages ranging from 0 to 8 years or all children prior to entry into primary education (UNESCO 2002b). Baum and McMurray-Schwarz indicated the need for further studies/research in 2007 stating "Knowledge of current research is also important as we become advocates for young children by communicating with families, community members, and policymakers. In order to be effective in advocating for best practice in our schools and programs, we must be well informed and provide evidence in support of our opinions." (p. 368)

Barnett and Boocock (1998) critically reviewed 38 studies of long term effects of early childhood programs. Outcomes examined include I.Q., achievement and academic success as measured by grade repetition, special education placement and high school graduation. Early childhood education was found to produce persistent effects on achievement and academic success, but not on I.Q. but there were exceptions. Cost-benefit analysis based on one randomized trial found that the economic return from providing early education to children in poverty far exceeds the costs.

Barnett (1995) reviewed 36 studies to examine the long-term effect of these programmes on children from low-income families especially on children's cognitive development. The results indicated that these programmes can produce large short-term benefits for children on I.Q. and sizable long-term effects on school achievement, grade retention, placement in special education, and social adjustment. Yoshikawa (1995) through his review of literature from criminology, psychology and education showed that combination of intensive family support and early education services can lessen the devastating impact of delinquency on American children and families.

UNESCO (2002b) stated in its presentation at AIMS Bangkok that ECCE programmes should also focus on transition to early primary education and school readiness. This raised two topics which had been debated by many scholars. One group advocated "red shirting" or delaying entry into primary kindergarten by a year so as to give time for the student to mature (Elkind, 1987; Jones & Sutherland, 1981; Ilg, Ames, Haines, Gillespie, 1978). Another group argued that school readiness could be influenced by experiences at school (Piaget, 1970; Vygotsky, 1978) and that schooling could provide the environment appropriate for child development (Meisels, 1992) and by starting late missed out on beneficial early childhood

experiences and services provided by schools (May & Kundert, 1997). Some studies showed age had no effect on achievement even in the primary grades (Graue & DiPerna, 2000; Spitzer, Cupp, & Parke, 1995) many studies also showed a small academic advantage for older students which tend to fade when students leave elementary school (Bickel, Zigmond, & Strayhorn, 1991; Crosser, 1991; Langer, Kalk, & Searls, 1984) or by the second or third grade (Stipek, 2002; Spitek & Byler, 2001). The results of the study by Lincove & Painter (2006) suggest that delaying kindergarten does not create any long-term advantages for students.

Sénéchal & Young (2008) highlighted in their literature review that the results of a meta-analytic review revealed an overall positive effect of parent joint reading on children's emergent literacy and reading achievement. They also discussed variety of ways that parents can be involved in child's literacy development such as through parenting (e.g., supervising time use), parent-school communication, supporting school (e.g., volunteering, fund-raising), promoting learning at home, decision making (i.e., parent organizations), and community collaboration (e.g., using learning resources such as museums).

In 2002 GMR reported that Early childhood care and education (ECCE) was 'still relatively uncharted territory' at that time. There was some evidence to indicate increase in ECCE in both developed and developing countries. However, there was decline in enrolments in some Eastern European and Central Asian countries. Regarding early childhood care and education (ECCE), 56 of the 152 countries for which data were available had very low pre-primary enrolments, fewer than 30% of the age group, almost half of them in sub-Saharan Africa. Within countries urban/rural disparity for ECCE was quite distinct.

According to GMR 2005, progress towards wider access to ECCE was reported to be slow. On average, a child in Africa could expect only 0.3 years of pre-primary schooling, compared to 1.6 years in Latin American and the Caribbean, and 2.2 years in North America and Western Europe. Assessing quality in ECCE was very difficult and had been addressed insufficiently at global level. Pupil/teacher ratio was highest in sub-Saharan Africa (25:1 or more in half of the countries) and lowest in Central and Eastern Europe and Central Asia (15:1 in three out of four countries). Many teachers in low-income countries were employed on contract basis with low salaries, and had little or no professional training.

GMR 2006 reported that participation for pre-primary education (ECCE) varied widely both among and within the EFA regions. There was only limited progress between 1998 and 2002. Of the 17 countries with available data from East Asia and the Pacific (EAP) region, which include South East Asia (SEA), 12 countries progressed from 1 to 5 percentage points while 5 countries reported small negative changes. It was still underdeveloped in sub-Saharan Africa, the Arab States and the South and West Asia.

The theme for GMR 2007 was "Strong foundations: Early childhood care and education." It highlighted the following points: ECCE was recognized as a right for children in the Convention on the Rights of the Child, which had won near universal ratification; Early childhood is a time of remarkable brain development that lays the foundation for later learning; ECCE contributes to the other EFA goals (e.g. it improves performance in the first years of primary school) and to the Millennium Development Goals, especially the overarching goal of reducing poverty, as well as the education and health goals. It was also reported that almost half the world's countries had no formal programmes for children under 3.

The above report indicated that among developed and transition countries, and in Latin America, most ECCE provision was by the public sector. Most regions were near gender parity in pre-primary education. The children most likely to benefit from ECCE programmes were those most exposed to malnutrition and preventable diseases and were also the least likely to be enrolled. ECCE staff in developing countries typically had minimal education and pre-service training and were often relatively poorly remunerated. Government accord relatively low priority to pre-primary education in their spending and ECCE was not a priority for most donor agencies. It is no wonder then that ECCE activities were needing support in many developing countries.

The report also outlined the following activities which need to be addressed to reach the ECCE goal:

- High level political support, an essential element.
- A consultative process to develop a national ECCE policy for children from birth to age 8, specifying the administrative responsibilities and budgetary commitments across relevant sectors and levels of government.
- Ongoing national and international data collection and monitoring efforts to needs and outcomes in meeting the EFA goals.
- The designation of a lead ministry or agency for policy on young children and ECCE, and an interagency coordinating mechanism with decision making power.
- Well enforced national quality standards covering public and private provision for all age groups.
- Stronger and more partnerships between government and the private sector, an important ECCE stakeholders in many regions.
- Upgrading of ECCE staff, particularly through flexible recruitment strategies, appropriate training, quality standards and remuneration that retains trained staff.

- Increased and better targeted public funding of ECCE, with particular attention to poor children, children living in rural areas and those with disabilities.
- The specific inclusion of ECCE in key government resource documents, such as national budgets, sector plans and Poverty Reduction Strategy papers.
- More attention and more funding from donor agencies.

2.10. Adult literacy rate

The adult literacy rate measures the ability to read and write in person aged 15 years and above (UNESCO 2000). Myanmar used the UNESCO definition for its adult literacy rate estimation.

Definitions of literacy itself varied among countries and societies and as Wagner (2003) stated that literacy is not only difficult to define in individuals and delimit within societies, but it is also charged with emotional and political meaning. The politicizing of literacy achievement could also be seen in Myanmar where literacy rate was treated as a national status symbol and tend to be over-estimated all the time.

Adult literacy has been used as an indicator in measuring EFA achievement but with the definition of literacy varying widely all over the world it will be difficult to compare its achievement in different countries. Colclough (2003) also noted that the present measures of adult literacy were very unreliable.

At present in most countries, especially in the developing ones, measures of literacy are based upon census data (answers to question "can you read and write?"), or inferred from proxy measures such as number of years of formal schooling completed (a person considered literate completing

primary level, 4-5 years, schooling). It seemed that definitions of literacy tend to be different between developing and developed countries with the above definition reflecting that of developing countries and of course the UN, while the developed countries in their International Adult literacy Survey (IALS) and National Adult Literacy Survey (NALS) adopted the definition "Literacy is using printed and written information to function in society, to achieve one's goals, and to develop one's knowledge and potential" (Murray, Clermont and Binkley, 2005, p. 94). IALS (p.12) specifically pointed out that " literacy is not synonymous with educational attainment."

It came to the notice of the author that there was no instrument such as reading, writing test or questionnaire used by the MOE in Myanmar to measure this very important area. The data for adult literacy in the Myanmar MDA 2007 report was calculated based on the figures from 1983 census. Wagner (2003, p.299) pointed out "Compared to census-based literacy estimates, household level surveys offer considerable opportunity to create a detailed picture of literacy skills profiles." The author, therefore, intend to use the household questionnaire survey to measure the literacy to make it more valid and overcome the limitation of pure statistical estimation from census data. This also highlighted the need to develop valid and reliable testing instruments in literacy measurement. These tests should measure literacy achievements directly by looking at acquisition of basic skills in youths and adults which will be quite challenging and costly as Wagner (2003) stated. He also cited Mikulecky, Albers & Peers (1994) as showing that there is a need for better balance between functional context learning like job opportunities and basic skills practice like reading, writing and numeracy.

Venezky et al. (1997) stated that adult literacy testing is limited by a paucity of appropriate instruments, particularly for writing and

mathematical knowledge, and a lack of nominative data for the age ranges encountered in most program as well as for the learning disabled. They added that the assessment of adults at the low end of the performance scales was especially problematic. Wagner also suggested in his paper in 2003 to use three main parameters - *smaller, quicker, and cheaper*, should be considered when new tools for assessment are considered especially for developing countries.

Data related to year by year progress of adult literacy globally could be seen in the UNESCO GMRs. GMR 2002 reported that progress in adult literacy was taking place but, as the report stated, 'albeit slowly'. Two-thirds of the world's illiterates were women. 61% of illiterates lived in four high population countries - India, China, Pakistan and Bangladesh.

In 2003 and 2004, literacy rates as conventionally measured were still quite inadequate and measuring life skills are also very difficult. The GMR 2003 report estimates that approximately 862 million illiterates exist in 2000, reduction of 2% over the decade. A further 7% reduction was expected by 2015. Almost half of the illiterates live in South and West Asia, mainly in Bangladesh, India and Pakistan. Women accounted for two-thirds of the world's illiterates. Prospects were reported to be brighter for 15-24 age groups in the four regions with lowest levels of adult literacy, particularly striking was that almost all the youth were already literate in East Asia and Pacific region (which include the South East Asian countries).

Adult literacy has been used as an indicator in measuring EFA achievement but with the definition of literacy varying widely all over the world it will be difficult to compare its achievement in different countries. Colclough (2003) also noted that the present measures of adult literacy were very unreliable.

It was reported in GMR 2006 that multi-region surveys in the form of Progress in International Reading Literacy Study (PIRLS, 2001) showed that large numbers of fourth graders in many countries had limited reading skills. Students from rural areas and socio-economically disadvantaged family background were particularly vulnerable. Nearly 800 million adults were estimated to be illiterate in the world in 2005, representing 18.3% of the adult population. The rate was reduced by 62 million from the 2003/4 figure reported above and 64% of the illiterates were women. Severe illiteracy was concentrated in sub-Saharan Africa, the Arab States and South and West Asia regions where literacy rates were only about 60%. There were significant progress for literacy in some countries since 1990. Brazil for example, increase from 80.1% to 88% in a decade, with literacy for women 88.3%. The world literacy rate increased from 75% in 1990 to 82% in 2000-2004. Illiteracy was associated to a significant extent with extreme poverty. East Asia and the Pacific had the highest literacy rate (91%) but because of its large population had 17% of the world's illiterates. The youth literacy rates (ages 15-24), a significant indicator of progress towards EFA and MDG goals, were above 70% in all regions and gender disparity less pronounced than in adult (UNESCO, 2006).

The following points, extracted from the GMR 2006 - Report at a glance, should be considered to achieve the Dakar literacy goals by 2015.

- Active government responsibility for adult literacy policy and financing as part of education sector planning.
- Clear framework to coordinate public, private and civil society provision of literacy programmes.
- Increase budgetary and aid allocations.
- Basing programmes on an understanding of learners' demands, especially their language preferences and their motivations for attending classes, in consultation with local authorities.

- Use of curricula developed on the above demands, with clearly stated objectives and the provision of adequate learning materials.
- Adequate pay, professional status and training opportunities for literacy educators.
- Appropriate language policies, as most countries facing stark literacy challenges are linguistically diverse, so that there will be a smooth transition to learning opportunities in regional and official languages.
- Foster literate environment by giving sustained attention to language policies, media policies, access to information, supply of texts and learning materials, in both formal and non-formal contexts.

2.11. Life skills training

Myanmar defined it as the acquisition of knowledge, values, attitudes and skills through the four pillars of learning: learning to know, learning to do, learning to live together with others, and learning to be.

This definition is rather unclear and would certainly be difficult to assess. Even the GMR published by UNESCO reported in 2005 issue that teaching and assessing life skills were proving to be difficult as reliable data were usually not available. It may be the reason that there is a dearth of data relating to life skills training and impacts in GMR reports.

Murray et al stated in 2005. "It is also important to emphasize that life skills must be connected to success in life. There are many skills, talents, and abilities that do not meet this criterion, even though they may involve sophisticated intellectual processes. This means that all academic abilities

are necessarily life skills nor are all life skills are likely to be taught in school" (p.50).

Life-Skills Training evolved over the past several decades, growing mainly from four movements in contemporary psychological thought and practice (Phillips, 1985). In Myanmar, life skill is part of the national curriculum for primary and secondary school. The curriculum and training materials are in line with four areas : (a) interpersonal communication and human relation skills, (b) problem-solving and decisionmaking skills, (c) physical fitness and health maintenance skills, and (d) identity development and purpose in life, skills which were identified by Brook's Delphi study (1984).

Same as ECCE, the central issue here is lack for monitoring tools and instrument. There is no baseline study. There is no impact study done by the government or UN agencies or private sector in Myanmar so far. The Myanmar EFA MDA simply showed the number of teachers who had attended the training. At present a number of studies have been conducted on the impact of life skills training programs mostly in developed countries. Many of them relate to children, youth and adults with drug addiction, substance abuse, HIV/AIDS, and other disability problems and the results were found to be beneficial to the training recipients (Boyd, Herring & Briers, 1992; Spoth, Clair, Shin, & Redmond, 2006). However, there was also a report of failure in a life skills training for youth in California (Courtney et. al. 2008) and possible reasons given for the result include problem of randomization process, high staff turnover, low qualification and performance of trainers and very limited (30 hours) of classroom based instructions only.

The content of 'life skills' is so broad and encompass all aspects of 'life' itself that many disciplines are involved in teaching it and also in putting it into practice. Ownership of the programmes then became difficult and confusing. A very good example of this confusion could be seen in the

article by James (2002) where she reported on the use of life skills teaching to combat HIV/AIDS in young people in Durban, South Africa. Ownership was claimed by both the health and the education sectors and even within the education sector, "life skills and its associated ideologies of dialogue, self-driven learning and the development of the whole person, were neither recognized nor appreciated by teachers in local schools in 1997." She then went on to state that "the failure of life skills in a school setting left little option but to concentrate on the world, beyond formal schooling, in which skills-teaching could be informally pursued in a more cohesive and integrated setting." Peer educators, volunteers, were brought in and they appeared to be proving quite satisfactory in their work which may also prove to be sustainable.

2.12. Education quality

Quality aspects in Myanmar include complex issues of teaching - learning approaches, quality of teachers, class size, availability of learning materials, assessment systems, leadership of school heads, and above all, the effectiveness of supervision and assistance provided by Township Education Officer.

The MOE in Myanmar assessed education quality based on the areas mentioned in the definition. Each school can have the quality graded from highest grade A to lowest grade E as the result of school assessment. The criteria used in assessment leaves much room for debate as they were more subjective than objective. It needs to be pointed out that only limited indicators were used to measure education quality in EFA MDA 2007 (presented later). The author will try to identify the points related to education quality in the interview and focus group discussions.

The need to consider indicators in country context could be seen in the study by Courtney (2008). She used the Education Quality Improvement Project (EQIP) of Cambodia as a case study to examine the effect of using Monitoring and Evaluation (M&E) tools on educational development. She discussed about quality in education starting from the various definitions and going into the factors and conditions which affect education quality from various aspects of input, process and outcome. Interestingly she combined the information collected through classroom observation forms with interviews of school staff and observation teams as the indicators on the form did not provide adequate explanation of the context. Her findings validated the fact that separating teaching and learning process from the culture and classroom behaviour will provide a superficial understanding of the pedagogic practices that teachers are using in schools. Her findings highlighted the need to contextualize the information gathered from schools. M&E tools made it possible to measure some aspects of quality improvements and using them encourage changes in practice. She concluded that "the very act of supervising (using M&E tools) and taking an interest in the school was positive."

GMR 2002 reported globally that monitoring of education quality was very limited and was mainly based upon proxy indicators (e.g., teacher student ratio, percentage of trained teachers, etc.) rather than assessment of learning outcome. Special surveys of learning outcomes, e.g., TIMSS (Third International Mathematics and Science Study), etc., should be considered to provide relevant information for education quality. The report also indicated the need for credibility in EFA planning process by following certain steps, also taking HIV/AIDS, combat conflicts, disaster and other instabilities into consideration, and, the need to promote inclusion of EFA in Poverty Reduction Strategy Papers (PRSPs). Resource requirements for reaching EFA, including the World Bank estimate of US\$ 4.2 billion needed for support, were also stated in the report. Overall, it was reported that

the progress towards the goals was insufficient; the world was not on track to achieve EFA by 2015.

Education quality was still assessed using proxy indicators. Pupil/teacher ratios were found to be variable between countries and even within the country. Greatest variations was observed in sub-Saharan Africa where the average had risen from 40 to 46. There were countries where half of teachers had no training in teaching. Half of the countries where data were available allocated between 3.4% and 5.7% of national income to education. The GMR 2003 stated that studies have shown girls performed much better in reading than boys, who tend to do better in mathematics even though the difference was less pronounced (GMR 2003/4).

GMR 2005 report gave explanations about quality in education in six chapters. It reported that fewer than one third of children had achieved mastery by grade 4 to 6 even though the average Net Enrolment Rate for the countries was 65%. The report gave suggestions for approaches to promote educational quality. They include:

- the governments to take the leading role in countries' efforts
- correct gender inequalities
- prevent discriminations against particular groups on ethnic or cultural grounds
- define essential minimum standards that students should possess after completion of primary education
- improve the curriculum, teaching/learning strategies, learning materials like texts and use of teaching aids
- ensuring professional development of teachers
- link different elements of education like early childhood education and development, universal primary education, adult literacy, gender-sensitive policies, etc.

The report (GMR 2005) also discussed about achievement tests for learning outcomes which may be taken as direct measure of education quality. The surveys of Southern and Eastern African Consortium for Monitoring Educational Quality (SACMEQ II) in 2000-2002 in 13 countries and one territory, 2003 round of Trends in International Mathematics and Science Study (TIMSS) conducted in 46 countries and the Programme for International Student Assessment (PISA) conducted in 2000 and 2003 in 40 countries were mentioned but the results were rather inconclusive. However, they showed the marked contrast between countries having high enrolments ratios which have high achievements and countries with lower enrolment ratios going hand-in-hand with lower achievements.

Available data suggested that large proportions of teachers lack academic qualifications, training and mastery of content, especially in developing countries. Pupil/teacher ratios had risen over the past decade where NERs had increased, particularly in sub-Saharan Africa and South and West Africa. The HIV/AIDS pandemic was severely undermining the education quality. Zambia estimated that 815 primary school teachers, 45% of teachers trained that year, died from AIDS in 2001 (GMR 2005).

GMR 2006, based upon available data in 2005, reported that education quality was still too low as seen from proxy indicators. Many pre-primary and primary school teachers lack adequate qualifications. Number of primary school teachers would have to increase by 20% a year to reduce pupil/teacher ratio to 40:1 and to achieve UPE by 2015.

A few developing countries increased public spending on education, notably in East Asia and Pacific, Latin America and the Caribbean. The regional medians were 3.3% of GDP in sub-Saharan Africa and 3.9% of GDP in East Asia and Pacific. A few large countries reduced expenditure significantly - Philippines by 24% and Indonesia by 8%. It had to be assumed that increase in public spending on education would bring up the

educational quality as more teachers may be trained and employed bringing down the teacher-student ratio, teaching aids will be available more readily, the physical learning environment more conducive to students' learning, etc.

GMR 2006 also reported that only a few studies had attempted to link aid and learning outcomes. In Ghana, World Bank support for primary education through provision of textbooks and improved school infrastructure was shown to have contributed directly to educational attainment and achievement. Some countries established their own core indicators to measure progress. In Uganda, where 50% of primary education budget was externally funded, used indicators which include teacher qualification, pupil/teacher ratios and percentage of pupils reaching grade 6 who can master a set of nationally defined basic learning skills. It remained difficult to measure impact of aid on quality. However, several intermediate indicators like evidence of good education sector policies, which have clear objectives for access, equity and quality, well define targets and indicators may serve as benchmarks for governments and aid agencies in assessing progress.

2.13. Some studies from developing countries

As stated before the GMRs were based upon data from country reports and studies relating to EFA conducted in countries around the world. One such study by Nguyen was reported from Viet Nam. Nguyen (2006) carried out a robust study applying vigorous statistical analyses, multivariate analyse, odds ratio, standard error for logistic regression, etc., on a sub-sample of 7934 student aged 6-18 who lived in rural areas of Viet Nam. A distinct feature of his report was the use of Age and School Specific Enrollment Rate (ASER) in place of Net Enrollment Rate (NER) indicated as a core indicator for EFA. NER showed the percentage of students of the specified age-group for grade 1 who enrolled in that grade, and considered only the

age grouping. Nguyen used not only age grouping but also calculated it for respective school. No doubt that ASER is more specific but its usefulness is questionable in estimating the net enrollment rate for primary education for the whole country. The paper then provided data relating to gender disparity among the students, and factors such as parental education and occupation affecting enrollments. He made inferences based upon sound statistical reasoning and concluded by proposing further research using separate regression models for primary and secondary levels.

Another report relating to small developing countries could be seen in Pacific Island Countries consisted of 14 small island states with wide ranging diverse ecology, population structure and cultures. All of them are developing countries facing many problems of development like Myanmar and any report relating to these countries might be useful for Myanmar. UNDP report (1999, p.35-36) for these countries showed that even though basic education participation and achievement vary across the Pacific region many of the constraining factors were common to all. These include economic constraint, geographic spread and numbers of school-age population, teacher shortage, limited provision of non-formal education, coordination of multiple stakeholders, customs and local languages.

Another publication on Afghanistan, a developing country which was very useful in understanding the findings of the present study was an article presented by Guimbert and colleagues. Guimbert et al (2008) reviewed some key features of the education system in Afghanistan. The objective of their paper was to understand the drivers of enrollment with a view to recommend ways to achieve further progress towards universal enrollment and completion. Despite very limited data they also attempted to study the quality of education. They reported that the reasons for their children going or not going to school could be arranged into two groups. The *supply-side*, consisting of lack of school or lack of girl school or female

teachers, etc., and the *demand-side*, consisting of traditions, cost of sending children to school, etc.

Their review was based upon three datasets for the year 2004/5: Public Expenditure Tracking Survey (PETS), School Census (SC) and National Risk and Vulnerability Assessment (NRVA). The findings indicated that enrollment was heavily skewed toward the lower grades (much more in the lower primary level grades), and toward boys. Significant disparities in enrollment exist by province and by gender. While universal primary education enrollment was reported to be almost achieved in the three main cities it remain marginal in south of the country. Net primary enrollment was only 40% for girls as against 67% for boys.

Human Rights Research and Advocacy Consortium was cited in that report to state that rough estimates suggested 74% of girls and 56% of boys drop out of school by the time they reached Grade 5. The World Bank was also cited as reporting in 1999 the use of outdated curriculum and excessive reliance on memorization and rote-learning. These findings correspond very well to those existing in other developing countries including Myanmar.

Robinson in his article in 2005 showed that there was broad acceptance of the diverse and plural nature of literacy having different meaning in different contexts. He went on to state that adult literacy provision required approaches which were quite different from regular schooling and put forward three areas needing urgent attention if progress is to be made:

- First, "In contrast to schooling, there is no model (for literacy) that can be applied universally." He pointed out that literacy acquisition and provision needed further work.

- Second, the policy implications of designing literacy provision which take the diversity issue into consideration still need to be spelled out fully.
- Third, there is a need to find creative approaches to assess literacy achievement as it is difficult to measure literacy with the present measures which are unreliable.

The article by Khaniya and Williams (2004) brought out many interesting and vital points regarding reform in primary education in Nepal. Their study tried to find out the learning achievements of grade 3 students four years after instituting various inputs in the reform of Nepalese primary education system. The authors questioned that even though the Nepalese Ministry of Education had declared the Nepalese education system to have undergone a major reform, was the reform successful? This brought into question the definition of 'success'. If success was defined as improvements in access, provision of inputs as planned, and successful disbursement of funds, then there was success and many education development projects would be deemed successful based upon such criteria. However, if the criteria were broadened to include learning gains, reduced geographical and gender disparities in learning and acquisition of core basic skills, then the projects may not seem to be so successful. The Nepal reform raised serious questions about the criteria used for assessment of education development programmes. This study also brought out many issues which should be considered carefully in educational development programmes, such as, the home conditions of students, continuous professional support for teachers, too heavy reliance on ready-made reform packages from abroad, and exclusive emphasis on inputs.

2.15. Literature on Myanmar EFA activities

Myanmar has also developed and implemented the Education for All National Action Plan (EFA NAP) starting from 1993. However as the set targets were too ambitious a review and revision was made in 2003 encompassing the years 2003 - 2015 by incorporating the Dakar EFA Goals and the United Nations Millennium Development Goals (MDGs). The revised NAP would form the basis for discussions in this thesis. This NAP also forms the major reference for the author as the first NAP presumably formulated in 1993 could not be found anywhere in country or abroad. It had to be presumed that the 1993 NAP was not published and the EFA targets for 1993 quoted in the EFA Mid-Decade Assessment Report 2007 were present in the official papers and files only. The revised 2003 NAP, being an official publication, also illustrated the commitment of the government for the primary education sector. According to the revised NAP, the goal areas were:

- Access to and quality of education;
- Early childhood care and education (ECCE);
- Non-formal and continuing education; and
- Education Management and Information System.

Four National Goal Areas and Six Strategies

Goal Areas \ Issues	Access	Quality and Relevance	Management
Access and quality	Developing and expanding effective schools for children Making quality education more accessible to children Increase retention and completion rate in schools		
ECCE	Assisting 0-5 children to reach their fullest potential		
Non Formal and Continuing Education	Enhancing literacy and continuing education through literacy		
Education Management and EMIS	Modernizing education management and information system		

Source: EFA National Action Plan 2003

The six strategies to be employed in addressing these goal areas include the followings:

- Developing and expanding child friendly schools;
- Making basic education more accessible to children;
- Increasing retention and completion rates in schools;
- Assisting children to develop to their fullest potential;
- Enhancing literacy and continuing education through non-formal education; and
- Modernizing education management and information system.

National EFA goals → Goals areas → Strategies → Detail activities (targets).

In the EFA 2003-2015 National Plan, new targets were set to ensure access to and quality of basic education. The goals of current EFA NAP were formulated in May 2002 to be more realistic and to be in line with the

Long-Term Basic Education Development Plan and the Special Four-Year Education Plan. The six Myanmar EFA Goals were set by incorporating the Dakar Framework for Global Action and the MDGs as stated previously. The six Myanmar EFA Goals were:

1. Ensuring that significant progress is achieved so that all school-age children have access to and complete free and compulsory basic education of good quality by 2015;
2. Improving all aspects of the quality of basic education: teachers, education personnel and curriculum;
3. Achieving significant improvement in the levels of functional literacy and continuing education for all by 2015;
4. Ensuring that the learning needs of the young people and adults are met through non-formal education, life skills and preventive education programmes;
5. Expanding and improving comprehensive early childhood care and education;
and
6. Strengthening education management and EMIS.

The revised NAP covered all major areas addressed by the Dakar Framework and identified many issues relating to the primary education sector. Possible solutions for them were also discussed even including educational research for quality improvement. It also showed the existing situation in 2002 for the 18 core indicators and the intended targets for the years 2005, 2010 and 2015. It is indeed a theoretically sound document even though questions may be raised regarding the reported data. It would certainly bring about educational development, especially in primary education level and general literacy, if all identified issues were addressed.

Another major source of reference for EFA in Myanmar was the EFA Mid-Decade Assessment Report published in 2007. This is also a theoretically sound document addressing all components of EFA. It dealt at length with all six goals of EFA, providing data on the core indicators as well as other related aspects of education, and attempts were made to base the assessments and discussions upon available data. Questions may again be raised regarding the data reported in the document, for example, the number of children with disabilities in formal schools was reported to be 10,268 which may be assumed to represent the numbers in Yangon and not for the country as a whole. However, the assessment covered all aspects of EFA, outlining the achievements and challenges for various components. One distinct point to note was that the document focused only on achievements, citing successes and areas where success was the least. It avoided terms like non-achievement and failures and used the term challenges to describe some of such situations. Being an official publication it had to be expected that the emphasis would naturally be on what were considered to be achievements than on non-achievements and failures.

One interesting feature of the above Mid-Decade Assessment book was the inclusion of Chapter 4: Challenges to Providing Education. It gave synthesis of issues in basic education, relating to Access and quality, ECCE, NFE and continuing education, educational management and EMIS. The chapter also contained statements on challenges and recommendations to deal with them in the areas of policy and budget, social and cultural factors, legal factors, geographical factors, language factors, school factors, risk factors and natural disasters. A few examples of the challenges and recommendations stated will be presented to give an idea about them. Regarding language factors, the challenges include:

- Although the official language of the country is Myanmar language (Myanmar language) most of the national groups in the country has

its own dialect and Myanmarsar is often a “second language” which makes education difficult for children from national groups. In addition, teachers assigned to remote areas may not be able to speak the local language, constraining communication between them and their students.

- Some residents of border areas are communicating in Chinese or Thai and not the Myanmar language.

Recommendations given for them were:

- Motivate more teachers from the national groups to return to their locality and teach.
- Enhance awareness of people in remote and border areas that they are citizens of Myanmar. Therefore, they need to use the national language when communicating with each other.

Whether the recommended actions may solve or alleviate the stated challenge is less important than to see that attempts were at least made to identify the problem and possible solution recommended. In Myanmar context, this is indeed a progress and need to be acknowledged as such.

Han Tin (2000) provided frank and open appraisal of the education system in Myanmar. He gave critical comments unstintingly based upon his past experiences as a teacher in Myanmar and retiring from the post of National EFA Coordinator a few years ago. Excerpts from his observations regarding education system in Myanmar are presented as follows. However, it need to be pointed out that his observations were very subjective belonging to the ‘qualitative domain’ rather than to the ‘quantitative’ where the reported data need to be substantiated by empirical values. In other words, his observations were mainly based upon his experience than upon published data from representative studies.

- Teachers occupy the valued position as one of the “five gems” on the same plane as Buddha, Holy Scriptures, Monks and Parents.

- The social roles of teachers and students are drawn so rigidly that expecting the latter to participate in dialogue and decision making is deemed inappropriate.
- At a time in Myanmar's education system when the dedication, commitment, confidence and high social status of teachers are being eroded by malpractice and corruption, it is clear that corrective measures must be taken without delay to arrest this backslide.
- Often parents keep their children gainfully employed to supplement the family income, or keep them at home to look after their younger siblings when their parents are away at work.
- Most students feel that the schooling they have received has failed to prepare them for the world of work.
- The popularity and success of private, non-government educational establishments have sprung up throughout Myanmar. Quality control is a necessity in these circumstances.
- Curriculum reform is an issue that also needs to be addressed urgently. The current curriculum is so overloaded with factual knowledge that it lends itself to rote learning.
- Classroom practices also do not allow for analytical, creative thinking or free discussion and expression of thought.
- At the preschool level an atmosphere of benign neglect exists.
- The joy of learning and the idea that school can be a place for socializing and fun as well as for learning are stifled from the very outset of a child's life.
- School terms should be arranged so that rural family units can make full use of the manpower available to them without disrupting the schooling of their children. (So as to reduce the massive drop-out rate before completion of the primary cycle of education in rural areas which he termed 'disadvantaged'.)

- An urban- school model does not usually work well in a rural setting.
- Adequate remuneration and incentives must be provided to counter the dubious practices of some of teachers 'to earn a fast buck' by operating outside the formal state system.
- Research and development have also lagged behind due to inadequate funds.
- The focus should be not only on formal education, but (also) on informal education.

The Ministry of Education, Education Sector Study (ESS) Phase I and Phase II was carried out by the Ministry of Education in 1992 and 1993 in collaboration with UNESCO and UNDP. Indeed a rare study of its kind in Myanmar and the author had a hard time trying to find a copy of the report for reference. It could not be found or was not made available to the author in Myanmar, but a copy was finally located in UNESCO library in Bangkok. The data from this study will be cited as reference, time and again, in the discussions as the data from other references from the Ministry of Education are most likely to be biased, intended only to show the achievements of the government.

The ESS study was carried out vigorously by a group of scholars and education experts from nearly all sectors involved in education and training in Myanmar, namely, education, medicine, engineering, agriculture, veterinary, economics, etc. They were able to report the existing real situation objectively. They wrote "In spite of considerable past achievements, education in Myanmar is presently facing serious problems related to the content, organization and management of educational processes. As a result, the equity, quality, internal and external efficiency of such processes are weakening, leaving the Myanmar education system sufficiently unprepared to contribute towards national development goals." The study pointed out that what appeared to be

'near universal admission into primary schooling' is in reality not the case and that the retention rates for all levels of the education system were low, and that "most students who are rejected by, or abandon the system, belong to the most vulnerable population groups." It was also reported that "the level of public spending on essential educational inputs, such as school books and teaching aids, is among the lowest in developing countries" reducing the educational quality. They reported that "there is an average of more than 20% repeaters in each grade of primary education."

The studies identified eight key issues for development of the education sector in Myanmar so that it may play an effective role in development of the country. It was stated then in 1992-3 that it is necessary for these key issues to be addressed with sustained well targeted actions. These issues were:

1. Redefining the role of primary education
2. Strengthening the curriculum development to meet changing needs
3. Creating a fair and efficient selection system
4. Making evaluation learning oriented
5. Linking education to life after school and the world of work
6. Improving the quality of teaching and training of teachers
7. Providing appropriate facilities and instructional materials
8. Improving sector management

Looking at these issues one can notice that all of them relate to the present day EFA goals in one way or another. Most of the issues still persist to this day and the data relating to this study may serve as a reference or a baseline for monitoring EFA core indicators in this research.

Han Tin (2000) pointed out that even though efforts were made to address the issues identified by ESS they were mostly inadequate. Even though new

textbooks and methodologies had been introduced rote learning was still preferred by teachers and students. The evaluation system still focused upon recalling facts, and not on analytical and creative thinking. The integrity of the system was also called into question when talks of the possibility of “buying” sets of matriculation examination questions, a nationwide high school graduation examination, could be heard in town.

A recent baseline study on Child Friendly Schools programme was carried out UNICEF in 2007. The study covered 13,200 Grade 5 students from 1000 schools in 20 townships. It conducted assessment on performances of child friendliness of schools in selected townships. Myanmar Language Learning Achievement (MLLA) was also included in the study covering vocabulary, spelling, syntax, grammar, comprehension and production using instruments previously tested in two large sample-based studies. Scoring was carried out using partial credit model. The findings showed that schools located in urban areas were more advantaged than those in rural and remote areas and also identified four priority areas for improvement. They were maintenance of healthy school environment, gender disparity (boys favoured more than girls), use of corporal punishment and high incidence of bullying. The most disturbing finding was that 76% of the students failed to meet the minimal level of competence for MLLA.

All of these literatures and reports contained many topics, issues and facts relating to all six goals of the EFA Dakar Framework for Action and the situation of education in general and EFA implementation in Myanmar. Many of them will be useful in constructing questionnaires, guiding the interviews and discussions, and, interpreting the results. They will certainly be helpful in trying to find answers to the research questions and fulfill the aim and objectives of the present study.

3. Research Questions

The above literature review has shown that even though the achievement of EFA goals show progress in many countries there are still many countries where the goals may not be achieved by 2015. Regarding achievement of UPE (EFA Goal 1) objectives by 2015, there are 44 countries where it may not be possible and some South East Asian countries (Lao PDR, Myanmar and Thailand) were among them. Similarly there are many countries, especially developing countries, where other EFA goals like, gender parity, adult literacy, education quality, etc, are not being achieved as intended and have a low chance of doing so by 2015. The present study therefore aim to assess the achievement of EFA NAP by reviewing the available EFA reports and also by conducting special studies so as to be able to cross check the accuracy and reliability of reported data and also to identify difficulties, constraints and limitations faced by the educators - teachers and administrators in education, and give recommendations to try and correct them so as to increase achievement of EFA core indicators and through them the achievement of EFA goals as much as possible by the target year 2015 in one developing country in South East Asia region - Myanmar.

As such, the proposed study will try to find answers to the following questions for Myanmar:

1. What is the achievement status of Core Indicators relating to the EFA goals as reported by MOE in the following areas:
 - Universal Primary Education (UPE)?
 - Gender parity and equality?
 - Early childhood care and education (ECCD)?

- Adult literacy?
 - Life skills training?
 - Education quality?
2. Can other indicators be used in place of some Core Indicators?
 3. How accurate and reliable are the education data used by the MOE?
 4. How far does the data from MOE and EFA country coordinator tally with findings from the assessment of school records, household survey and interviews conducted by the researcher for this study, and, the data published by UN agencies?
 5. How can the education data used by MOE be made more accurate and reliable?
 6. What are the difficulties, constraints and limitations being faced in implementing and monitoring EFA activities and how can these be overcome or reduced?

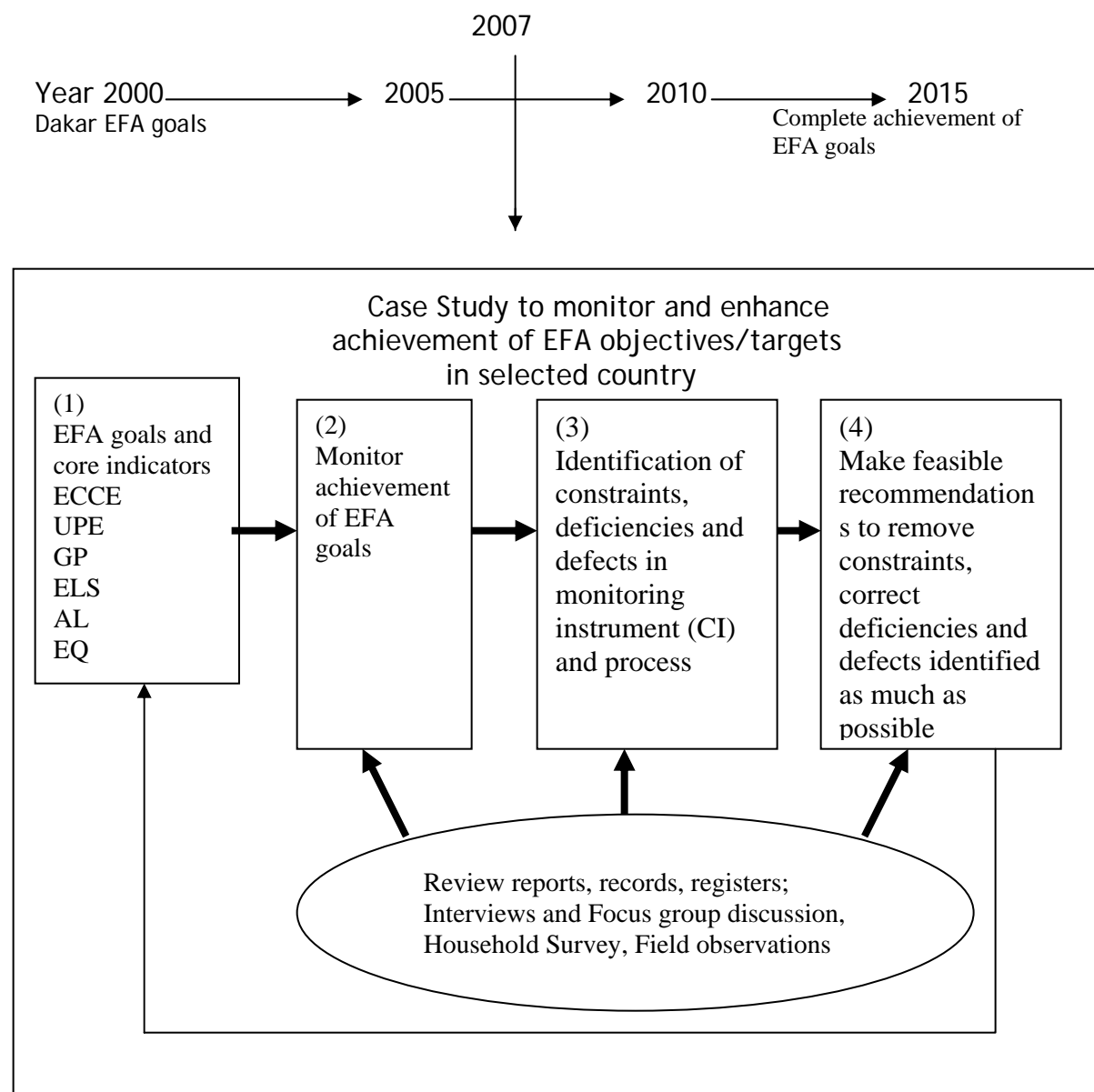
4. Aim and Objectives

Aim: To assess achievement of EFA in Myanmar and to increase its achievement in later years.

Objectives

1. To assess implementation status of Myanmar EFA NAP based upon achievement of Core Indicators as stated in the latest available MOE reports.
2. To assess the applicability of respective CI for the EFA Goals in the context of both urban and rural areas of Myanmar and find ways to make it more applicable.
3. To identify other more applicable indicators for the EFA goals if possible.
4. To find out the accuracy and reliability of education data reported by MOE in relation to the findings of the present study and data reported by UN agencies.
5. To propose means to make the education data of MOE more accurate and reliable.
6. To identify the difficulties, constraints and limitations encountered in implementing and monitoring EFA activities together with their underlying reasons.
7. To identify and recommend ways of mitigating the difficulties, constraints and limitations identified above so as to increase achievement of EFA goals.

5. Conceptual Model of the Study



ECCE - Early Childhood care and Education
 UPE - Universal Primary Education
 GP - Gender Parity
 ELS - Education of Life Skills
 AL - Adult Literacy
 EQ - Education Quality
 CI - Core Indicators

6. Methodology

This section will first of all describe the theoretical assumptions underlining the study being conducted. It will address the paradigmatic considerations of the study by looking at both the ontological and epistemological stances of the methods used in collecting and analysis of data. The chapter will then describe the research design, and, materials and methods to be used in the study.

6.1 Research Design

The present study used the Explanatory Case Study Design described by de Vaus (2001, p.221) as more detailed explanations will be needed for the observed achievement of EFA goals by the selected country in 2007. It was felt that the observed *phenomenon* (achievement of EFA goals in this study) must be studied in the light of the *context* (the existing situation for education in a country) and as Yin wrote in 1993, the context may contain important information which may be of assistance in understanding about the phenomenon being observed.

The National Action Plan for EFA (NAP) was treated as the 'case' at the *holistic* level while the components of the education system of the country - Ministry and Departments of Education, other relevant ministries of the government, National Coordination Committee for EFA, schools, NGOs and the community (households) all treated as *embedded* units of the case, the terms *holistic* and *embedded* being applied as described in de Vaus' book (p.220-221). It may be imagined that the 'case' NAP could only function within the context created by all *embedded* units and they were quite inseparable.

Even among the explanatory case study designs, the present study employed the clinical case study type of design. The researcher tried to find out what

was the problem or problems in the case and their possible causes. The researcher started with the NAP implementation status regarding achievement of EFA goals, which showed which goals were being met and which were not. Possible explanations (hypotheses) were then developed for these achievements or not achieving them and more information gathered to find out what was happening and why. In that way a full picture of the case was build up and evaluated to see which explanations best fit the case. Having identified the reasons and possible causes of the problems in the case, recommendations were then made to resolve the problems as much as possible and increase achievement of objectives in the future.

6.2. Theoretical considerations

The present study being concerned with education would form a part of research in social science. As such, a case study design was formulated involving both quantitative as well as qualitative methodologies. These two methodologies differ quite distinctly in their paradigms based upon their ontological and epistemological determinants. Quantitative methodology sees reality as objective and simple, explains human action in terms of nomological principles, supports value-free inquiry and is deductive. Qualitative methodology sees reality as subjective and problematic, explains human action in non-deterministic terms (Sarantakos, undated). Quantitative methodology takes a rigid, objective, neutral and 'scientific' stance and employs a perspective which resembles that of the natural sciences. Qualitative methodology adopts a subjective perception of reality and employs a naturalistic type of inquiry.

Wildemuth (1993) suggested that the difference between quantitative and qualitative methodologies was the difference between positivist and interpretive paradigms, the former recognizes an objective reality not dependent upon the researcher and the latter views reality as subjective and socially constructed. She wrote(1993, p.451) that the positivist

approach, with its goal of discerning the statistical regularities of behaviour, was oriented toward counting the occurrences and measuring the extent of the behaviours being studied. By contrast, the interpretive approach was oriented toward detailed description of the actors' actions and the meanings associated with observable behaviours. She linked epistemic assumption to method and method determined by the epistemology. Bradley (1993) in the same journal as Wildemuth agreed that methodology and epistemology were linked to each other and that methodology developed from the researcher's ontological and epistemological stance.

However, as Jones (2004) stated "The divide between quantitative and qualitative methods is not fundamental and hides many of the common features between the two." In social science studies there was a considerable mix between quantitative/objective and qualitative/subjective research methodologies as could be seen in some studies - Dewdney and Harris (1992) *Community information needs: the case of wife assault*, where a random household survey was followed up with structured interviews; Chatman (1992) *The information world of retired women*, where she described the quantitative data about her sample of 55 women and then uses individual examples giving long quotations from her interviews. She also did not report planned suicide of a respondent which she kept from the institutional authorities because of her promise of confidentiality. This demonstrated the objectivist stance in conducting her research as a subjectivist would have reacted to the possibility of suicide and might report it. Both of these actions brought into question the ethical implications of research.

It is apt to quote Jones (2004) at this stage, "In important ways they (quantitative and qualitative research) reflect a single paradigm, they may not be perfect partners as they represent both different ends of this

spectrum of activity but they are intimately connected." It would not be wrong then to state that both quantitative and qualitative methodologies are equally valuable and useful in their own context and the present study used them to find answers to the specified research questions.

6.3 Validity and Reliability

The present study employed both quantitative and qualitative methods in data collection. For the quantitative part of the study, the methods used were (i) review and analysis of latest available EFA core indicators published in EFA NAP reports which were for the years 1993 and 2004, (ii) review and analysis of school records and registers for the year 2004, the same year for which data were reported in the latest EFA report and (iii) household questionnaire survey of an urban and a rural area. These methods are concerned with collecting and analysing empirical data like percentages, rates, and ratios. It was learned that the data shown in the EFA reports came from government figures and also from Multiple Indicator Cluster Survey (MICS) studies carried out by UNICEF. The data obtained from analysis of school records and registers together with findings from the household survey would serve as cross-checks on the data presented in the EFA reports. These data on EFA core indicators obtained from schools and household survey were obtained from randomly selected stratified samples and the sample size for the household questionnaire survey was determined according to statistical principles. The calculations for the CIs were also made according to standardised EFA formulae, and as such, it had to be stated that the data obtained were valid and reliable.

Regarding the qualitative part of the study, the methods used were (i) semi-structured interview of a National EFA Team member, and, (ii) focus group discussions with teachers, PTA members and community members. Both of these methods had their own strengths and weaknesses. The researcher had used the interview and focus group discussions adhering as much as possible

to the principles and practices laid out in some texts and articles from reputable international journals (Patton, 1990; Denzin and Lincoln, 1994; Flores and Alonso, 1995; Mays and Pope, 1996; Morgan, 1997). This part of the study was to find out the difficulties, constraints and limitations encountered in implementing EFA programme in the country. The strength of qualitative research is in its ability to bring out the truth or as close to it as possible, which really meant the validity. It would be difficult to assess the validity of the results as the interpretation had to be based upon what the respondents and participants said in the interview and discussions. In other words, it would be very difficult to assess the credibility of qualitative results other than to determine whether the results were sensible, believable, useful in practice, and with as little bias as humanly possible. It had to be assumed that the answers and opinions given were true and that they would give the same answers when asked again by the same researcher or by a different person. All of this pointed to the fact that the results of the interview and focus group discussions would be valid but may be of weak reliability.

It had to be pointed out that de Vaus (2001, p.31) wrote, "*Measures will never be perfectly reliable and perfectly valid. These are not all or nothing concepts and the goal is to maximize the reliability and validity.*" The researcher agreed with that statement fully. The present study did attempted to ensure validity and reliability for both the quantitative and qualitative approaches by using more than one research method to produce 'triangulation' of results (Cohen and Manion, 1986). The results from one method could be checked against another and where the results converged and agreed would represent reality.

6.4. Selection of Country

This study was carried out in Myanmar the selection of which was based upon the following criteria:

1. A developing country with the possibility of achieving the majority of EFA goals by 2015.

A total of 181 countries, the highest number of countries with data available for gender parity in primary education as reported in GMR 2007, were taking part in the EFA programmes worldwide. Out of them it was reported that in 44 countries it may not be possible to achieve all of the EFA gals by 2015. Some ASEAN countries like Lao PDR, Myanmar and Thailand were among the list of 44 countries. It was correct that they may not be able to achieve all of the EFA goals but in case of Myanmar and Thailand possibility existed that they would be able to achieve the majority of the goals by 2015. Also, based upon the other criteria which were stated below, the selection falls upon the ASEAN countries and finally Myanmar.

2. Likely to get permission from local authorities to conduct the study.

This was also felt to be an important criterion. Permission from the local authorities would be needed to conduct studies and research activities, maybe in the countryside depending upon the chosen sample. It was felt that it would be easier to get permission from authorities, especially in Myanmar as the author is a Myanmar citizen and as she would be helping the educational authorities to acquire scientifically sound data on its EFA achievements together with recommendations for better achievement in later years before 2015.

3. Fairly developed education infrastructure.

This was a very important criterion for selection. The selected country need to have a fairly developed education infrastructure so that EFA activities could be implemented as recommended by the study. Without this the first recommendation that the study will be making would be to develop the education infrastructure first of all. Also, without this infrastructure it would not be possible for a country to achieve the majority of the EFA goals by 2015.

4. Cultural and social environment same or similar to that of the researcher.

Since the research methods included conducting household surveys, interviews and focus group discussions it was imperative that she (the researcher) be able to communicate effectively with the participating people. It was also important that the researcher also understand and be able to adapt and to appreciate the cultural and social environment she would be getting into. The researcher would only be able to develop a rapport with the subjects by understanding the social context. It would be easier for the researcher to do this if the country selected should be from the region where her native country is situated. The best option would be to choose the researcher's native country for the study.

5. Financial requirements for travelling and accommodation in the country within reach of the researcher or met through grants, aids or student loan if necessary.

This was also an indispensable part of the requirement. The research would need funds for travelling, living costs in the countryside, stationeries and gifts of appreciation to the participants of the interview and group discussions. It may not be possible to bear the costs by the researcher alone and in the absence of grants, loans or stipend from an

external source, the best option would be to choose the researcher's native country for the study.

Country Profile of Myanmar

Myanmar with a land area of 677,000 square kilometers is the largest country in mainland South East Asia. With the Bay of Bengal in the south, the country has common borders with Bangladesh, India, China, Laos and Thailand.

Based upon the publication of the Central Statistical Organization, Yangon in 2004, the population of Myanmar 2006/07 is estimated at 56.515 million, of which 28.097 million or 49.72 percent are males and 28.418 million or 50.28 percent are females. 70.1 percent of the population resides in rural areas with remaining 29.9 percent in urban areas. Population growth rate averages 2% per year. Myanmar is a union of fourteen administrative areas: seven States and seven Divisions. The States are represented by the seven major ethnic groups: *Kachin, Kayah, Kayin, Chin, Mon, Rakhine* and *Shan*. The largest group is the *Bamar* which comprises about 70 percent of the population. However, there are as many as 135 ethnic groups and as many languages. It is estimated that 65.4 percent of the population is engaged in agricultural sector, 20.6 percent in the services sector and 14.0 percent in the industrial sector. Since ancient times, people enjoy freedom of worship. Religious edifices and religious orders have been in existence in Myanmar for a long time and religious festivals are generally held on a grand scale. Buddhism is practiced by 89.6 percent of the population, Christianity by 5.5 percent, Islam by 3.8 percent and Animism by 1.1 percent.

The mean household size in Myanmar is 5 and there is hardly any difference between rural and urban areas in this respect. Overall, females head 18.4 percent of households. This percentage of households with female as head

has been increasing over the years, especially in urban areas. Regarding the general level of education, 40.2 percent of household population has primary education, 18.0 percent middle school education, 8.2 percent high school education and 4.2 percent university education. Thus, more than half of the household population has basic education. As stated in the Introduction of this thesis, national development has a direct relationship with education and as such, investing in education is considered to be an important strategy for national development.

Myanmar is an agricultural country, self-sufficient in food production. According to the Ministry Report 2006 of the Ministry of Planning and Economic Development, Yangon, the Household Income and Expenditure Survey conducted in 2001 showed that the estimated poverty rate for urban areas was 20.7 percent, rural 28.4 percent and 26.6 percent for the country as a whole. The per capita GDP for 2000/01 was reported to be Kyats 50927 and increase to Kyats 221,217 in 2005/06.

The country has a well developed health infrastructure but the health status still leaves much to be improved as evident by the following data. Anthropometric measurements taken in 2003 by Multi-indicator Cluster Survey (MICS) conducted by the Department of Health Planning in Myanmar showed that 31.8% of under five years of age (<5) children were wasted, 32.2% stunted and 8.6% severely underweight. Under five children mortality rate has been declining in Myanmar and reached 66.1 per 1000 live births (1000LB) in 2003. Infant mortality rate (IMR) was found to be 50 per 1000 live births in 2003. Maternal mortality rate (MMR) was 2.2 per 1000 LB in 2003. A 30 year long term health development plan Myanmar Vision 2030 has drawn up plans to reduce mortality of under 5 years age-group children to 52/1000LB, Infant Mortality Rate to 42/1000LB and Maternal Mortality Rate to under 2/1000LB respectively by 2011. Life expectancy at birth in

1999 was 60.7 years for males and 63.9 years for females with an overall expectancy of 62.3 years for both sexes.

In Myanmar, the national government takes responsibility for education of its citizens and as such, nearly all schools for education come under the administration of the public sector. Lately, starting from about 1991 private schools and technical training centres for Information and Communication Technology (ICT) as well as for education, but mainly for pre-primary education, came into existence especially in Yangon and Mandalay. The following figures as reported by the Myanmar Red Cross Society in 2006 show the number of schools and student population in Myanmar for the school year 2003 - 2004.

Table 1. Schools and Student Population in Myanmar 2003 - 2004

School level	No. of Schools	No. of Students
Primary school	40,247	6,997,536
Middle school	3,507	2,992,862
High school	1,906	749,632
Total	45,662	10,740,030

The Burma Basic Education Law was enacted in 1966 and was replaced by Burma Basic Education Law of 1973. With the enactment of these laws came a number of changes in basic education. The Ministry of Education had to assume overall responsibility for basic education in the country. The Department of Basic Education was formed and was expanded and reorganized in 1998 into four separate departments - Department of Basic Education (1) for Lower Myanmar, Department of Basic Education (2) for Upper Myanmar, Department of Basic Education (3) for Yangon City and

Department of Education Planning and Training. The Basic Education Objectives as stated by the Ministry of Education in 2000 were:

1. To enable every citizen of the Union of Myanmar to become a physical or mental worker well equipped with basic education, good health and moral character;
2. To lay foundations for vocational education for the benefit of the Union of Myanmar;
3. To give precedence to the teaching of science capable of strengthening and developing productive forces;
4. To give preference to the teaching of arts capable of preservation and development of culture, fine arts and literature of the state; and
5. To lay a firm and sound educational foundation for the further pursuance of University Education.

The entry age of the formal education system is 5 years in Myanmar. The basic education system in Myanmar consists of 5 years of primary school (elementary) beginning from Grade 1 to 5, 4 years of middle school (lower secondary) from Grade 6 to 9 and 2 years of high school (upper secondary), Grade 10 and 11, totaling 11 years in all. Pre-school classes and pre-primary schools for toddlers, 3 - 5 years age, were introduced in 1998, many of which belong to private sector or social welfare department.

According to the 1947, 1973 and 2008 Constitutions of the Union of Burma, every citizen shall have the right to education, and, every citizen shall be given basic education which the State prescribes by law as compulsory. Myanmar ratified the Convention on the Rights of Child without any reservations since 1991 and measures have been successfully taken to fulfill the commitment of the Convention. The 1993 Myanmar Child Law states that every child shall have opportunities of acquiring education; and, have the right to acquire free basic education (primary education) at schools

opened by the State. Myanmar also ratified the Convention on the Elimination of all Forms of Discrimination Against Women (CEDAW) in 1996 even though the government stated that it was not relevant in Myanmar context as both boys and girls enjoy equal rights to all levels of education.

Education Structure

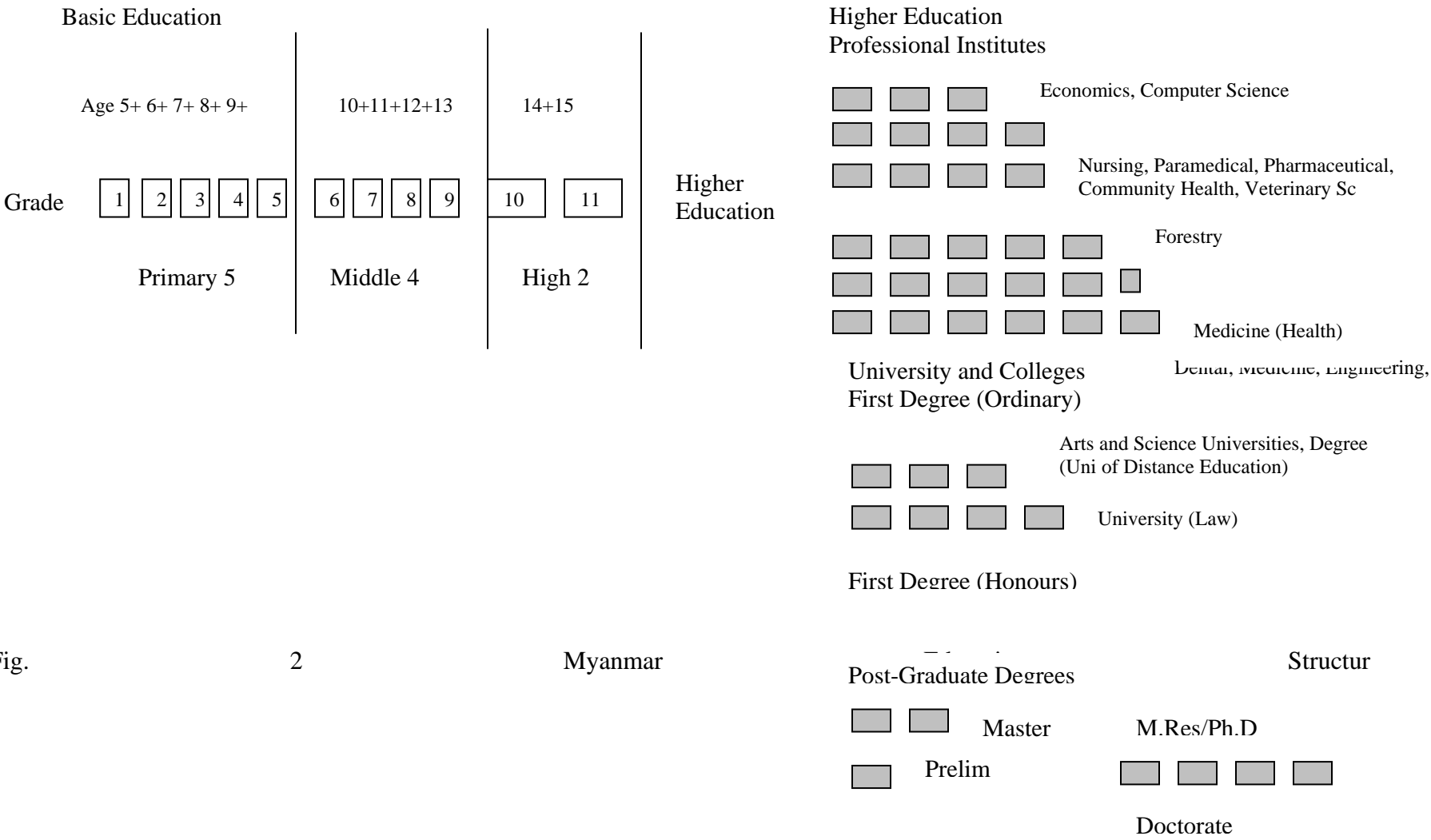


Fig. 2 Myanmar Education Structure

6.5 Research Methods

Research was carried out using the following research tools.

1. Review of National EFA Reports

Implementation status of NAP was assessed first of all by reviewing achievement of EFA Core Indicators as reported in the two latest available National EFA Reports, which were 2003 National EFA NAP and EFA Mid-decade Assessment Report 2007 even though it was labelled as a draft, as it was the latest and the only report available to the researcher.

2. Review and analysis of school records and registers

The schools were selected by stratified random sampling from among the schools in the township. The selection of schools were carried out as follows. First of all a division, Yangon division, was chosen by random sampling from among the six divisions/states - namely, Yangon, Mandalay , Ayawaddy and Bago divisions, and, Shan and Mon states. The divisions/states were chosen based upon the following criteria:

- security,
- same educational development status,
- accessibility,
- availability of logistical support,
- possibility of waiving official permission from education department.

Yangon division itself consists of 42 townships from which a township was selected by random sampling and thence the schools by stratified random sampling - one each of Basic Education High School, Basic

Education Middle School, Basic Education Primary School, Private Primary School, and Monastic School in urban area, and, a Basic Education Primary School in rural area.

The selected schools include a Basic Education High School (BEHS), a Basic Education Middle School (BEMS), a Basic Education Primary School (BEPS), a Private School (PS) and a Monastic School (MS) in the urban area. A Basic Education Primary School (BEPS) was also selected in the rural area of the township.

School records and registers of the selected schools were inspected and recorded so as to supplement data missed in the EFA Report and also to serve as a cross reference. The selected schools consisted of five schools [3 public (1 primary, 1 middle and 1 high school), 1 private and 1 religious school] in urban and 1 primary school (public) in rural area of the selected township.

The school records and registers reviewed and analysed were for the year 2004, the same year for which EFA data were recorded and used as reference in the latest EFA Report, i.e., Mid-Decade Assessment Report 2007 (draft).

3. Interview

Interviews have being used in social science research including education for a long time now. It is an accepted research method in qualitative research. The present study constructed and used a semi-structure based upon the guidelines given by Seidman (1991).

The interviews were conducted after the interviewer carefully explained the objectives of the study and that the participation in the interview was entirely voluntary and that the interviewee can

stop the interview at any time the interviewee wanted. Three sessions of semi-structured interviews (30 - 40 minutes each) were conducted with the National EFA Team member to get the opinions and comments upon the applicability of Core Indicators in Myanmar context and the constraints, deficiencies and defects encountered in using them for monitoring of NAP implementation. The difficulties encountered in implementing the NAP were also elicited.

The interviewee was also asked to give suggestions or ideas for correcting or overcoming these constraints, deficiencies and defects. The initial intention was to conduct interviews with the EFA National Coordinator. However, as he cannot get official permission from the Ministry of Education he declined to give the interviews. The researcher then had to arrange an informal interview with a member of the EFA Team privately assuring strict confidentiality. The interviews were conducted in the interviewee's home, in a room with privacy, with the interviewer (researcher) supplying light refreshments and lunch or dinner to the family. A tape recording was made of the interview, which was very reluctantly agreed to by the interviewee, only after the interviewer promised strict confidentiality and that the tape will be given to the interviewee after transcribing the interview.

4. Focus Group Discussion (FGD)

The FGD method, which was initiated by Merton and Kendall in 1946, was used to gather information from teachers, PTA members and community elders. Even though FGD had a long history in market research (Morgan, 1988) it had now come to be used in social sciences including health and education. FGD enabled the researcher to gain a larger amount of information in a shorter period of time

from selective participants who had specific experience - in this case EFA. Subjective experiences of participants were explored in relation to predetermined research questions.

The FGDs, which were constructed and implemented basing upon the description by Kruger (1994), were conducted with the teachers from selected schools, Parents Teachers Association (PTA) executive committee members, and, community elders of selected urban and rural areas. Two senior teachers from the 3 public schools, together with two PTA members and two community elders formed one group while another group consisted of eight senior teachers from the selected schools in the area. The initial intention of including the third group consisting of National EFA Team members for one FDG cannot be carried out as the EFA National Coordinator said, *quote "does not have the authority to give permission for such a discussion" unquote*. Two sessions, each lasting about one to one half hour, were conducted for each FDG group. One group consisted of seven members, three males and four females; three senior teachers from state high school, two PTA members and one community elder from urban area and one community elder from the rural area, who were not PTA members. Another group consisted of eight senior teachers, six females and two males; two each from the state middle and primary schools in urban area, one each from the private and Monastic Schools in the urban area while two teachers were recruited from the rural state primary school.

The group discussions were conducted at the home of a participant (a former schoolmate of the researcher) where there was some privacy, the owner acting more or less as the host with the researcher supplying snacks and refreshments. All participants were told that participation was voluntary and they can drop out at any time in the

discussions, their views will be kept strictly confidential and no mention will be made as to their names or identity. The objectives of the study were also explained to them carefully together with the FGD process. The participants did not need much introduction among themselves, except with the researcher. The discussions were at first hesitant but after a few minutes quite open and frank views were put forward based upon their experiences. A tape recording was made at the time of discussion but was destroyed in front of the home owner after being transcribed. It was ensured that all participants got the chance to participate in the discussions even though a few attempted, probably unconsciously and not deliberately, to be dominant.

The constraints, deficiencies and defects encountered in monitoring and implementing the NAP as identified by the National EFA Team (NET) member served as the basis for discussions within the FDG groups. The FDG members were asked whether they agreed or did not agree with each stated issue or problem given by the NET member, and to give reasons for their statements. They were asked to simply give their views and opinions and not to debate, argue or persuade others in the group. They were also asked to identify more issues or problems also giving reasons why they think these issues or problems occurred. Finally they were asked to give ideas on how to overcome or correct the issues or problems they had agreed or brought out during the group sessions.

5. Household Questionnaire Survey

Use of questionnaires and household surveys are accepted methods of data collection in research. In the present study, questionnaires were used in conducting household surveys to collect quantitative data on

the existing status of education, mainly primary level education and literacy in the selected urban and rural areas.

A questionnaire survey was conducted on randomly selected households in the selected township (urban area) and all households of the village where the selected school is situated. The questionnaires were left with the family if the members were literate and can fill in the questionnaire by themselves. If not, the researcher had to read out the questions and fill it in for them. That was very few indeed as at least one member of the family can fill in the form. It need be noted that the samples may not be statistically significant, even though random samples were taken where ever possible, as the number of sample was limited by the time and financial constraints faced by the researcher. The aim was to find out whether the enrolled students actually attended the class, their retention rates and completion rates for primary education and also whether disabled students, if present in the family, are getting any education. The reasons for not attending the schools were also elicited for out of school children in the families. Literacy rates for adults and for 15 - 24 years age groups in the study area were also to be calculated.

A sampling by lot was first made between Divisions and States as presented above. Yangon Division got selected and out of the townships in the division, a township was randomly selected and then its ward with 140 households was again selected randomly for urban area. A village, with 69 households, was also selected for the rural part of the study because it happened to be the village where the randomly selected school was located.

6. Field observations

The researcher in her capacity as an Education Officer with UNICEF in Myanmar had to travel to many schools through out the country. She was able during her field visits to talk to people, teachers, students, parents, community members and local authorities. Those observations were used to supplement and complement the findings from other methods of study.

6.6 Sampling and statistical application

The study being designed as a Case Study, a focused sampling technique, as described by Hakim (1986), was used in selecting a case. This may also be designated as 'strategic selection of cases' as cases are selected because they have particular characteristics (de Vaus 2001, p.238). In this study, the case - NAP for EFA of Myanmar, was based upon criteria described in 'the selection of a country' at the start of this methodology section.

Selection of schools from urban and rural areas were carried out by means of multi-stage cluster sampling as described by Kumar (1999), selecting the Province, Division or State first, and then the town and village in rural areas sequentially, finally the schools in those areas. The number of schools have to be limited based upon the time and financial resources of the researcher. As such, the number of schools selected in the urban area consisted of 3 public schools (1 each of primary, middle and high school), 1 private school, and, 1 religious school. One public school in the rural area was also selected for the study. No private or religious schools can be included in the sample in rural area as they were not present there. Only schools with the most number of students were selected for the study.

Household questionnaire survey was done by using 'cluster sampling' in urban area, while in rural area all households in the village where the

school is situated were surveyed. The sample size for urban area was calculated by using the following formula (Lwanga and Lemeshow, 1991, p. 25):

$$N = z^2 p(1-p) / d^2$$

Where N = estimated sample size

z = standard normal deviation (1.96 at 95% confidence interval)

p = proportion of gross enrolment (e.g., 90%=0.9)

d = precision level (degree of accuracy at 0.05 level)

Using the above formula the number of households to be surveyed was calculated to be 138 in the urban area and a township, identified by stratified sampling, with its 140 households was used for urban part of the study.

Even though the study was designed as a Case Study incorporating review and analysis of EFA reports, school records and registers, interviews and focus group discussions including household surveys in urban and rural areas using questionnaires were also conducted. As such, statistical applications were made to the collected data where ever possible. Chi square tests and difference between proportions were used to test for associations in the observed data.

The interviewee for the in-depth interview and the participants for the focus group discussions were selected by means of 'purposive sampling' as described by Patton (1990). The selection was thus based upon the fact that the subjects were people actively involved in implementing EFA activities, except for the community members. The community members who were

active in community development activities were also included in the FGD groups so as to include all stakeholders of education in the study samples.

6.7 Ethical Considerations

The ethical involvement in the present study include safeguarding and protecting the confidentiality rights of the participants. The ethical representation was carried out by first getting the consent of the National EFA Coordinator, teachers of selected schools and other people of parent - teacher associations to be included in FGDs, and heads of households to participate in the study. The research aim, objectives and methods were explained to them carefully. It was made known to them that participation was absolutely voluntary and that they can refuse to participate or to continue to participate at any time during the study. They were told that the information they provide will be treated as confidential, their participation will be kept anonymous by not including names or indicating the person's identity in reporting the findings, the findings will be used only for the purpose of preparing the thesis. It was indeed fortunate as no unethical conduct was observed or came to the notice of the researcher. An ethical dilemma would have developed if any unethical behaviour on the part of the respondents/ subjects was observed or brought to light during the discussions.

7. Results

Achievement of EFA NAP was determined by reviewing the achievements of the EFA Core Indicators (CI) for the most recent and available reports in Myanmar. Comprehensive reports covering all CI were indeed very few and the researcher had to use whatever is available unofficially as official permission was not forth coming.

Table 2. Achievement of EFA Core Indicators

Sr No.	Core Indicators	Achievement of CI		Remarks
		2002*	2005** (Target) Actual	
1	Gross enrolment in ECD	10.0	(15)	No rate available, there were 142,438 children in ECD school
2	% of new entrants to Grade 1 with ECD attendance	8.0	(10) -	No data available
3	Gross Intake Rate	112.4	(108.0) 105.6	Exceed target
4	Net Intake Rate	92.1	(95.0) 97.6	Exceed target
5	Gross Enrolment Ratio	90.8	(94.0) 89.6	Target not achieved
6	Net Enrolment Ratio	78.0	(85.0) 82.2	Target not achieved
7	Current public expenditure in PE (a) as % GNP (b) as % GNP per pupil	0.4 ^a 3.8 ^a	(0.5) 0.58 ^a (3.9) 4.4 ^a	Based on GDP in 2004 budget, exceed targets
8	Public expenditure on PE as % total expenditure on education	39.7	(42.0) 49.7	Exceed target
9	% primary school teachers having required academic qualifications	95.5	(96.0) 97.0	Exceed target

10	% primary school teachers certified to have national standard	80.0	(97.0) 97.7	Exceed target
11	Pupil/Teacher Ratio	33:1	(32:1) 30:1	Exceed target
12	Repetition rates by grades	-	-	Data not available. See Table 3
13	Survival rate to Grade 5	67.0 ^b	(74.0) 71.5	Target not achieved
14	Coefficient of efficiency	82.0 ^c	(88.0) 85.1	Target not achieved
15	% children reaching at least grade 4 or equivalent competencies	57.2	(68.0) -	Data not available
16	Literacy rate of 15-24 year olds	94.0	(96.0) 96.5	Exceed target
17	Adult literacy rate	91.8	(92.5) 94.1	Exceed target
18	Literacy Gender Parity Index	95.9	(96.0) 99.0	Exceed target

ECD - Early Childhood Development

PE - Primary Education

^a as % of GDP³⁷ and not GNP

^b survival rate to grade 4 and not grade 5 (1991-92)

^c for 1991-92

* EFA National Action Plan, Yangon 2003

**EFA Mid-decade Assessment Report, Yangon 2007

The above Table 2 shows data of two latest EFA publications in Myanmar, EFA NAP 2003 with data for 2002 and EFA Mid-decade Assessment Report 2007 with data for 2005. Mid-decade Assessment Report shows targets of EFA indicators for 2005 and also the actual achieved data. There were no achievement data for CI 1, 2 and 15, while no data were available for both 2002 and 2005 for CI 12 the repetition rates by grades. Values for CI 7 were also calculated by the researcher based upon available data for the year 2005.

Table 3. Promotion rates for primary education (PE) level classes

PE Grades	2000-01(%)	2005 (%)		Remarks
		Target	Actual	
Grade 1	80	82.5	86.6	Exceed target
Grade 2	94	96.0	91.6	Target not met
Grade 3	92	95.0	93.1	Target not met
Grade 4	91	95.0	94.6	Target not met
Grade 5	98	99.0	99	Met target

The Myanmar EFA NAP used promotion rates in place of repetition rates

Source: Central Statistical Organization, Yangon 2005

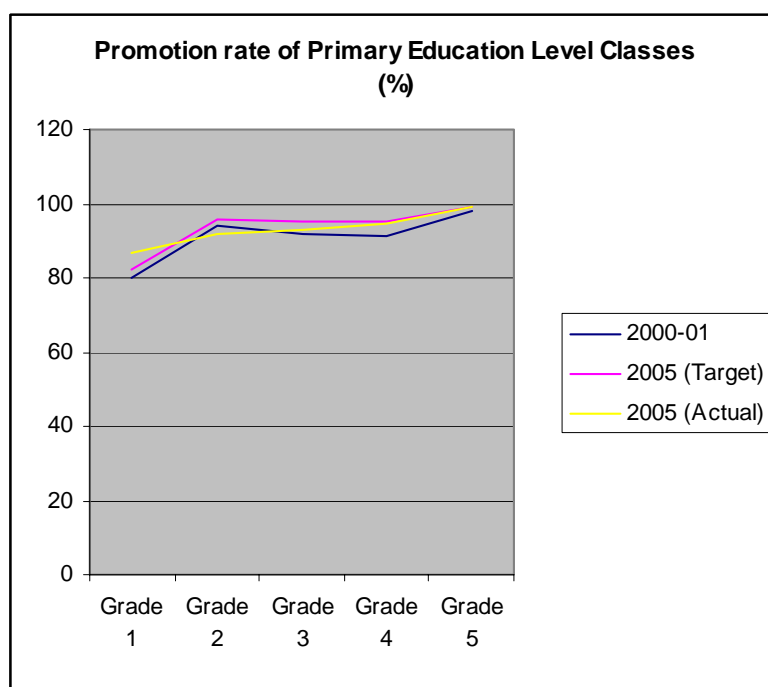


Table 3 shows the promotion rates for the five grades in place of repetition rates. It was assumed that 100 percentage less the promotion rate would indirectly show, even though it may be crude, the repetition rate. For example, the actual repetition rate for Grade 1 in 2005 may roughly be calculated as $100 - 86.6 = 13.4$, and the repetition rate would then be

13.4%, meaning that those who did not pass would be repeating the grade. Again assuming that all who did not pass would enroll as repeaters.

The following tables (4 to 9) show the data collected and compiled from the 2006-7 school year records, registers and inspection of selected schools from the selected Township. Separate tables are shown for different schools and for all schools combined.

Table 4. Data relating to a Basic Education High School in urban area

Grades	Number of students			Number of repeater students			Number of drop-out Students ^d			Number of teachers		
	Male	Female	Total	M	F	T	M	F	T	M	F	T
1	50 ^a	48 ^a	98 ^a	-	-	-	-	-	-	-	3	3
2	56	54	110	2	1	3	-	-	-	-	3	3
3	50	51	101	2	-	2	-	-	-	-	3	3
4	57	55	112	2	1	3	-	1	1	1	2	3
5	60	58	118	3	1	4	1	-	1	-	3	3
6	75	73	148 ^b	3	2	5	-	-	-	1	4	5
7	67	70	137	2	2	4	-	-	-	-	5	5
8	64	65	129	1	-	1	-	-	-	-	4	4
9	65	66	131	-	-	0	-	1	1	1	4	5
10	72	74	146 ^c	3	1	4	-	-	-	-	5	5
11	62	64	126	4	2	6	2	-	2	-	5	5
Total	678	678	1062	22	10	32	3	2	5	3	41	44

^b Transfer in of students from Primary Schools in the township

^c Transfer in of some students from Middle Schools in township

^d 3 drop-out for health reasons, 2 to help with family business

^a 9 out of 50 boys, 11 out of 48 girls and 20 out of 98 (20.4%) children in Grade 1 had attended pre-primary (ECD) schools

Table 5. Data relating to a Basic Education Middle School in urban area

Grades	Number of students			Number of repeater students			Number of drop-out students**			Number of teachers		
	M	F	T	M	F	T	M	F	T	M	F	T
1	32 ^a	30 ^a	62 ^a	-	-	-	-	-	-	-	1	1
2	31	34	65	-	-	-	-	-	-	-	1	1
3	34	32	66	1	-	1	-	-	-	1	1	2
4	33	31	64	-	2	2	-	-	-	-	2	2
5	32	35	67	1	-	1	-	1	1	-	2	2
6	40	42	82*	-	-	-	-	-	-	1	1	2
7	39	37	76	1	-	1	-	-	-	1	1	2
8	41	42	83	-	1	1	1	-	1	-	3	3
9	42	39	81	1	-	1	-	-	-	1	2	3
Total	324	322	646	4	3	7	1	1	2	4	14	18

*Transfer in of students from other Primary Schools in the township

**2 students left school for unknown reasons

^a 5 out of 32 (15.6%) boys, 3 out of 30 (10.0%) and 8 out of 62 (13%) had attended pre-primary (ECCD) schools

Table 6. Data relating to a Basic Education Primary School in urban area

Grades	Number of students			Number of repeater students			Number of drop-out students			Number of teachers		
	M	F	T	M	F	T	M	F	T	M	F	T
1	27 ^a	30 ^a	57 ^a	-	-	-	-	-	-	-	1	1
2	30	29	59	-	1	1	-	-	-	-	1	1
3	29	32	61	1	-	1	-	-	-	-	1	1
4	30	28	58	-	-	-	-	-	-	-	1	1
5	33	31	64	-	2	2	-	-	-	-	2	2
Total	149	150	299	1	3	4	-	-	-	-	6	6

^a 1 out of 27 (3.7%) of boys, 2 out of 30 (6.7) girls and 3 out of 57 (5.3%) children had attended pre-primary schools

Table 7. Data relating to Private Primary School

Grades	Number of students			Number of repeater students			Number of drop-out students			Number of teachers		
	M	F	T	M	F	T	M	F	T	M	F	T
1	7 ^a	8 ^a	15 ^a	-	-	-	-	-	-	-	1	1
2	9	8	17	-	-	-	-	-	-	-	1	1
3	7	6	13	-	-	-	-	-	-	-	1	1
4	8	6	14	-	-	-	-	-	-	-	1	1
5	6	7	13	-	-	-	-	-	-	-	1	1
Total	37	35	72	-	-	-	-	-	-	-	5	5

^a all (100%) of children had attended pre-primary schools

Table 8. Data relating to a Monastic School

Grades	Number of students			Number of repeater students			Number of drop-out students*			Number of teachers**		
	M	F	T	M	F	T	M	F	T	M	F	T
1	6	5	11a	-	-	-	-	-	-	-	1	1
2	8	4	12	1	-	1	-	-	-			
3	7	6	13	1		1	-	-	-	-	1	1
4	6	4	10	1	1	2						
5	5	4	9	-	-	-	2	-	2			
Total	32	23	55	3	1	4	2	-	2	-	2	2

*2 male students left to help with the family farm

**1 teacher has to look after grade 1 and 2, while another looked after the remaining grades. These are in addition to the monks who would help with teaching of some subjects

^a None of the children had attended pre-primary (ECD) schools

Table 9. Data relating to a Basic Education Primary School in rural area.

Grades	Number of students			Number of repeater students			Number of drop-out Students*			Number of teachers		
	M	F	T	M	F	T	M	F	T	M	F	T
1	24	26	50 ^a	-	-	-	-	-	-	-	1	1
2	27	25	52	1	-	1	-	-	-	-	1	1
3	24	23	47	-	-	-	-	-	-	-	1	1
4	28	29	57	1	1	2	-	-	-	-	1	1
5	23	24	47	-	-	-	1	-	1	-	1	1
Total	126	127	253	2	1	3	1	-	1	-	5	5

*1 male student left to help with family farming

^a none of the children had attended pre-primary (ECCD) schools

Tables 4 to 9 showed the number of students in each grade as well number of repeaters, drop-outs and number of teachers for each selected school of the study.

The number of students attending the schools tend to vary year by year, not only for grade 1 but also in other grades as well. This was because (1) students coming in for grade 1 vary from year to year as there was no set number of students to be accepted for each year, and, (2) some tend to move from one school to another within the township even though there is a policy to allocate students to schools based upon their area of residence. Students passing out from the fifth grade of a primary school will be required to enroll in the specified middle or high school in the area. Similarly students passing out from the ninth grade of a middle school will be required to enroll for the tenth grade of the specified high school. However, people tend to overcome that restriction by changing their address and also by other means, not only after passing the highest grade of the school, but also during the various school years. The result was that even though there were 100 students in a class for the year, after

examinations some will move to another school, some will transfer in from another school, some dropped out, so that the number of students in the next higher grade class may be 100 or more than 100 or even less.

Table 10. Data relating to all selected schools for study in the Township

Grades	Number of students			Number of repeater students			Number of drop-out students			Number of teachers		
	M	F	T	M	F	T	M	F	T	M	F	T
1	146	147	293 ^a	-	-	-	-	-	-	-	7	7
2	161	154	315	4	2	6	-	-	-	-	8	8
3	151	150	301	5	-	5	-	-	-	1	7	8
4	162	153	315	4	5	9	-	1	1	1	8	9
5	159	159	318	4	3	7	4	1	5	-	9	9
6	115	115	230	3	2	5	-	-	-	2	5	7
7	116	107	223	3	2	5	-	-	-	1	6	7
8	105	107	212	1	1	2	1	-	1	-	7	7
9	107	105	212	1	-	1	-	1	1	2	6	8
10	72	74	146	3	1	4	-	-	-	-	5	5
11	62	64	126	4	2	6	2	-	2	-	5	5
Total	1356	1335	2691	32	18	50	7	3	10	7	73	80

^a 46 out of 293 (15.7%) children had attended pre-primary (ECD) schools

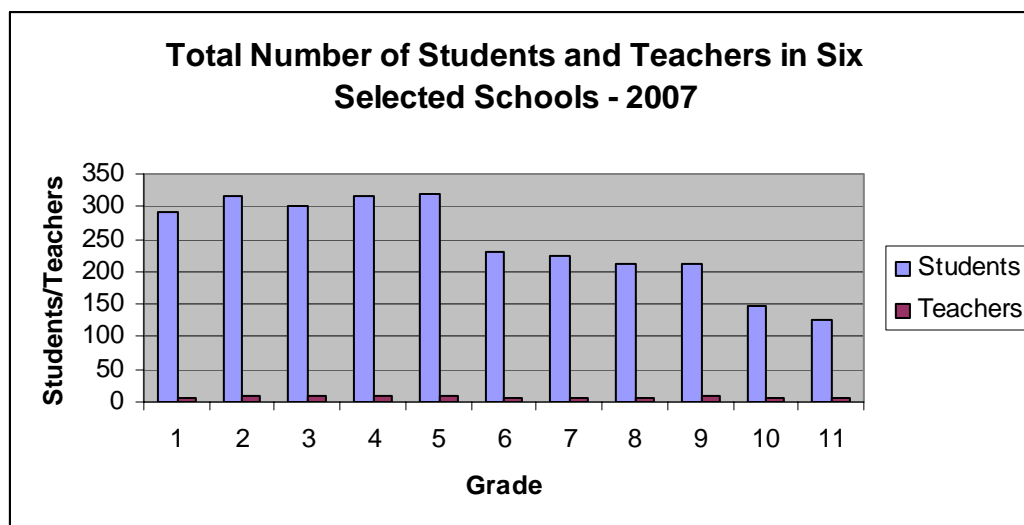


Fig. 1 Bar chart showing total number of students and teachers in selected schools

It can be seen from figure 1 which was based upon Table 10 that the total number of students tend to decrease gradually over the grades probably showing drop-outs from the selected schools. They may have dropped out totally from schooling or moved to other schools in which case they would still be in the school system. The variability of teacher numbers was not apparent from the figure. There was not much difference in the number of teachers for the grades except the last two grades where the numbers were quite less than other grades because the numbers represent only one school (Grades 10 and 11 were only present in High School and not in others).

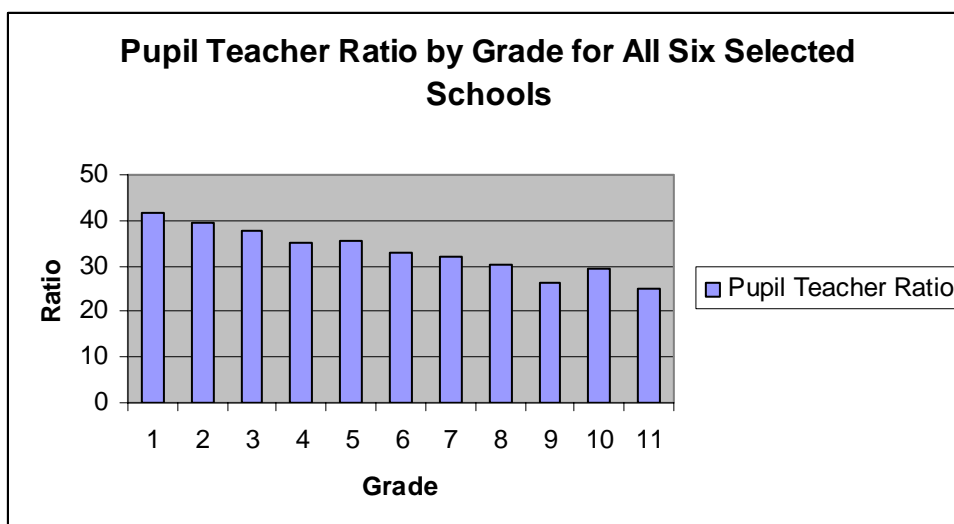


Fig. 2 Bar chart of pupil-teacher ratio by grade in selected schools

Figure 2 showed that pupil-teacher ratio became better as grades got higher. It was fortunate for the students as they could get more individual attention from teachers especially in high school which in Myanmar can decide the students' future as acceptance for university education depend upon their total scores obtained for Grade 11, a national matriculation examination.

Table 11. Physical conditions of schools under study (consolidated data)

Physical components		Number in/of respective school					
		BEHS	BEMS	BEPS	PS	MS	RBEPs
Type of school building	Brick	/	/		/		
	Wooden			/		/	/
Classrooms (overall)	lighting adequacy	/	/	/	/	X	/
	ventilation adequacy	/	/	/	/	X	/
	space per child (sq feet)	9	7.5	7.8	10	6.6	7.5
	Blackboard distance from last row in class	52ft	28ft	29ft	18ft	16ft	25ft
	Use of modern aids	/	/	X	/	X	X
	Adequacy of desks/chairs	/	/	X	/	X	X
Toilets	Separate for boys and girls	/	/	/	/	X	X
	Sanitary	X	X	X	/	X	X
	Average No. of students per toilet	54	54	38	12	18	32
Drinking water	Number of students per source	62	43	50	18	23	25
	Sanitary	/	/	X	/	X	X
Presence of play ground		/	/	/	X	/	/
Supply of school meals		X	X	/	/	/	X
Supply of text books		X	X	X	/	/	X

/ indicates yes or presence

X indicates none or absence

Table 11 shows the physical conditions of the selected schools in the study and the their environment.

The following table shows the data of teachers according to sex and qualifications in the study population.

Table 12. Data relating to teachers in selected schools

Sex of teachers	Teachers from primary level classes			All teachers		
	Matriculate only (% of teachers Primary level)	University graduates (% of teachers Primary level)	Attended Pedagogy training (%)	Matriculate only (% of total)	University graduates (% of total)	Attended Pedagogy training (%)
Male	2	-	-	2	5	5
Female	5	34	21	5	68	48
Total	7 (17.1)	34 (82.9)	21 (51.2)	7 (8.75)	73 (91.25)	53 (66.3)

The above Table 12 shows the qualifications of teachers in the selected schools, for teachers from primary education level classes (Grade 1 to 5) and for all classes. All teachers were either matriculates or university graduates.

From the data presented in the above Tables 4 to 10 the repetition rates according to grades and sex for each selected school as well as for all schools are presented below

Table 13. Repetition rates for Grades in an Urban Basic Education High School

Grades	Male (%)	Female (%)	Total (%)
1	-	-	-
2	4	2	3
3	3.5	-	1.8
4	3.2	1.7	2.5
5	4.3	1.5	2.9
6	4.3	2.8	3.5
7	3	3	3
8	1.5	-	0.8
9	-	-	-
10	4.6	1.5	3
11	6.6	3.3	4.8
Average all grades*	3.1	1.6	2.3

*Approximate rates as it is based upon present student population

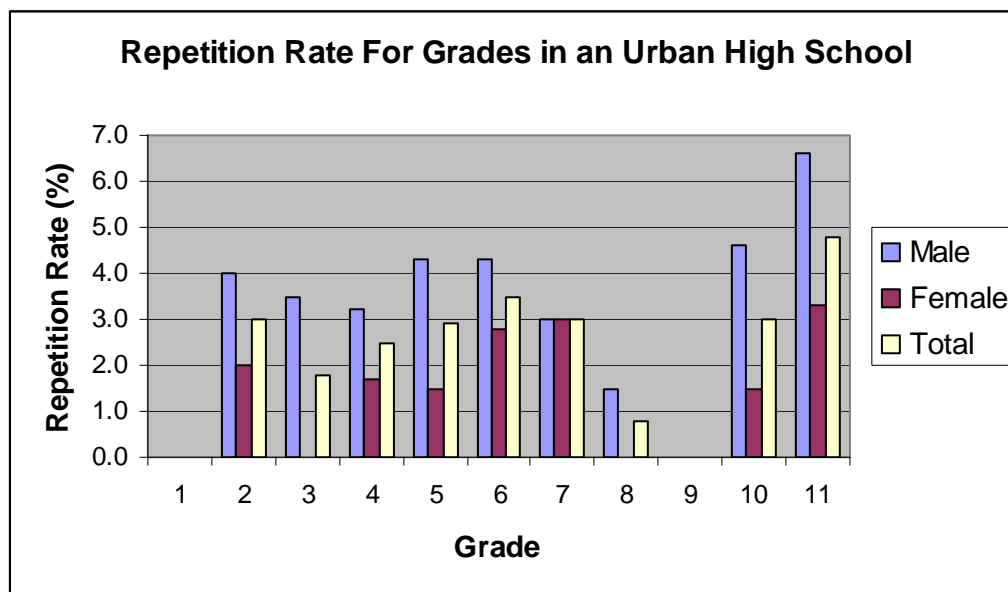


Fig. 3 Bar chart showing repetition rates by Grades for urban High School

The Table and Fig. 3 shows that on average repetition rates were nearly double for males than for females. The average repetition rate was just

2.3% as all schools were practicing what was called "continuous assessment" which made it very difficult for students to fail and repeat classes. This is also the result of "politicizing" the education. This applied to all schools in the study.

Table 14. Repetition Rates for Grades in an Urban Basic Education Middle School

Grades	Male (%)	Female(%)	Total (%)
1	0.0	0.0	0.0
2	0.0	0.0	0.0
3	2.9	0.0	1.5
4	0.0	5.7	2.9
5	2.4	0.0	1.2
6	0.0	0.0	0.0
7	2.4	0.0	1.2
8	0.0	2.3	1.2
9	2.4	0.0	1.2
Average all grades*	1.2	0.9	1.1

*Approximate rates as it is based upon present student population

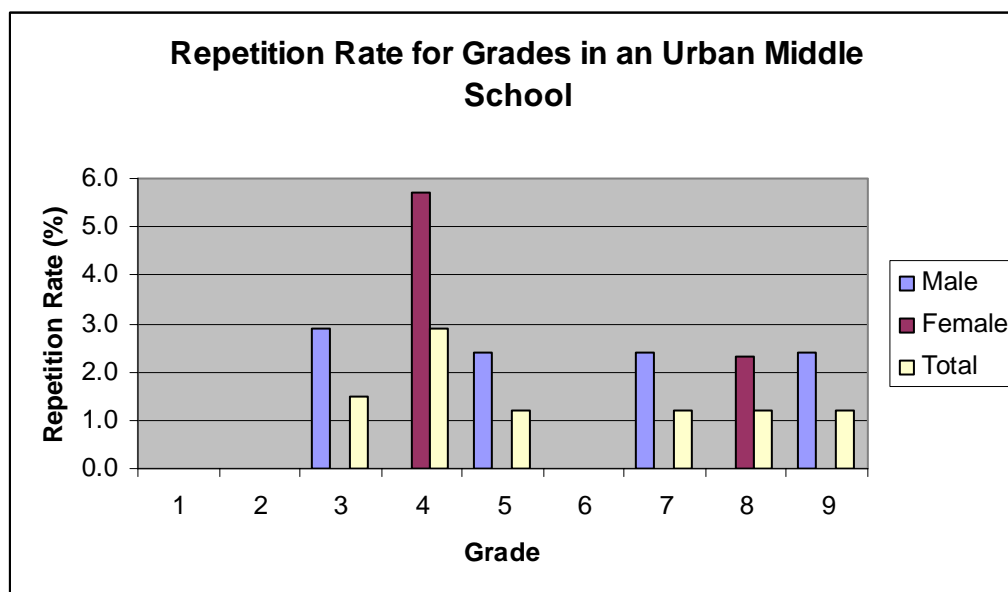


Fig. 4 Bar chart of Repetition Rates for Urban Middle School

Table 15. Repetition rates for grades in an Urban Basic Education Primary School

Grades	Male (%)	Female (%)	Total (%)
1	0.0	0.0	0.0
2	0.0	3.1	1.6
3	3.2	0.0	1.7
4	0.0	0.0	0.0
5	0.0	6.7	3.3
Average all grades	0.7	2.0	1.4

A distinct feature of Table 15 was that the rate for males was more than twice that of females.

Table 16. Repetition rates for a Monastery School

Grades	Male (%)	Female (%)	Total (%)
1	0.0	0.0	0.0
2	12.5	0.0	7.1
3	14.3	0.0	9.1
4	16.7	20	18.2
5	0.0	0.0	0.0
Average all grades	9.7	4.2	7.3

Table 17. Repetition rates for a Rural Basic Education Primary School

Grades	Male (%)	Female (%)	Total (%)
1	0.0	0.0	0.0
2	4	0.0	2.1
3	0.0	0.0	-
4	4.2	3.4	4.1
5	0.0	0.0	0.0
Average all grades	1.6	0.8	1.2

Table 18. Repetition rates of all Grades of all schools included in the study

Grades	Male	Female	Total
1	0.0	0.0	0.0
2	2.6	1.3	2.0
3	3.0	0.0	1.6
4	2.5	3.0	2.8
5	3.4	2.5	3.0
6	2.5	1.8	2.2
7	2.7	1.8	2.3
8	0.9	0.9	0.9
9	1.4	0.0	0.7
10	4.6	1.5	3.0
11	6.5	3.1	4.8
Average all grades	2.3	1.3	1.9

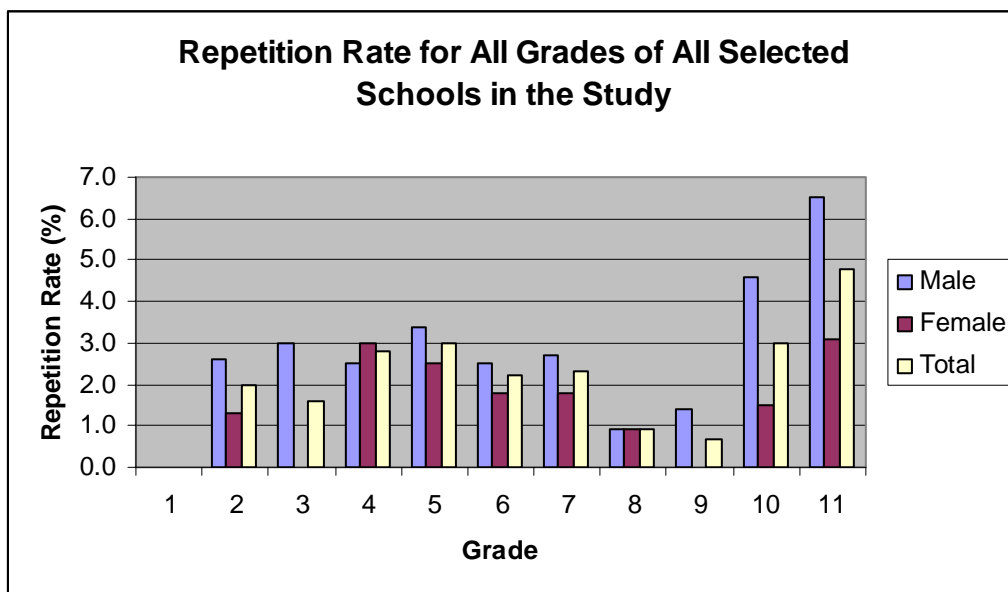


Fig. 5 Repetition rates for all Grades of all selected schools

Table 19. Average repetition rates for all grades according to sex and school

Schools	Males	Females	Average
Urban BEHS	3.1	1.6	2.3
Urban BEMS	1.2	0.9	1.1
Urban BEPS	0.7	2.0	1.4
Private school	-	-	-
Monastery school	9.7	4.2	7.3
Rural BEPS	1.6	0.8	1.2

These figures showed that except for Urban BEPS, females had half or nearly half the repetition rates for males. As seen from Table 19, Monastic School had the highest repetition rates for both males and females.

From these data it was found that,

- (1) 15.7% of new entrants to Grade 1 had attended pre-primary schools
- (2) the male to female student ratio was 1.02:1,
- (3) the overall repetition rate was 1.9%,
- (4) the repetition rates for female students was half or nearly half that of males,
- (5) the Monastic School had the highest repetition rates
- (6) the overall drop-out rate was 0.37%,
- (7) male drop-out rate was more than twice that of females,
- (8) the overall student teacher ratio was 33.6:1,
- (9) the male to female teachers ratio was 1:11.4,
- (10) all teachers (100%) had required academic qualifications while
 - a. 17.1% were matriculates and 82.9% were university graduates in primary level classes,
 - b. 8.75% of teachers of all classes were matriculates and 91.25% were university graduates .

c. 51.2% of teachers of primary school level had attended pedagogy training while overall, 66.3% of teachers had pedagogy training.

(11) The physical conditions of the schools appeared to be quite acceptable even though many areas could be improved except for the Monastic School where conditions were crowded, with poor lighting and ventilation, drinking water and sanitary facilities not satisfactory, inadequate number of chairs and desks, no separate toilets for boys and girls, but the school supplied meals and text books which can be seen only in a private school.

(12) From discussions with teachers it was apparent that the curriculum in use is a standardized one with life skills content even though it was outdated. Nobody knew when the curriculum was last revised and the revision process was not satisfactory.

(13) The township education official mentioned in informal conversation that students from Monastic school prefer to repeat as the Monastery provided lunch only to primary students.

7.2. Household Questionnaire Survey

The following tables show the results of household questionnaire survey. Table 11 shows the demographic data of the study area population indicating the number of persons in various age groups according to sex distribution and for urban and rural areas.

Table 20. Population structure of study area

Age groups	No. of persons						
	Male			Female			Both sexes
	Urban	Rural	Total	Urban	Rural	Total	
<5	24	18	42	27	19	46	88*
5 - 9	21	11	32	25	15	40	72
10 - 14	22	11	33	25	12	37	70
15 - 19	30	12	42	28	18	46	88
20 - 24	30	22	52	34	16	50	102
25 - 29	33	20	53	27	30	57	110
30 - 34	31	22	53	35	17	52	105
35 - 39	29	20	49	40	19	59	108
40 - 44	24	22	46	38	20	58	104
45 - 49	20	21	41	34	10	44	85
50 - 54	18	12	30	24	12	36	66
55 - 59	19	10	29	25	11	36	65
60 +	8	5	11	11	8	19	30
Total	309	206	513	373	207	580	1095

* < 2.5 years = 44, 2.5 to <5 years = 44 children

The age and sex distribution of the study area is quite similar to Myanmar country population as a whole except for the fact that, the population under 15 years of age is just 21% of the total at the time of study in 2006 as against 26% for the country as a whole in 2001. This maybe the result of the falling birth rate all over the country.

Population Pyramid for Study Area

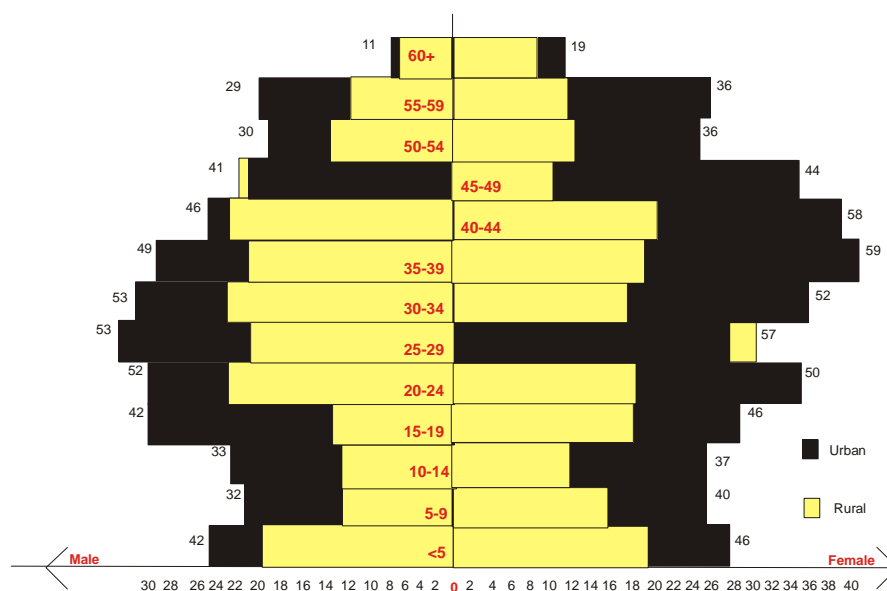


Fig. 6 Population Pyramid of Household Study Area

Table 21. Results of household questionnaire survey on Primary Education in urban area

Age groups	Number of children of pre-primary and primary education age											
	No. in families			No. enrolled in PE			No. attending PE			No. out of school*		
	M	F	T	M	F	T	M	F	T	M	F	T
<2.5 years	13	13	26									
2.5 - <5 years	11	14	25 [†]									
5 – 9 years	21	25	46 ^{!!!}	20	23	43	20	23	43	1	2	3
>9 years**	2	-	2	2	-	2	2	-	2	-	-	-
Total	47	52	99	22	23	45	22	23	45 ^{!!}	1	2	3

* Reasons for being out of school:

- For economic reasons (1 boy)
- Health reasons - heart disease (two girls)

** Children over 9 years of age but enrolled in primary education(PE) Grade 1

! 5 (out of 25) (20.0%) children were attending pre-primary schools

!! 8 (out of 45) (17.8%) children had attended pre-primary schools

!!! Contains 6 children of 5 years age - 3 males and 3 females (new entrants to Grade 1)

Table 22. Results of household questionnaire survey on Primary Education in rural area

Age groups	Number of children of pre-primary and primary education age											
	No. in families			No. enrolled in PE			No. attending PE			No. out of school*		
	M	F	T	M	F	T	M	F	T	M	F	T
<2.5 years	9	9	18									
2.5 - <5 years	9	10	19									
5 – 9 years	11	15	26!	10	14	24	8	10	18	3	5	8
>9 years**	-	2	2	-	2	2	-	1	1	-	1	1
Total	29	36	65	10	16	26	8	11	19	3	6	9

* Reasons for being out of school: Economic reasons in 3 girls and 2 boys, health reasons in the rest

**Children over 9 years of age but enrolled in Primary Education (PE) Grade 1

!Contain 8 children of 5 years age - 3 males, 5 females (new entrants to Grade 1)

Tables 21 and 22 show the results of household survey regarding enrolment and attendance in primary education. Table 21 also identified that, in urban area, 5 out of 25, (2.5 - 5) years age pre-school children were attending ECD programme in a centre run by Department of Social Welfare (DSW), while 8 out of 45 children attending PE at present had attended DSW centre before coming into school. DSW centres as well as some private pre-school centres were established mainly in some urban areas of the country. As such children in rural areas have little or no access to DSW centres or any other ECCE facilities as evident by their absence in Table 22. For the survey as a whole (urban + rural), 5 out of 44 children (11.4%) of 2.5 - <5 years age group was attending ECD programme and 8 out of 69 children (11.6%) of 5 - 9 years age group had attended ECD programme. The Apparent or Gross Intake Rate (AIR or GIR) as calculated from the above data was found to be 114.3% and the Net Intake Rate (NIR) 100%.

Table 23. Overall relationship between PE enrolment and attendance in the areas under study

Study area	Total number of Children of PE age	No. enrolled (%)	No attended (%)	No. out of school (%)
Urban	46	43 (93.5%)	43 (93.5%)	3 (6.5%)
Rural	26	24 (92.3%)	18 (69.2%)	8 (30.8%)
Total	72	67 (93.1%)	61 (84.7%)	11 (15.3%)

Table 23 brought out the fact that even though children may be enrolled in school they may not attend. This was illustrated in the rural area where enrolment rate may be as high as 92.3% while attendance rate was 69.2%.

This was not seen in urban area where all enrolled students attended. Overall the enrolment rate was 93.1% while attendance was 84.7%.

The table also indicated that, in the survey population of 72 children of primary school age - 5 to 9 years, 11 (15.3%) of them were out of school. Out of 11 children, 8 were from rural area and 3 from urban area. The number of children who were out of school in urban area constitute 6.5% of the total number of primary school age children in urban area, while the percentage was 30.8% of the total primary school age children in rural area.

Again for the 11 children, 6 consisting of 2 boys and 4 girls were out of school for health reasons. The remaining 5, consisting of 2 boys and 3 girls, were out of school for economic reasons. All 8 children from rural area were from families whose parents were farm labourers with lowest income in rural communities and with one or both of their parents illiterate.

Table 24. Completion of Primary Education among children in study area (urban and rural)

Sex	No. of children	Completion status of PE	
		Completed (%)	Not completed (%)
Male	93	79 (84.9%)	14 (15.1%)
Female	109	91 (83.5%)	18 (16.5%)
Both sexes	202	170 (84.2%)	32(15.8%)

The PE completion rate appeared to be quite high in the study area with 84.9% in males and 83.5% in females. The overall completion rate was 84.2%.

Table 25. Relationship between individual parent's education and overall school attendance (all classes) of their children in urban area

Parents' educational status		No. attending school			Not attending school			Total No. children		
		M	F	T	M	F	T	M	F	T
Father	Literate	20	15	35	-	2	2	20	17	37
	Illiterate	2	6	8	-	1	1	2	7	9
Mother	Literate	22	16	38	-	-	-	22	16	38
	Illiterate	3	2	5	2	4	6	5	6	11
Both parents	Literate	14	23	37	-	-	-	14	23	37
	Illiterate	-	-	-	-	1	1	-	1	1
Total		61	62	123	2	8	10	63	70	133

Table 26. Relationship between parents' education and overall school attendance (all classes) in urban area

Parents' education	No. attending school			No. not attending school			Total No. Children (100%)		
	M	F	T(%)	M	F	T(%)	M	F	T
Literate	56	54	110(98.2)	-	2	2(1.8)	56	56	112
Illiterate	5	8	13(61.9)	2	6	8(38.1)	7	14	21
Total	61	62	123(92.5)	2	8	10(7.5)	63	70	133

Tables 25 and 26 show the relationship between parents' literacy status and school attendance for all classes (overall school attendance) in urban area of the study. 98.2% of the children attended school when the parents were

literate as against 61.9% for illiterate parents. The overall attendance in urban area was 92.5%.

Table 27. Relationship between individual parent's education and overall school attendance of their children in rural area

Parent's educational status		No. attending school			Not attending school			Total No. children		
		M	F	T	M	F	T	M	F	T
Father	Literate	7	6	13	-	1	1	7	7	14
	Illiterate	1	2	3	2	2	4	3	4	7
Mother	Literate	6	8	14	-	2	2	7	9	16
	Illiterate	4	5	9	5	5	10	9	10	19
Both parents	Literate	2	4	6	-	-	-	2	4	6
	Illiterate	1	1	2	2	3	5	2	5	7
Total		21	26	47	9	13	22	30	39	69

Table 28. Relationship between parents' education and overall school attendance in rural area

Parent's education	No. attending school			No. not attending school			Total No. children		
	M	F	T(%)	M	F	T(%)	M	F	T(100%)
Literate	15	18	33(91.7)	-	3	3(8.3)	15	21	36
Illiterate	6	8	14(42.4)	9	10	19(57.6)	15	18	33
Total	21	26	47(68.1)	9	13	22(31.9)	30	39	69

Tables 27 and 28 show the existing relationships between parents' literacy status and overall school attendance in rural area. 91.7% of the children of

literate parents attended school while only 42.4% of illiterate parents did so. There is a significant difference ($p < 0.001$) between rates illustrating that the number of children of literate parents attending school was more than twice that of children of illiterate parents. Conversely the rates hold true for illiteracy also. The percentage of children of illiterate parents not attending school was 57.6% as compared to 8.3% for children of literate parents. The overall attendance rate in the rural area was 68.1%.

Table 29. Relationship between individual parent's education and overall school attendance of the children

Parents' education		No. of children		
		Attending school(%)	Not attending school(%)	Total No. children (100%)
Father	Literate	48 (94.1)	3 (5.9)	51
	Illiterate	11 (68.8)	5 (31.2)	16
Mother	Literate	52 (96.3)	2 (3.7)	54
	Illiterate	14 (46.7)	16 (53.3)	30
Both parents	Literate	43 (100)	-	43
	Illiterate	2 (25.0)	6 (75.0)	8
Total		170 (84.2)	32 (15.8)	202

Table 29 shows that school attendances vary depending upon whether the father or mother or both parents were literate. There seemed to be only slight differences between them but the differences were found to be significant ($p < 0.001$). The attendance rate was highest when both parents were literate, and more attendance was also observed when mothers were literate than with the fathers. Illiteracy of both parents or of the mother or father also appeared to foster non-attendance as evident by the high non-attendance rates of 31.2% in case of fathers being illiterate, 53.3% when the

mothers were illiterate, and 75.0% when both parents were illiterate respectively.

Table 30. Relationship between parents' education and overall school attendance

Parents' education	Number of children		
	Attending school (%)	Not attending school (%)	Total (100%)
Literate	143(96.6)	5 (3.4)	148
Illiterate	27 (50.0)	27 (50.0)	54
Total	170 (84.1)	32 (15.9)	202

Tables 30 shows the relationships between parents' educational status and school attendance of their children. As logically expected, the school attendance was high ($p < 0.001$) when the parents were literate (96.6%) than when the parents were illiterate (50.0%).

Table 31. School attendance of disabled children (5 to 16 years) in study area

Sex of child	No. disabled children observed	No. attending regular school	No. attending special centre	No. not attending school/centre
Male	4	2*	-	2***
Female	7	1**	1 [@]	5*****
Both sexes	11	3	1	7

* 1 boy 7 years old with hare lip, another 10 years with slow cerebration due to

Epilepsy

** 16 years old girl one leg paralysed (?polio)

*** All with medical problems - Mongolism in 1 boy(6 years) and
Cerebral palsy in 10 years old boy

**** Birth defects like deformed legs in 1 girl (8 years), heart disease in 2
girls (6 years and 7 years)

Deaf & mute in 1 girl (7 years), squint in 1 girl (6 years)

@ 10 years old girl attending special school for deaf & dumb in Yangon

It can be seen from above table that 4 out of 11 children or 36.4% with
disabilities were attending school or special centre.

Table 32. Adult literacy in study population

Location	Sex	No. of persons over 15 years of age		
		Literate (%)	Illiterate(%)	Total(100%)
Urban	M	207(85.5)	35(14.5)	242
	F	228(77.0)	68(23.0)	296
Rural	M	139(83.7)	27(16.3)	166
	F	120(74.5)	41(25.5)	161
Total		694(80.2)	171(19.8)	865

Table 33. Adult literacy according to locality in study population

Location	No. of persons over 15 years of age		
	Literate (%)	Illiterate (%)	Total (100%)
Urban	435 (80.9)	103 (19.1)	538
Rural	259 (79.2)	68 (20.8)	327
Total	694 (80.2)	171 (19.8)	865

The location of the residence of the respondents, urban or rural, did not seem to have any effect on adult literacy as the difference observed was not significant ($p>0.5$)

Table 34. Adult literacy according to sex in study population

Sex	No. of persons over 15 years of age		
	Literate (%)	Illiterate (%)	Total (100%)
Males	346 (84.8)	62 (15.2)	408
Females	348 (76.1)	109 (23.9)	457
Total	694 (80.2)	171 (19.8)	865

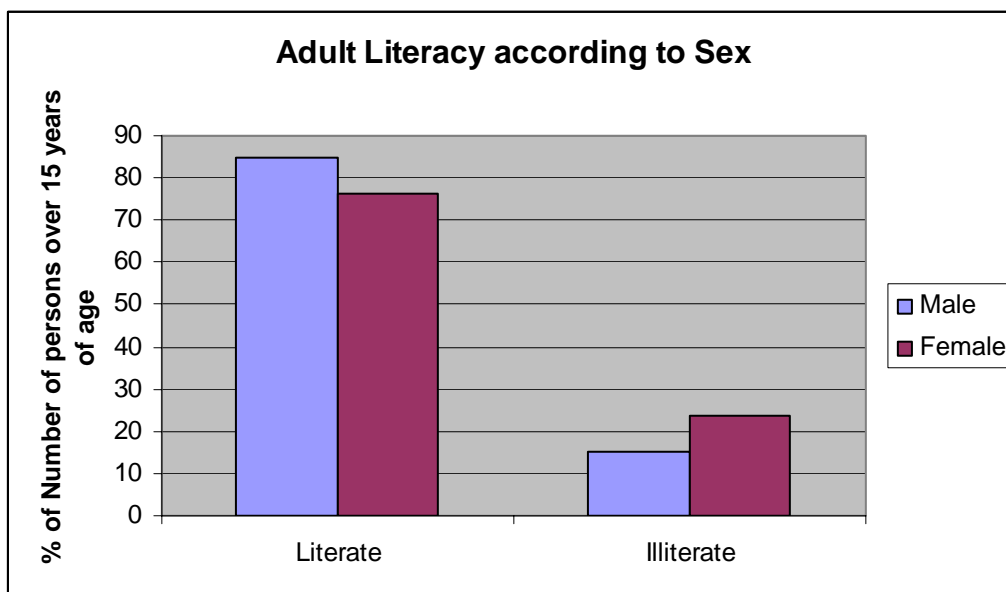


Fig. 7 Bar chart showing Adult Literacy according to sex

Tables 32 to 34 show the adult literacy status in the study area. Figures were shown for (1) the area as a whole, (2) according to locality and (3) according to sex. The Adult Literacy Rates (population over 15 years of age) for urban and rural areas were not significantly different ($p > 0.5$), being 80.9% in urban and 79.2% in rural areas. For males, there was not much difference between urban and rural areas being 85.5% and 83.7% respectively and the results were also found to be not significant ($p > 0.5$). For females also there was not much difference between urban and rural being 77.0% and 74.5% respectively and again the rates were not significant statistically ($p > 0.1$).

In both urban and rural areas, the rates between males and females were different being 85.5% and 77.0% respectively in urban area, while in rural area the rates were 83.7% and 74.5%. Overall (in urban and rural), the rates were 84.8% in males and 76.1% in females. There was thus a significant difference ($p < 0.001$) among the sexes, males being more literate than females, especially in rural area. Overall Adult Literacy Rate was found to be 80.2%.

Table35. Literacy in 15-24 years age group of study population

Location	Sex	No. of persons 15-24 years age group		
		Literate(%)	Illiterate(%)	Total(100%)
Urban	M	52(86.7)	8(13.3)	60
	F	54(87.1)	8(12.9)	62
Rural	M	29(85.3)	5(14.7)	34
	F	27(79.4)	7(20.6)	34
Total		162(85.3)	28(14.7)	190

Table 36. Literacy in 15-24 age group of study population (males)

Location	No. of males 15-24 years age group		
	Literate(%)	Illiterate(%)	Total(100%)
Urban	52(86.7)	8(13.3)	60
Rural	29(85.3)	5(14.7)	34
Total	81(86.2)	13(13.8)	94

Table 37. Literacy in 15-24 years age group of study population(females)

Location	No. of females 15-24 years age group		
	Literate(%)	Illiterate(%)	Total(100%)
Urban	54 (87.1)	8 (12.9)	62
Rural	27 (79.4)	7 (20.6)	34
Total	81 (84.4)	15 (15.6)	96

Table 38. Literacy according to sex in 15-24 years age group of study population

Sex	No. of persons 15-24 years age group		
	Literate(%)	Illiterate(%)	Total(100%)
Males	81 (86.2)	13 (13.8)	94
Females	81 (84.3)	15 (15.7)	96
Total	162 (85.3)	28 (14.7)	190

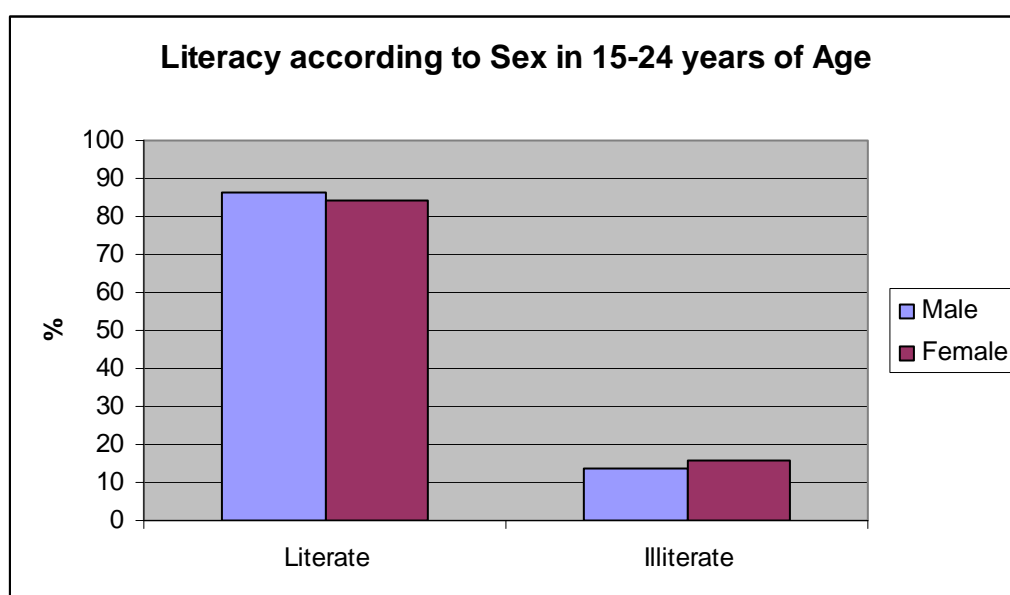


Fig. 8 Literacy according to sex in 15-24 years of age

Table 39. Literacy according to locality in 15 - 24 years age group of study population

Locality	No. of persons 15-24 years age group		
	Literate(%)	Illiterate(%)	Total(100%)
Urban	106 (86.9)	16 (13.1)	122
Rural	56 (82.4)	12 (17.6)	68
Total	162 (85.3)	28 (14.7)	190

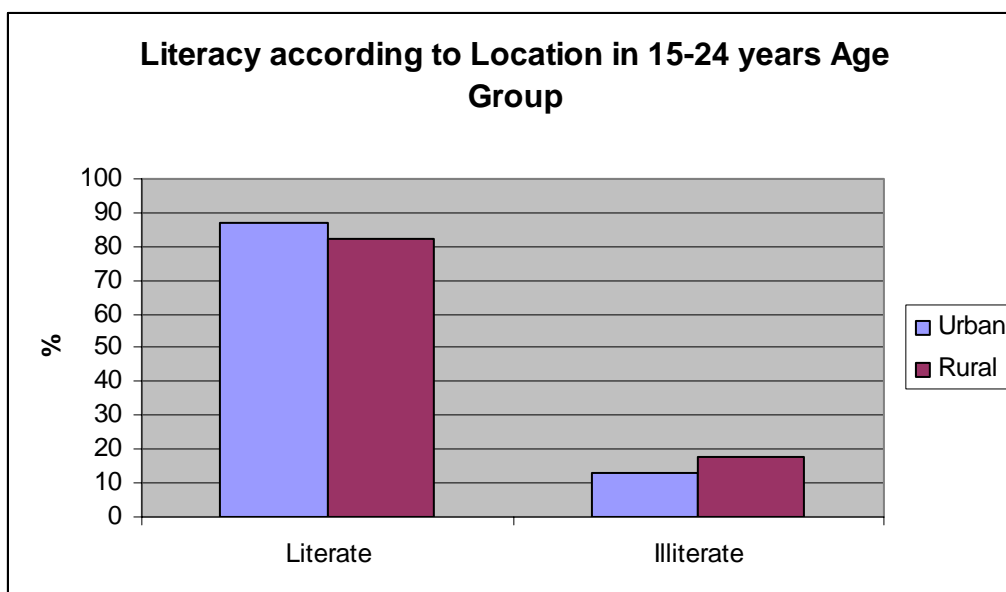


Fig. 9 Literacy according to locality in 15-24 years of age

Tables 35 to 39 show the literacy status of 15 - 24 years age group. No significant difference ($p > 0.1$) was observed between literacy rates for males and females, as well as for urban and rural areas. However, the difference in literacy rate between rural and urban areas was more evident in females as the rates increased from 79.4% in rural area to 87.1% in urban area, while in males there was just an increase from 85.3% in rural area to 86.7% in urban area. For both sexes, the difference between rural and urban areas was not much being 82.4% in rural while in urban it was 86.9%. The overall Literacy Rate for the 15-24 years age group was 85.3%. Comparing the Adult Literacy Rate and the Literacy Rate for 15-24 years age group, even though the overall rates were not very different, being 80.2% and 85.3% respectively, the increase observed indicated that educational efforts could well be having some impact.

7.3. Interview with National EFA Team member

The researcher was not able to conduct interviews with the EFA National Coordinator as official permission from the Ministry of Education was not obtained. As such, three informal and unofficial interview sessions with the a member of the National EFA team (NET) were carried out at the interviewee's home. Even then, the interviewee only consented after repeated assurance as to the confidentiality of the information and the interviewee's identity. The findings from the interviews are presented below. A sample transcript of one interview is shown as annex.

7.4. The summary of findings on achievement of CIs from review of reports, analysis of school records and registers and household survey

1. Based upon the two latest official reports on EFA plan and implementation, no data were available in 2005 for four CIs (CI 1, 2, 12 and 15), 2005 targets were not achieved in four CIs (CI 5, 6, 13 and 14), 2005 targets were exceeded in the remaining ten CIs.
2. Cross checking with analysis of school records and registers (school analysis), and, household (HH) survey findings (**bold**) showed variation between the official data and study findings for the CIs as follows:
 - a. CI 1 and 3 to 6 could not be verified as population data were not available from authorities.
 - b. CI 2, % of new entrants to Grade 1 with ECD attendance - 2005 report did not show any data. Target for 2005 was 10% and school analysis showed 15.7%, HH survey **17.8%**.
 - c. CI 7 and 8 showing investment and prioritization in PE - study findings was more than targets for 2005, i.e., the total amount of money invested and allotted to PE was more than targets but amounts not corrected for inflation.

- d. CI 9, % primary school teachers having required academic qualifications - school analysis finding more than official reported data (100:97).
 - e. CI 10, % primary school teachers certified to have national standard (paedagogic training) - school analysis finding much less than the official reported data (51.2:97.7).
 - f. CI 11, Pupil/teacher ratio - school analysis finding more than reported data (33.6:30.1), i.e., more student per teacher than official data.
 - g. CI 12, repetition rates by Grades - official reports did not show any data. School analysis finding show on average 1.9% for all grades. The rates for female students was half that of males. Monastic school had the highest rate.
 - h. CI 13, Survival rate to Grade 5 - could not be estimated from school analysis findings.
 - i. CI 14, Coefficient of efficiency - could not be estimated from study findings.
 - j. CI 15, % of children reaching at least Grade 4 or equivalent competencies - HH survey finding, as completion rate for PE, was more than target for 2005 (84.1:68.0).
 - k. CI 16, literacy rate of 15-24 year olds - HH survey findings less than official reported data (85.3:96.5).
 - l. CI 17, adult literacy rate - HH survey findings less than official reported data (80.2: 94.1).
 - m. CI 18, literacy Gender Parity Index - HH survey findings less than official reported data (89.0: 99.0).
3. Other findings from school analysis:
- (i) The overall drop-out rate from school analysis was 0.37%.
 - (ii) Males drop-out rate was more than twice that of females.
 - (iii) The male to female teacher ratio was 1:11.4.

- (iv) The physical conditions of the schools appeared to be quite acceptable even though many areas could be improved except for the Monastic School where conditions were crowded, with poor lighting and ventilation, drinking water and sanitary facilities not satisfactory, inadequate number of chairs and desks, no separate toilets for boys and girls, but the school supplied meals and text books which can be seen only in a private school.
 - (v) From discussions with teachers it was apparent that the curriculum in use is a standardized one with life skills content even though it was outdated. Nobody knew when the curriculum was last revised and the revision process was not satisfactory.
 - (vi) The township education official mentioned in informal conversation that students from Monastic school prefer to repeat as the Monastery provided lunch only to primary students.
4. Other findings from HH survey:
- (i) AIR was 114.3% and GIR was 100%.
 - (ii) All enrolled students attend in urban area while only 69.2% of students attended when enrolment was 92.3% in rural area. Overall, 84.7% attended while enrolment was 93.1%.
 - (iii) In urban area, 98.2% of children attended school when parents were literate as against 61.9% for illiterate parents. Overall attendance in urban area was 92.5%.
 - (iv) In rural area, 91.7% of children of literate parents attend school as against 42.4% for illiterate parents. Overall 68.1% attended school.
 - (v) 94.1% of children attended school when father was literate while 96.3 attended when mother was literate and difference statistically significant ($p < 0.001$). All children attended when both parents were literate.
 - (vi) 36.4% of children with disability were attending normal school or special centre.

- (vii) There was no statistically significant difference between literacy status of adults in urban and rural areas. The difference between males and females was however significant in both urban and rural areas, males more literate than females. The rate was 80.2% for both sexes.
- (viii) Overall literacy rate for 15-24 year olds was 85.3% with no significant difference between the sexes in urban and rural areas.
- (ix) The literacy rate of 15-24 year olds being more than adults it may be indicating that literacy efforts were having some effect.

(a) Applicability of EFA Core Indicators (CIs) in Myanmar context

Table 40 shows the summary of comments made by the NET member regarding each core indicator.

Table 40. Remarks on applicability of EFA Core Indicators in Myanmar context

Sr. No.	Core Indicator	Remarks
1	% gross enrolment in ECCE	Applicable
2	% grade 1 entrants who has attended ECCE	
3	AIR (Gross intake rate)	Applicable
4	NIR	
5	GER (Gross enrolment ratio)	Applicable but did not show actual (real) participation of students and capacity of PE
6	NER	
7	Expenditure on PE (a) % of GNP/GDP	Applicable using GDP in place of GNP

	(b) % of per capita GNP/GDP/pupil	
8	% expenditure on PE of education total	Applicable
9	% teachers with academic qualification	Applicable but did not show competency achieved as the result of experience
10	% teachers acquiring national standards	
11	Pupil-teacher ratio	Applicable
12	Repetition rates by grades	Not very applicable under present conditions
13	Survival to grade 5	Applicable
14	Coefficient of efficiency	Not very applicable under present conditions
15	% pupils mastering basic competencies	Applicable
16	Literacy rate 15-24 years age group	Applicable
17	Adult (15+ year age group) literacy rate	Applicable
18	Literacy gender parity index (GPI)	Applicable

The interviewee stated that all CI were more or less applicable in Myanmar context. The comment regarding enrolment ratios (CI 5 and 6) was that even though applicable, they were not able to show the real existing status of student attendance in schools. Regarding student enrolment in primary education, the comments given by the NET member include, "*We did get reports on student enrolment ratios from schools. The ratios were very good indeed. I think it was because of government pressure where they specified 'school enrolment week' and instructed that all children of PE age must be enrolled in school during that week. Because people are afraid of the government they enrolled their children. But, once they were enrolled*

there was no follow up to see if these children were in school throughout the school year. So even by the first month after enrolment the children were away from school out in the fields tending cattle, goats or doing house work. So we need some other indicator which will show the real existing situation." Asked what that new indicator should be, the NET member was not sure what it should be, but thought the enrolment ratios still need to be retained because they will show the situation at the start of a school year. The new rate or ratio should consider the percentage of children who are attending school throughout the whole year.

The indicators of lesser applicability in Myanmar context included repetition rates and coefficient of efficiency. Regarding CI # 12, repetition rates by grades, the education system currently in practice in Myanmar employed *"what was called continuous assessment which ensures that all students acquire passing grades in all classes of primary education. If a student should fail, the teachers were blamed and were asked to conduct a supplementary examination which was not heard of in basic education in past times. Naturally, the teachers with their low salaries, would rather pass the students than take blame for failures"* (NET member, 2006). As a result, the repetition rate was negligible in all (classes) grades. If a child should be required to repeat a grade it was mainly due to health reasons. The NET member said that it was not to say the Repetition Rate, defined as such in the EFA core indicators, was not usable in Myanmar but because of the particular situation explained above, it was not very useful at the moment.

Similarly, the coefficient of efficiency was not very applicable as it was based upon repetition rates, drop-out rates and cohort methods which were found to have weaknesses in Myanmar.

(b) The constraints, deficiencies and defects encountered in monitoring and implementing EFA

The difficulties and constraints as expressed by the interviewee include the followings:

1. Difficulty of getting precise population data. The last official nationwide population census in Myanmar was in 1983. After that the population data was based upon estimations using available methods. The NET member (interviewee) stated, "*The population registers in villages and wards, which form the basic administrative units in the country, sometimes include inflations. These inflated figures were inherited from the previous socialist regime where rations were allocated based upon family members. You must have seen that practice before don't you? The more members there were in immigration department Form10 (family members list) the more rations you get. So the family would keep family members who had gone away living somewhere still on the list.*" Efforts are underway to correct this and before it could be done some errors would exist in calculation of rates and ratios.
2. Community members unaware of the concept of EFA. This was indeed a fact especially in rural area. The interviewee described an incidence where community members based upon their past socialist system experiences wanted to know if Education for All was a "*socialist concept.*"
3. Very limited awareness of the importance of ECCE in education by the community at large. The interviewee said, "*This came as no surprise as the general knowledge regarding early childhood development was indeed very limited among the general public.*"

4. Too few teachers trained in ECCE. The interviewee gave his opinion that early childhood constitutes a very important part of child development and that trainers/teachers need to have special training to conduct the programme effectively.
5. Very limited number of ECCE facilities and mainly available only in large towns. The opinion given was that ECCE is a rapidly developing practice generally accepted in the country but the facilities for it were still very limited. It was said that the government was now accepting help from nongovernmental and religious organizations for ECCE programmes in addition to UN agencies in the country.
6. Children having to take part in income generation of the family, rather than schooling, due to poverty especially in rural areas. The interviewee explained that *"agriculture, the main occupation in rural areas of the country, was highly labour intensive and that all members of the family need to contribute some effort for the family economy"* This need was aggravated by the fact that the general population in rural areas were poor and simply could not afford to hire extra help for tending to cattle and doing house work especially in case of girls. The interviewee also said, *"The attitude of parents, their literacy status is also important. Quite a number of the parents are illiterate, especially in rural areas where they are also poor. They would rather have their children help in their farms than spend time in school which they felt is not helping the family in any way. They prefer sending the children to monastery in their free time for 'education' than to formal schools which has set time schedules."*
7. Even though enrolled in school some students may not attend. The opinion of the interviewee had been explained above.

8. Indicator for repetition may not be applicable in Myanmar context. The explanations for this has also been stated before.
9. Students and teachers having difficulty in getting access to schools as some schools are not established in the most appropriate location. The interviewee was especially forceful about his point stating, *"I can never understand why a school was built in an area where it was difficult to reach for both students and teachers. Maybe for political reasons, who knows? But, this certainly acted as a hindrance for access to school and came to affect the EFA activities in some areas, mainly rural areas, of the country."*
10. Teachers unaware or have only vague awareness of the importance of the indicators and data in education monitoring. The interviewee stated, *"We are trying to advocate the importance of indicators in monitoring of EFA activities to all stakeholders. I believe we will have to convince our senior management level in education sector first of all as some are still wavering. So it's no wonder that some teachers, who had to do the reporting, were unaware or have only vague idea about it."*
11. Teachers possessed little knowledge and skill in calculating the EFA core indicators. The interviewee explained that they had been trying to develop the necessary skills in all teachers but was falling behind as they can give these training only during the vacation months and also because of the fact that there were few teachers and all of them were overworked with low pay.
12. Too few teachers in some schools so that a teacher may have to look after over fifty students in a class. That, the interviewee said, was the cause of many problems in the schools.
13. Weak motivation on the part of quite a large proportion of teachers. This problem cropped up time and again during the

three interview sessions with the NET member. It appeared that teachers' motivation depended upon a number of conditions, mainly being overworked, low pay and the meager recognition they received from authorities who seemed to think of them sometimes as 'fill-ins' for official functions. These appeared to weakened their motivation but the interviewee pointed out that *"there are many teachers in many schools who do take their work seriously and labour day in and day out, teaching students, maintaining records and registers manually but taking pains to see that they are accurate and up to date."*

14. Some teachers may be absent from duty station even though they are on roll so that teacher-student ratios may need some correction. The interviewee pointed out that in some schools in the remote areas of the country teachers tend to be away from their duty station without leave. The teacher-student ratio calculations need to be corrected in such instances so as to get a correct ratio.
15. Only a few computers and IT facilities available in some schools in urban area. On this issue the interviewee commented, *"Only schools in urban areas, even then in large cities, have computers. For the poor teachers in question, those in district towns, there were none. Even if they have computers they will need electricity which I believe is not available 24 hours a day in all towns. That was also the constraint they faced in using modern IT facilities in our schools. Some of our teachers are quite skillful in use of modern IT facilities but as the electricity was not available they cannot use them."*
16. Teachers as well as students have none or very limited skills in using the computers and accessories. This was also a problem mentioned by the interviewee. Since there were no computers

in the schools, teachers and students did not make efforts to develop the skills to use them.

17. Only token support for education activities from some local administrative authorities. This can be seen from the interviewee's comment which follows. *"Many local authorities are simply not interested in schools or only make a show of some interest. Well, unless their children are attending one. However, there are few who are really interested in schools itself, but not in the students and teachers welfare. They would take interest in seeing that the schools in their locality have good physical facilities - like classrooms, chairs, desks, building. But ask them for teaching aids and teachers training facilities and they think it is the duty of the teachers to make them available."*
18. Administrative authorities, including educational authorities, more inclined to report educational achievements than hindrances. This issue was apparent from the following comments by NET member. *"I am not sure if the local administrative authorities think they will get more merit and look good to their superiors if they report only achievements and not the failures."*
19. Local administrative personnel overstating achievements, including educational achievements, in some instances. This was apparent by looking at the comments given above and the one that follows. *"Tell them (the administrators) the exam results and they would like to hear that everyone passed. In that case, the responsible teacher would be praised and rewarded. As you know, it is quite not possible to see that all children passed. When some failed the pressure would come to see that the teacher make a revision and simply passed them."*

20. Central administrative authorities wanting to hear only achievements than otherwise. This issue can be seen from the following statement. *"I also think that the authorities in the central position also want to hear only achievements and progress whether it is really there or not. It is no wonder then that some local administrators may overstate the achievement. To tell the truth I am not sure who is influencing whom."*
21. Required data not being reported in time by many schools. See below.
22. A number of Monastic Schools failed to report their data. This together with the issue above was the result of teachers not being fully aware of the requirement and importance of educational data in educational management.
23. Data available for non-formal education activities were not complete. The interviewee stated that even the educational authorities appeared at a lost when asked about data on non-formal education.
24. Difficulty of defining 'life skills' as well as assessing its achievement. The interviewee stated that this was an issue not confined to Myanmar alone but to all countries. There is indeed a need to have an internationally standardised definition of non-formal education and an indicator to be used by countries worldwide.
25. Curriculum revision based upon subjective impression than on objective assessment. The interviewee stated, *"You know, curriculum revision must be based upon objective assessment of the existing one. You cannot do it by subjective impressions and simply because the present one in use had been in existence for a long time. Regrettably that is what happening at the moment."*

26. PTA and respective community not actively involved in educational management of the school. This could be seen from the interviewer's comment and the interviewee's answer which follows together with some comments shown in issue 17 above.

R. You were saying that PTAs were not involved in educational monitoring in schools. That they were involved only in censoring some wild students.

NET: Right. I wish that they take interest in monitoring how the school is progressing, not only physically but also in educational achievements. They can be a regulating factor in seeing that teachers report the real picture about their students and their school. (Continued defensively) Not that the teachers were not reporting the real existing situation, but there are few teachers and they are really overworked as I said yesterday. They (PTA) can also ask teachers about EFA indicators, what they meant, how they can be measured. This would force (emphasis) the teachers to take more interest in EFA activities and learn more about the indicators which are crucial in monitoring progress as you very well know.

7.5. Focus Group Discussion (FDG)

The questions posed to the groups and the responses of the members were shown in the annex. In the annex, even though the members discussed quite a lot for each question, sometimes going off the tract, only the main points raised by the group members and some distinct features, as discussed in the four group discussions, two for each group, were compiled, consolidated and presented as answers for each question.

The main points and issues raised during the discussions could be summarised as follows.

- Nearly all of the community elders including some PTA members were unaware of EFA.
- Community elders had not even heard of ECCE even though they knew about Department of Social Welfare nurseries and day-care centres.
- All teachers knew and accepted the importance of ECCE.
- All participants in the FGD agreed that children should be sent to ECCE centres/schools, even if it was for the wrong reasons.

The above issues identified by the participants of FGD were concerned with awareness of EFA and ECCE by community elders and the acceptance of ECCE programmes by teachers and community elders. Naturally all teachers knew about EFA and ECCE while some PTA members and all community elders were unaware of EFA and ECCE even though some knew about day-care centres run by DSW. All participants agreed that children should be send to ECCE centre. The reasons given by community members include, *“it will make the mother free to attend to house work”*. Also, *“keep the children occupied and gave family members opportunity to have some rest.”*

- Only a few teachers had training in EFA monitoring but the training appeared to have minimal impact on the monitoring skills of teachers.
- Teachers had misgivings about selection process for training of teachers in Pedagogy and EFA monitoring.

From the issues above, the general opinion was that there is a need to have more teachers trained for skills in EFA monitoring. The training given at present did not seem to have much impact as the teacher who had undergone training for CI calculation *“could not really recall how they are calculated and not sure about their importance.”* Regarding the selection process for training of teachers in EFA skills as well as Pedagogy there was some misgivings, one teacher stated, *“I think the township education*

officer is not fair, (adding after some hesitation) maybe even dishonest, choosing teachers who will approach him with gifts, you know."

- 'Political will' important in organizing all children to enroll in schools.
- Even though enrolled some children did not attend.
- Failure to attend school after enrolment and student drop-outs were mainly due to economic reasons.
- Some physically disabled children were attending regular schools.
- The enrolment was not complete as some children, especially from poor rural families, would not get the chance to enroll.

The above issues identified by the participants showed that there was access to children in communities. There was even inclusion of some physically disabled children in PE even though the coverage was not complete, especially for children from poor rural families. One issue was that some children fail to attend after enrolment and drop-outs also occurred because of economic reasons.

- Adult literacy rate high in urban area, low in rural area and will improve as the result of 3 R's and UPE drives.
- In general, children of educated or literate parents attend schools.

The opinion of the participants was that the adult literacy rate would be high in urban and low in rural area. The children of literate parents were mostly attending schools even though there can be exception as explained by a community elder *"there was a child of educated parents who had to leave school as his parents, both mother and father, were drunk all the time. The parents are both hopeless and are a burden to the community."*

- Teachers were usually overloaded with teaching programmes and occupied with many other 'fill-in' activities.

- Teachers had to give private tuitions because of low salary, and, because of that teaching in schools became 'lax'.
- Motivation of school teachers were generally 'good' but could be improved.

The above issues came out of the FGD sessions and teachers were talking about their own situation and they said that they *"were overworked, being involved not only in academic activities but also in acting as "fill-in's" for many state ceremonies, where teachers as well as students were always summoned to attend by the local authorities."* The other members of the group expressed sympathy for the teachers as they were *"unofficially delegated to attend local administrative functions, and which they could not refuse because they did not want to be in the 'bad book' of the local administrators ."* Even though the teachers did not state any relationship between low pay and motivation, they did mention about having to give private tuitions and lost of time they should spend with their families. Non-teacher members of the group appeared to be sympathetic but one PTA member said quite frankly that practicing *"private tuitions made the teachers lax in their teaching activities at school."* The motivation appeared to be generally good as half of the participants said it was good while the other half said it could be improved as it was found *wanting*, but was not said to be *bad*.

- Chairs and desks inadequate for students in rural schools.
- Very limited or no facilities for IT training as well as usage in schools.
- IT facilities present in private school but used only by teachers for lesson preparations.
- Computers not used at present for educational data management.
- Accuracy and reliability of educational data may have some weaknesses as the result of:
 - Educational staff not aware of its importance,
 - Staff not trained in data management,

- Absence of or inability to use IT facilities in schools.

The FGD participants brought out the situation of severe limitations they faced regarding physical facilities as well as IT availability and usage in their schools. These limitations compounded by shortcomings of the respective staff brought on questions regarding accuracy and reliability of educational data.

- Low interest in education and schools by local administrative authorities.
- Administrative authorities and communities should be involved in school management but do not know how.
- Authorities interested only in hearing 'good things' which may be the result of higher authorities' expectations as such.

The possible role of the local administration in education was voiced by the FGD participants. It appeared they were quite disturbed about the existing situation. This could be seen from their comments which were shown below:

"The authorities were only interested to hear 'good' things about anything including education." Township education officer, *"reported only progress expecting favours from higher authorities."* The general opinion was that maybe because they were very busy their interest in education and schools was not much.

- Gender parity present in schools but equality still need to be addressed.
- More male teachers were needed in teaching jobs.
- Teaching was generally felt to be more suitable for females.
- Females may be even better administrators than males.

The suitability of women for teaching jobs was discussed to some length. There appeared to be some difference of opinion between male and female

participants. The teacher members were quite convinced of the need for male teachers in schools.

The male participants discussed that *"because women are by nature more gentle, caring and because they are good at looking after children, with their motherhood attitude, are more suitable to be teachers"*. Female members agreed to a certain extent about this, but think there is definitely a role for male teachers too. They pointed out that *"in all families both mother and father have to share responsibility to bring up their children. Likewise in schools too male teachers should participate in educating the children not only as controllers of discipline or administrator, which all female members felt should be shared between the sexes, but also in active teaching also."* Some female teachers pointed out that *"female heads are even better at maintaining discipline and better administrators than male heads."*

- 99% of teachers were matriculates, over 90% with university degrees but only 30 - 40% with paedagogical training.
- Paedogogy training is especially important for pre-primary school teachers.

The teacher with paedagogic training *"strongly recommended that all (she said to underline all) teachers must be required to get this paedagogic training."* She strongly put forward that *"application of educational science principles and methods would make all teachers become better and effective teachers."* All teachers agreed that *"training is especially needed for teachers from those pre-primary schools and centres as they are looking after very young children and the training/and education the children received at that stage will have an impact on their attitude towards schooling in later years."*

- At present, curricula were overloaded but had no application in daily life.

- Present curricula emphasise rote learning than problem solving or critical thinking..
- Students taking private tuition outside of school achieved higher marks in 11th grade exam.

The teachers all thought "*the curricula were overloaded with content which they feel had no application in daily life.*" The teacher who had attended pedagogy training commented that "*the curricula put more emphasis upon rote learning than on problem solving or critical thinking.*" The teachers all felt that "*they should all be involved in making decisions for curriculum review and revision, and not be made by some administrators sitting in their offices.*" Better exam results were seen in students taking private tuition.

The other issues which were pertinent to educational access and education quality were identified as follows:

- Location of some schools not convenient for teachers and students as site selection was based upon political considerations.
- A question arose as to absenteeism of teachers.
- There were not enough teachers in schools, as the result teachers could not take 'earned leave' or had to teach more than one class daily.

8. Discussion

The findings of the present study it will be discussed based upon the research question and objectives mentioned previously. The discussions will also be made in relation to findings from other studies, underpinning the philosophy of development which are evident in the literature, especially for those carried out in developing countries and more specifically those from Association of South East Asian Nations (ASEAN) countries as these countries have more or less similar ethnic, culture and religious backgrounds to Myanmar even though the economic status and development may be different. Economically and developmentally Myanmar is more similar to Laos DPR and Cambodia, less similar with Vietnam, but, definitely behind the other ASEAN countries (Thailand, Indonesia, Singapore, Malaysia, Philippines and Brunei Darussalam) (World Almanac 2004).

Monitoring of EFA goals will be made by looking at progress of EFA core indicators. As such the assessment will be based initially upon empirical data relating to the above indicators in various reports published by the MOE in Myanmar and also by UN agencies. These data may be validated by inspecting and analyzing records of sampled schools and again by means of household surveys. The empirical data so obtained would not be complete unless contextualized by means of interviews and focus group discussions as undertaken in the present study. The format of discussion will be based mainly upon 18 EFA Core Indicators within the framework of the six EFA goals specified in the Dakar Framework of Action (UNESCO 2000) and indicated in the very first research question of this study. Discussions on research questions 2, 3, and 4 will be incorporated, wherever appropriate, into question 1. Research questions 5 and 6 will then be considered together so as to give recommendations for better achievement of EFA goals.

The first thing to discuss is the difficulty of getting any data from the education and administrative authorities. They all appeared to be reluctant, even intimidated, to talk and the researcher was able to get them to cooperate only after repeated assurance of anonymity and confidentiality. Also, the fact that many of the respondents and interviewees from education department are personal friends of the researcher helped. However, once the respondents and interviewees started cooperating the discussions came quite freely. It was another matter for the local administrative department and the researcher was unable to get the population data for the required age groups from them. The researcher was thus unable to calculate some of the education indicators, Gross Intake Rate, Net Intake Rate, Gross Enrolment Ratio, Net Enrolment Ratio, for the selected schools.

8.1 Achievement of EFA Core Indicator(s) (CI)

The first research question to be discussed is the achievement of EFA CIs. The discussion format, as stated at the start of this section, will be based upon achievement of the six EFA goals from Dakar Framework of Action starting with ECCE. The respective CI from the identified 18 Core Indicators will then be addressed as appropriate in each EFA goal.

Generally, it can be seen from Table 2 that out of 18 Core Indicators, no data were available for 4 CIs (# 1, 2, 12, 15), target was not achieved in 4 CIs (# 5, 6, 13, 14) and exceed the target in 10 CI (#3, 4, 7, 8, 9, 10, 11, 16, 17, 18). For CI #7a and b, the calculation was based upon Gross Domestic Product (GDP) and not on Gross National Product (GNP) as given in the definition of CI. The basic explanation for this use of GDP in place of GNP was that Myanmar being subjected to sanctions by western powers for its military government was receiving very little foreign aid and it was also not possible for Myanmar companies to invest abroad so that GDP would be

quite applicable in considering the national budget. Overall the EFA mid-decade assessment in Myanmar showed that data were available for 14 indicators one indicator above the 13 data routinely collected and reported by most countries.

It need be pointed out that nearly all of the data available in Myanmar for education were published by the government. The data shown in Table 2 were officially published data from two latest and available MOE reports. The researcher noticed during her field visits that there exist two sets of data in schools and it can only be imagined that the official version may not show the real existing situation. This brought into question the accuracy and reliability of officially reported data and also the school records and registers the researcher obtained for her study. However, the researcher was able to carry out household surveys both in the urban and rural areas and the findings may represent the true situation to a certain extent and will be used in comparing and interpreting the results.

8.1.1 Early Childhood Care and Education

The first two EFA core indicators, Gross enrolment ratio and net enrolment ratio, are concerned with the first component of basic education - early childhood care and development (ECCD). The target of this component is to expand early childhood care and development activities, including family and community interventions, especially for poor, disadvantaged and disabled children. It includes the full range of purposeful and organized activities intended to provide for the healthy growth and developmental needs of children from birth to five years of age as is the case in Myanmar, Thai and Laos context even though the age covered may go up to six - eight years in case of some countries (Bangladesh Country Report 2000c, UIS 2001).

UNESCO (2001a) recommended that for ECCE the assessment should focus more particularly on early childhood development programmes, that is those that consist of organized and sustained school-based or centre-based activities designed to foster learning and the emotional and social development of children.

Regarding CI # 1, it is concerned with gross enrolment in early childhood development programmes, including public, private, and community programmes, expressed as a percentage of the official age-group concerned, if any, otherwise the age-group 3 to 5. Even though the official EFA reports for Myanmar (Mid-decade Assessment 2007) did not include the figure for 2005, the household survey (Tables 21 and 22) showed that 5 out of 44 (11.4%) children of 2.5 to <5 years of age were attending ECD (pre-primary) programme in the study area. This figure even though applicable to the study population only, at least gave a certain indication as to the extent of ECD exposure for children in the country. Table 2 showed that gross enrolment in ECD was reported as 10.0% in 2002 and the target for 2005 was set as 15.0%. As reported in EFA GMR 2007, compared to other countries in South East Asia, Myanmar GER for pre-primary children (11.2%) was above Lao PDR (8% in 2004) and Cambodia (9%in 2004) but well below Indonesia (22% of 5 - 6 year age group in 2004), Viet Nam (47% in 2004) and Thailand (90% for 2004). The figures of these countries presented here were for the school year ending 2004 and covers the age group 3-5 years except in case of Indonesia shown above. The figure for Nepal was stated to be 40% (Khaniya & Williams, 2004).

The relevant age group for calculation of this indicator in some countries is 3 to 5 years age group, but in Myanmar context the age group 2.5 to <5 years is used, which is still applicable for CI # 1. As shown in the results section, ECD programmes were mainly available in large cities like Yangon, Mandalay, Mawlamyaing, Patheingyi, Taung-gyi, Pyaw, etc. Some religious

charities have started establishing schools and centres for 2.5 - <5 years children even in some rural areas of the country but data regarding these programmes are still scarce. The number of children attending ECD programmes are growing rapidly as private pre-primary schools and Department of Social Welfare (DWS) and Ministry of Progress of Border Areas and National Races and Development Affairs ECD centres are increasing at a fast rate. Indeed the number of ECD schools and centres had also increased recently as national NGO like Myanmar Maternal and Child Welfare Association, religious organizations like Christian and Buddhist Charities, international NGO like World Vision, and communities had established many centres and schools, even in the rural areas. However, for the foreseeable future ECD programmes will still be confined mainly to urban areas, and the coverage may still be quite small as the majority (>70 %) of the population reside in rural areas.

In Myanmar there is also the need, as Han Tin (2000) pointed out, to control and regulates the ECD programmes which are being undertaken by many agencies as stated above. The curriculum of pre-primary school classes need to be reviewed and revised so as to ensure they are of acceptable standard and quality. At present they tend to teach primary school curriculum to three and four years old children, mainly by rote learning techniques. Parents are as much to be blamed as teachers for this as they expect preschool classes to prepare their children for primary schooling ensuring "good/high" grades in primary school classes. As Han Tin (2000) stated the children are thus deprived of the joy of learning and the idea that schools can be a place of socializing and fun as well as learning. The persons responsible for teaching of preschool children received none or only rudimentary training as teachers and care givers.

It can also be seen in Table 2 that there was no data available from EFA reports for CI # 2, number of new entrants to Grade 1 who have attended

some form of organized ECD programme equivalent to at least 200 hours, expressed as a percentage of total number of new entrants to grade 1. Tables 4 to 10 showed that overall 15.7% of the children entering into grade 1 of the schools included in the study had attended pre-primary (ECD) schools. The number of children who have attended pre-primary schools and centres range from 100% for those entering a private school in urban area to 0% for those attending the rural primary school. One glaring reason might be that children in urban area and especially from well-to-do families entering private schools had more ready access to both pre-primary and primary schools. It was also observed in the household study that 17.8% of new Grade 1 entrants in urban area had attended ECD programmes (Table 21). Taking both urban and rural children attending primary school together (Tables 21 and 22), 8 out of 69 (11.6%) had attended pre-primary schools or centres.

Again it need be pointed out that the observed rates were just a rough indication and may not be representative of the country as a whole. At most it might represent the urban areas where there was access to both ECD programmes and primary schooling. In addition to the pre-primary schools and centres, community-based, family-based, home-based ECD programmes and parenting education programmes are being promoted and expanded to increase ECD coverage, adding 'care' component to ECD making it become ECCD and later referred to as Early Childhood Care and Education (ECCE) because education, as discussed in the Introduction Section of this thesis, is accepted to lead to development. Mother circles and Day Care Centres are also being set up to take care of under 3 year-old children. The exact numbers of such centres and schools were very hard to acquire but according to the EFA mid-decade assessment report 2007, there were 1876 pre-primary schools and 237 day care centres in the country in 2006. The rate reported for Myanmar in 2002 was 8.0% which compared quite favourably with Lao PDR (8.0% for school year ending 2004), but below

Cambodia rate of 12.0% in 2004 and Malaysia 78.0% in 2003 as reported in EFA GMR 2007.

These schools and centres play a very important role in development of children as the intellectual development of a child is very rapid during the early years. EFA National Action Plan of Indonesia (Ministry of Education Planning, 2005) citing Bloom stated that approximately 50% of variables of adult's intellectual level have actually taken place when a child is four years old. An increase of 30% takes place at the age of eight years and the remaining 20% in the middle or the end of the second decade. The beneficial effects of early childhood care and education brought about by providing early school experiences and environment appropriate for child development had been reported by a number of scholars/researchers (Vygotsky, 1978; Meisels, 1992; Yoshikawa, 1995; May & Kundert, 1997; Barnett and Boocock, 1998). The services provided at these centres and schools covered many diverse arrangements from parenting programmes to community-based child care, centre-based care and formal pre-primary education often in schools. ECCE can improve the well-being of young children, especially in developing countries where, as reported in EFA GMR 2007, a child has a four in ten chance of living in extreme poverty and 10.5 million children a year die from preventable diseases before age 5.

Programmes typically aim at age groups under 3 years and those between age 3 to primary school entry, which may be 5 to 6 years or at most 8 years. These programmes should ideally cover nutrition, health care and education rather than focusing on one aspect only. The programmes traditionally based on child care practices should respect and take into consideration: children's linguistic and cultural diversity; children with special educational needs and disabilities; gender disparity; use of mother tongue in teaching and interacting activities; requirement for low child/staff ratio; having teachers with relevant qualifications; and parental involvement in all

activities of the centre and school as Senechal & Young (2008) have shown that parental involvement can benefit child's literacy development. All of these requirements except the essential need for high-level political support, formulation of an ECCD policy and getting donors interest to support such activities are included in the EFA GMR 2007 recommendations.

According to the interview and focus group discussions it could be seen that the importance of ECCE for children development is at least understood and accepted by teachers. The NET member was also convinced of the importance of ECCE for child development. The NET member said at the first interview session, *"I am fully aware of the importance of ECCE for child development. I have read literatures on it and I also have a young son, 3 years old and he's attending a pre-primary school class run by a former teacher. It is a private class and teachers there are really dedicated to helping the children. He has learned some English words by just staying eight weeks there. He would greet me in English first thing in the morning. It's really wonderful to see him pick up the language so fast."* The NET member continued, *"I will try my best to get the administrators interested in ECCE programmes. We can't do anything without funds and we need help from administrators to get the funds."* The PTA members and community elders in the FGD were also quite favourable towards ECCE centres and schools even though for wrong reasons. As presented in the results section, they said they will send their children and grand children to pre-primary schools because *"it will make the mother free to attend to house work"* and also, *"keep the children occupied and gave family members opportunity to have some rest."* It was also commented by a community member, a parent, at one FGD session that he expected the pre-primary school classes to prepare his child so that he "did well" academically in the primary school classes. It is indeed an opportune time to raise awareness regarding ECCE programmes among the general

population and there is every likelihood that it would be received quite favourably.

8.1.2 Universal Primary Education

The CIs # 3 - 14 are concerned with Universal Primary Education: CIs # 3 and 4 with access to PE; CIs # 5 and 6 with participation and capacity of PE; CIs # 7 and 8 with measuring the relative emphasis given to investment in PE and priority given to PE in the education system; CIs # 9 and 10 with quality of human resources, namely teachers, involved in PE; while CI # 11 with the quantity of human resources input for PE; CIs 12 - 14 with internal efficiency of the PE system. A word of caution at this point as the indicators will show data relating to children who have access to schools while there may still be children who are marginalised and have no access to schools. Data relating to them are not available readily and some indicators should be developed for these children as achievement of EFA would not be possible without providing access to schools for them.

8.1.2.1. Access to PE

CI # 3 and 4 show access to primary education. CI # 3, Apparent (gross) Intake Rate (AIR), is the number of new entrants in primary education grade 1, regardless of age, expressed as a percentage of the population of the primary school-entrance age. It reflects the general level of access to PE. Since it includes those children over the official school entrance age entering Grade 1, it can be over 100%. A high AIR shows that there are more children over the official school entrance age coming in to Grade 1 and as over-aged children coming in got less, probably due to more effective movement to get all children into schools, the rate will decrease, for example, from 112.4% to 105.6% as it could be seen in Table 2. In over half of the Association of South East Asian Nations (ASEAN) countries the AIR or

GIR were above 100% in 2004 as reported in the EFA GMR 2007. Viet Nam (98%) and Malaysia (94%) had rates below 100%, Brunei Darussalam (107%) had over 100% but not as much as Lao PDR, Indonesia, Myanmar, all of them having AIR over 110% but less than 120%, Philippines (134%) and Cambodia (148%) had the highest rates. The data for Singapore and Thailand were not available. The Gender Parity Index (Female/Male) for AIR of ASEAN countries in 2000 - 2004, as reported in EFA GMR 2007, range from 0.93 (Cambodia) to 1.00 (Malaysia), with Myanmar having 0.99.

Even though GIR or AIR is usually estimated for grade 1 of primary education cycle it may also be calculated for all other grades also. It is especially useful to look at the GIR for the last grade of primary education, the fifth grade. Students have to enroll in that grade first before completing the primary education level. It is the minimum prerequisite for completion of PE. The number of children entering the fifth grade as a percentage of the population at the official age for that grade in 2004, as reported in EFA GMR 2007, was 86% worldwide, almost 99% in developed countries and 84% in developing ones. Overall, the access to last grade of primary education is close to or well above 90% in all regions of the world except South and West Asia (82%), the Arab States (80%) and sub-Saharan Africa (57%).

CI # 4, Net Intake Rate (NIR), is concerned with the number of new entrants in the first grade of primary education who are of the official school-entrance age, expressed as a percentage of population of the same age in that area. It gives a more precise measurement of access to PE of the eligible, primary school-entrance age children. This should increase as more and more children of the official school entrance age entered the school as can be seen in Table 2 where Myanmar NIR for 2002 was given as 92.1% and the target for 2005 was 95.0%. The actually achieved rate in 2005 was given as 97.6% exceeding the target. Being limited to the official school-entrance age group the rate can never be more than 100%. Compared to Myanmar

official rates of AIR 105.6% and NIR 97.6%, the difference between AIR and NIR was greater in case of Indonesia, Lao PDR and Cambodia, but for Viet Nam it was about the same as Myanmar in 2004 (EFA GMR 2007). The difference between AIR and NIR will show how much of the children above the official grade 1 entrance age are still out of school. The greater the difference, the more children there will be out of school. Access to PE was found to be increasing rapidly in most countries of the world as it was in South East Asia region. The gender parity was getting better also as GPI for NIR of ASEAN countries in 2004, as shown in EFA GMR 2007, range from 0.94 (Indonesia) to 1.01 (Myanmar) with the other countries falling in between.

For Myanmar based upon the official reported data, both CI # 3 and 4 may thus be stated as having achieved more than the targets set for them. Gender parity regarding access to PE also appeared to be achieved as the average GPI stood at 0.99 and 1.01 for the gross and net intake rates. According to EFA GMR 2007, access to primary education is improving rapidly in many countries as most governments put in efforts to have all of their primary school-entrance age children enrolled in grade 1 of primary schools so as to reach NIR 100%. However, the efforts may not be visible very much with many children still out of school due to various reasons while many entering students tend to be above the official age group or as it happened sometimes under the official age, and some of them being repeaters.

The AIR calculated from the household survey data (Tables 21, 22) showed a rate of 114.3% and a NIR of 100% which as explained before may not be representative of the country as a whole. However, at least in the study area, the effort of trying to get all primary school-entrance children enrolled in grade 1 is quite effective and hopefully this will be extended to the country as a whole in due course.

8.1.2.2 Participation and Capacity of PE

CI # 5 Gross Enrolment Ratio (GER) and CI # 6 Net Enrolment Ratio (NER) are concerned with participation and capacity of PE to absorb the children. GER is concerned with the general level of participation in and capacity of PE. A high GER indicates a high degree of participation, whether the pupils belong to the official age-group or not. A GER value approaching 100% or more indicates that a country is, in principle, able to accommodate all of its primary school-age population. However, in order to achieve universal primary education, the number of under-age and over-age pupils would need to decline in order to free places for pupils in the official primary school age-group. For Myanmar, the GER was found to decrease slightly in 2005 from the 2002 level (90.8% to 89.6%) and one can only wonder whether it was due to decline of under-age and over-age pupils. The household survey showed that in the survey area as a whole (urban and rural) 71 children out of 72 children of primary school age-group (5 - 9 years of age) or 98.6% were enrolled in PE (GER=98.6%). The 71 children enrolled include 4 children over 9 years of age.

The NER gives a more precise measurement of the extent of participation in PE of children belonging to the official primary school age. The NER value cannot be over 100%. An increase of NER over time reflects improving participation at the primary education level. If the NER is below 100%, then it indicates that not all primary school age-group children are enrolled in school. Table 2 showed that NER in the country as a whole increased from 78.0% in 2002 to 82.2% in 2005, even though the 2005 ratio did not reach the target of 85.0%. The findings from the household survey showed 67 children out of 72 children (93.1%) enrolled for PE giving a NER of 93.1%. In comparing the GER and NER of some countries in South East Asia region, the difference between them was not much in case of Myanmar and Viet Nam,

while the differences were quite large for Indonesia (Ministry of Education Planning 2005) and Lao PDR (EFA assessment 2000b).

Care should be taken in interpreting GER and NER. GER tend to overestimate a country's success in its efforts to reach Universal Primary Education (UPE) as it included children who were repeating a grade as well as children who were over and under age. NER on the other hand may underestimate coverage as it represented only children of the official school age. To correct these defects age-specific enrolment rates and accounting of late entrants who may be missed with regular accounting were introduced. Nguyen (2006) in his study on a sub-sample of Viet Nam Living Standard Survey in 1997-98 tried using age-and-school specific school enrolment rate (ASER) together with GER. ASER reported the proportion of pupils of the correct age prescribed for their grade in school. However, the quality as to its accuracy and reliability of the age-specific rates were not sufficient in many countries and the GER and NER were continued to be used as indicators for participation in PE. It was reported in EFA GMR 2007 that enrolment in PE worldwide had increase 6% between 1999 and 2004. Since GER and NER may not show true participation, as some students who enrolled may not attend, use of Attendance Rate - Gross, Net or Age-specific - suggested by Mehta (2002) should be considered seriously.

Regarding access and participation in primary education the NET member said, *"Both intake and enrolments have increased over time. But, I am not sure about the accuracy of data. I found that there were some differences between those reported by schools to our department and the results of the MICS surveys conducted by UNICEF. I am thinking of trying to verify the difference soon."* He also added reminding me of confidentiality, *"This increase in enrolment rates is definitely the result of political pressure from the government by advocating and implementing the "student enrolment week." They did enroll but drop out soon after. I also have a*

feeling that push for more enrolment brought about decline in quality as we could not meet the extra needs like teaching aids and materials arising out of more students in classes."

One community elder from the FGD also pointed out that, *"there were still children not enrolled or not in school, like children from rural areas working in tea shops and those working as house maids in urban homes. These children would not be in the population count and would not be considered in compulsory school enrolment movement."* This comment showed that there could be errors in the form of over estimation of rates and ratios. The data reported by MICS studies were less than those reported by the Department of Education. It can be assumed that the MICS results, being conducted by a UN agency, could be more correct as their results correspond quite well with the findings from the present household survey.

The enrolment ratios had been used to assess participation in PE. However, failure of students to attend even after enrolment could be seen in results from household survey (Table 23). This was solely for rural area as all students enrolled attended in urban area attended. This finding from household survey was supported by comments from interview of NET member as well as FGD participants. The NET member explained that *"agriculture, the main occupation in rural areas of the country, was highly labour intensive and that all members of the family need to contribute some effort for the family economy"* The elder from rural area said, *"reason for not attending school was mainly economic as children had to contribute towards family income/welfare by contributing some form of service, especially in poor families. That was the reason for sending their children out as house maids and errand boys to more affluent areas."*

8.1.2.3 Investment in and priority given to PE

CI # 7 is concerned with current public expenditure for PE (a) as percentage of GNP, and (b) as percentage of GNP per pupil. The first indicator (a) shows the proportion of the value of national production of goods and services of a country in a given year devoted to PE. The second indicator (b) measures the average cost of a pupil in PE in relation to the country's GNP per capita. Both indicators measure the emphasis given to investment in PE. In Myanmar context, GDP was used in its calculations. Bangladesh, Thailand and Lao PDR also presented their data for EFA Assessment Reports in 2000 using GDP. Later reports for these countries were beyond the reach of the researcher. Myanmar EFA NAP indicated the 2002 values for these indicators and the targets to be achieved in 2005. However, the Myanmar EFA mid-decade assessment draft report did not include any values for them and the researcher using the GDP value published by the Central Statistical Organization (2005) was able to calculate the indicators as presented in Table 2. The value for indicator (a) was 0.4% in 2002 and the target for 2005 was 0.5%. From the calculations it was found that the achievement in 2005 was 0.58% thus exceeding the target set for it. The value reported for indicator (b) in Table 2 was 3.8% in 2002 and the target set for 2005 was 3.9%. The achievement calculated by the researcher based upon available data showed the value to be 4.4%, exceeding the target. But, the values obtained need to be interpreted with caution as the GDP values reported were based upon current prices.

The public expenditure on PE as percentage of the GDP in Myanmar was indeed very low, 0.4% of GDP in 2002 (Myanmar EFA NAP 2003), compared to that used by Thailand in 2002 where 2.5% of GDP was allocated for preschool, basic and non-formal education (Bureau of Policy and Statistics, Thailand 2004), and 1.2% of GDP in Bangladesh (UNESCO 2001c). As stated in Myanmar EFA NAP 2003 above, the foreign assistance provided to Myanmar

for education was really minimal, a total of US\$ 643,000 in 2003. Looking at the amount of foreign aid given for education for some developing countries in 2003-2004, as reported in EFA GMR 2007 , Bangladesh - US\$ 516.0 millions, Viet Nam - US\$ 244.2 millions, Indonesia - US\$ 113.6 millions, to give a few examples, one can imagine the disproportionate gap in international assistance for Myanmar. Even China received US\$ 826.2 millions and India - US\$ 472.1millions. The people of Myanmar should take pride that whatever they have achieved was based upon their own effort when the military junta does not pay attention to the education system and developed nations as a whole ignored them.

CI # 8 relates to public expenditure on primary education as a percentage of total public expenditure on education. As shown in Table 2, the figure reported for 2002 was 39.7% and the target for 2005 was 42.0%. The actual expenditure reported for 2004-2005 was found to be 49.7%, again without correction for inflation or using a base-year constant price. Bangladesh in its EFA assessment 2000 reported that the percentage of PE budget was 43.1% of the education budget in 2000, and it is possible that it could be even higher in 2005. It had to be noted that 10% of their budget for education sector came from foreign assistance. However, from the percentages reported for 1991 to 2000 in their EFA Assessment: Country Report, the rates declined from a high of 48.52% in 1992 to 40.40% in 1999 and increased again to 43.1% in 2000. Similarly in Loa PDR as shown in their country report 2000 the percentage of budget used for PE from their total education budget was 48.3% in 1997-98. In Myanmar, it seemed that the actual expenditure (49.7%) exceeded the target (42.0%) for this indicator even though the rate was based only on the expenditure by the education sector (Ministry of Education) alone. Ideally the rate should be calculated upon the expenditure which included spending for primary education from other ministries as well. The rate would then be even higher. This indicator shows the priority given to primary education in national education policies

and resource allocation. Together with the high primary level GER and NER in Myanmar the increase in spending for PE shows that the government is taking the efforts for universal PE (UPE) quite seriously.

The interview of the NET member brought out the fact that there was indeed an increase in the budget over the years. However the comment given was, *"Now, if we look at the yearly budget allocation the amount in local currency is increasing year by year. But, if you ask me the buying power of the funds I am not sure what to say. I think the buying power is not the same, it is decreasing. So that even though the budget did increase I am not sure we can do more with it. Maybe even less but unless we know the inflation rate and compare the budget based upon a constant money value or buying power for a reference year, say 1981, we can never be sure."*

8.1.2.4 Internal efficiency of education system in PE

CI # 12, repetition rates by grades, measures the phenomenon of students repeating a grade. Together with CI 13 and 14, they also measure the internal efficiency of the primary education cycle. High repetition rates indicate poor level of instruction. However, in some cases, low repetition rates merely reflect automatic promotion policy practiced in some schools. The maximum number of repetitions which is permissible had to be determined by education authorities as the repetitions may pose a strain on the limited capacity of some classes and some schools. Since the educational policy being practiced by countries tend to vary, care should be taken in interpreting this indicator especially when comparing different education systems.

Myanmar EFA NAP used promotion rates (Table 3) in place of repetitions. Promotion and failure are two opposing parts of student assessment. There can be no guarantee that those students getting promotion will join the next level and similarly, those failing will repeat the same class. Usually majority of the students passed, got promoted and join the higher grade while the minority who failed repeat in the same grade for another year, that is, after subtracting the drop-out students from both areas. One may assume that if 90% of the class passed and joined the higher grade, then the other 10% will repeat the same class. One may thus report 90% promotion rate or the 10% failure rate which may generally approximate the repetition rate. Table 3 showed the promotion rates for grades 1 to 5, first for the base year of 2000-01 and the target set for 2005. It could be seen that grade 1, the entry point to PE, had the lowest promotion rate (highest repetition rate?), while the exit grade for PE - grade 5 had the highest promotion rate (lowest repetition rate?) in 2000-01. In 2005 the promotion rates increased gradually from grade 1 to 5, meeting the target of 99% for grade 5. It seemed that instructions got more efficient as the grades got higher or that the students tried harder as they reach the higher grades. The repetition rates calculated for the all schools included in this study (Tables 13 to 19) showed that overall (both male and female) repetition rate stood at 1.9%, with female students having half or nearly half the rates for that of males and that the rate was highest for the Monastic School, 9.7% for male students, 4.2% for female students and 7.3% overall.

In the preceding paragraph, the idea of promotion and failure being at the opposite poles of student assessment results was put up. It was also mentioned that students who failed would repeat the grade as repeaters though there were no guarantee that all who failed would appear as repeaters. The promotion rate for grade 1 nationally was reported to be the lowest as shown in Table 3, the achieved rate in 2005 for grade 1 being 86.6% signifying that 13.4% failed. However, in the selected schools whose

records and registers were inspected and analysed , no repeaters could be found repeating grade 1 even though there were repeaters for all other classes/grades. The one explanation offered was that with the introduction of a continuous assessment system in schools it was quite rare for a student to fail, especially for grade 1 which was viewed as a preparatory stage for the ensuing years of study.

It was reported in the EFA Monitoring Report 2007 that in more than half of the 148 countries for which data were available, the share of primary school pupils who repeated a grade in 2004 was less than 5%. In Cambodia the decrease was quite significant being 24.6% in 1999 which fell to 10.6% in 2004. The 2007 Report cited above also stated that in the majority of countries, particularly in the developing world, the highest repetition rates are usually found in grade 1. The example given showed that in Nepal the repetition rate for grade 1 was 43% while it was 11% for grade 5. The overall repetition rates in school year ending 2003 for primary level grades was reported to be 19.9% for Loa PDR, 10.6 % for Cambodia, 2.9% for Indonesia, and 2.4% for Viet Nam. For Myanmar the overall rate was reported to be 0.7% for the school year ending 2005. It need to be pointed out at this stage that the rates were shown not to make comparisons between countries as education systems may be different in the stated countries. They were presented so as to give an idea about the existing situation in many countries of South East Asia region. The high rates, especially in grade 1 raised the issue of school readiness of the students, and in other grades - reflects the insufficient mastery of the curriculum by students and the low quality of the education they received. The low rates may be the result of efforts to improve quality or may be the result of policies or practice of automatic promotion as the trend appeared to be ongoing at present in Myanmar. One may have some reservations about using this indicator alone to assess the internal efficiency of a school, but when taken together with

the other two, CI 13 and 14 as stated before, all combined would give some indication as to the schools' efficiency.

CI #13, survival rate to grade 5, is concerned with the percentage of a cohort of pupils who entered the first grade of primary education in a given school-year and who eventually reached grade 5. This indicator assessed the holding power and internal efficiency of an educational system while CI 12, repetition rate, assessed the efficiency of the instructions in the classes. Survival to grade 5 was of particular interest because the completion of at least four years of schooling was commonly considered a pre-requisite for a sustainable level of literacy. Since this indicator was based on cohort analysis models using a number of assumptions care should be taken in making comparisons between different education systems and countries.

In Myanmar EFA NAP, this indicator was estimated based upon 'survival to grade 4'. In reality what was termed 'grade 4' at the time when NAP was drawn up in 2002-03 correspond to the 'fifth standard' as the education structure being used at that time was to start with Kindergarten (KG) and go on to grade 1 to 4 (fifth standard), which constitute the primary education component of the basic education system. KG has now being designated as grade 1 and thus former grade 4 has become grade 5 at the present.

In 2002, survival rate to grade 4 (at present grade 5) was reported as 67% (1991-92 rate) and the target set for 2005 was 74%. Actually achieved rate was reported as 71.5% which was less than the target. In studying the school registers and school records during the present research activities it was quite impossible to calculate the survival rates for the schools mainly due to time constraint as the researcher was on her own. The researcher had access to the registers and records only for a limited time and was unable to get permission for making copies. That was to be regretted as the

survival rate to grade 5 was used as the best available proxy indicator of the quality of education for determining the Education for All Development Index (EDI). The GMR 2007 stated that education systems capable of retaining a larger proportion of their pupils to grade 5 perform better, on average, on international tests. It also went on to state that the survival rate to grade 5 is associated even more strongly with learning outcomes in lower secondary school. However, one should know whether the rate was calculated with or without repetition and the number of years allowed for repetition in each grade because depending upon those characteristics the rate would vary and would not be applicable for comparison between countries without taking those variables into consideration also.

Completion rates (proxied by survival rates) can also be used to assess the extent to which education systems retain children, enabling them to complete their education. This approach focused on children who did have access to schools and try to find out how many of them completed the primary education cycle. The present household survey was able to calculate the primary level completion rate from the responses of the households. The primary education completion rates appeared to be quite high in study area being 84.9% in males and 83.4% in female students and their difference was naturally not significant ($p > 0.1$). The overall primary education completion rate observed from household survey in 2006 was 84.1%. EFA GMR 2007 reported that in half of the 132 countries with data available for the school year ending in 2003, about 87% of a cohort of pupils who had access to primary education reached the last grade. The national primary education completion rate reported for Myanmar (school year ending 2003) was 69.0% for males, 71.8% for females and overall rate of 70.4%.

Another rate which has a bearing on the completion rate is the drop-out rate. The overall drop-out rate calculated from records of the schools

included in the present study gave an average drop-out rate of 0.4% for all grades (grades 1 to 11) with the rate for males being 0.5% and 0.2% for female students. This was in sharp contrast to the national rates reported for Myanmar in school year ending 2003, in the GMR 2007 report, where dropouts for all grades in primary level only (grade 1 to 5) was 31.8% for males, 27.5 for females, with overall rate for primary education of 29.7%. It is possible that the data collected from school records in the present study were incomplete, the possibility of which had been suspected for a long time now. Very important point need to be taken into account here is the researcher's own experience from field visit to another township as part of her job. The research was told in an informal conversation with a township education officer that there are always two sets of data in all schools and all township education offices. One set relates to the real existing situation while the other one is EFA data for reporting to authorities. And the researcher saw both versions and took pictures which are attached

GMR 2007 cautioned that national averages often hide significant disparities among groups within countries. Both boys and girls who lived in rural areas, came from poor families or have mothers with no education were more likely to drop out of school than other children. It also reported that rural children were sixty times more likely to drop out than urban children in Ethiopia. Differences between children of mothers with and without some primary education were strong, but generally less important than urban/rural or rich/poor differences. Gender disparities among children who dropped out were not noticeable in sub-Saharan Africa.

CI #14, Coefficient of Efficiency (CoE) is the optimum number of pupil-years needed for a cohort to complete the primary cycle, expressed as a percentage of the number of pupil-years actually spent by the cohort. It is synthetic indicator of the internal efficiency of an education system. It summarised the effects of repetition and drop-out on the efficiency of the

educational process in producing graduates. A coefficient of efficiency approaching 100% indicated a high overall level of internal efficiency and little wastage due to repetition and drop-out. Less than 100% showed inefficiency due to grade repetition and drop-out. More repetitions and late drop-outs (drop-out in later years of the PE cycle) would produce more reduction of efficiency than less repetitions and drop-outs in the earlier years of PE.

The education system, on one hand, would like to retain the students as long as possible in school, at least up to the higher grades, so that the student would acquire some basic knowledge and skills before dropping out. This meant that students with lesser achievements who were not promoted to a higher class get to repeat the same class in the next school year. Since the number of repetitions were not limited it would mean that a student might possibly go on repeating a class for two or three years and might take 8 - 10 years to complete the primary level cycle which normally took 5 years. Theoretically that scenario is possible but in reality after repeating a class for a year the parents would normally make the child leave school. Retaining students as long as possible in school may make the student better from the educational perspective, but, on the other hand, from economic point of view, the less the number of repetitions allowed for each grade and the earlier the students drop-out in PE cycle, the more efficient would be the system, at least economically more efficient. One should consider these two approaches carefully before making an educational decision. The Myanmar CoE was reported to be 82% in 1991-92 and the target for 2005 was 88%. The actual achievement reported was 85.1% in 2005 thereby failing to meet the target. It was also not possible to calculate this indicator from the data collected by school visits and household surveys in the present study.

Looking at the indicators of efficiency for Myanmar, the overall repetition rate of 1.9% from data analysis of selected schools and 0.7% from UNESCO report, survival rate to grade 5 of 71.5% and coefficient of efficiency 85.1% from the national reports, the overall drop-out rate of 0.37% with male students dropping out more than twice the number of females, as observed in the schools presently under study, all of these indicated that the education system appeared to be quite efficient. However, it had to be noted that because the schools in Myanmar are following somewhat like automatic promotion by using what is termed "continuous assessment" which is very much debatable, many questions arise as to the accuracy of repetition rates as observed in the present study. Also because of "transfers," students "migrating" changing schools year by year, the cohort method being used in determining the indicators might be inappropriate as the Expert Working Group on EFA pointed out.

Some aspects of education which will have bearing upon achievement of EFA goals will now be discussed briefly as they are essential for reaching the EFA goals. These may have been considered and addressed indirectly in some of the EFA core indicators. For example, in describing the literacy rates and gender parity indices, the equity issue may become embedded in them and not addressed as a separate indicator in its own right. The universal primary education goal will not be complete unless the out of school children were taken into consideration and the goal to increase adult literacy will also not be complete unless equity issue, with its standardisation treatment so as to be comparable across countries, is also taken into consideration. Similarly, in looking at the qualification of teachers, the ability to teach bilingually or multi-lingual ability of the teachers should also be considered as it will affect the effectiveness of teaching, which in turn will affect retention of pupils in schools, and ultimately the completion of primary education. The following paragraphs will describe each topic briefly.

8.1.2.5 Out of school children

The consideration of repetition rates and drop-out rates for primary education which have effect upon completion of primary education also brought to mind the children of primary school age who are out of school. Whatever reasons they may have for being out of school, it is really important that they must be given education either formal or non-formal so that they can be productive members of the society. Also, unless these children are given access to education the prospects of achieving universal primary education will be quite impossible.

The proportion of primary school age children who are out of school as observed in the present household survey was presented in Table 23. Even though the numbers observed were very low for them to have statistical significance, percentage wise there appeared to be some significance. Three out of forty six or 6.5% of primary school age children were out of school in urban area. It need be pointed out that two thirds of them were girls. In the rural area, eight out of twenty four or 30.8% of the children of primary school age were out of school, of which 37.5% were boys and the rest (63.5%) were girls. Overall, four out of eleven or 15.3% of the children of primary school age in the survey were out of school, of which 34.6% were boys and 65.4% were girls. Girls made up two thirds of the out of school children in both urban and rural areas. Other associated factors that could be observed in out of school children from household survey include, locality where they reside, educational status of parents and income of families. As shown in Table 23, 8 of the 11 out of school children in primary education were from rural area. Their family incomes fall within the lowest income level as the parents were all farm labourers. Either both or one of their parents were also illiterate.

As stated before the findings of the present household survey was based only on very small numbers observed and as such quite difficult for statistical computing. However, the present findings seemed to be more or less in conformity with the findings of the study carried out in India as well as the data reported in EFA GMR 2007. The Government of India commissioned study carried out by the Social and Rural Research Institute in 2005 was based upon an independent survey of 87,847 households nationwide. The results focused upon the 6 to 13 age group brought out that the overall rate was 6.9% with 6.2% for boys and 7.9% for girls. The rate of 7.8% in rural areas was significantly higher than 4.3% for urban areas. In urban areas the rates for boys and girls were similar but in rural areas it was 6.8% for boys and 9.1% for girls. It was reported that the variations by social group were much larger than by gender or place of residence. The study also found that 4.3% of out-of-school children were disabled and that of all disabled children, 38.1% were not attending school. The surprising finding reported was that the numbers of out of school children for scheduled caste and Muslim boys were higher than for girls which as not observed in other backward castes or scheduled tribes.

EFA GMR 2007 reported that in 2004 roughly 76.8 million children were out of school of which 7.2 million had dropped out, 23.0 million were likely to enroll later and 46.6 million (roughly 61%) were unlikely to enroll unless the governments made some incentives for them to enroll. It was estimated that for every two boys unlikely ever to enroll there were nearly three girls. UIS/UNICEF in 2005 used household survey data for 80 countries to study the background characteristics of out of school children. In these countries 26% of all primary school age children were out of school on average, 24% for boys and 26% for girls. The background characteristics include the followings:

1. Gender: on average there were 117 girls out of school as against 100 boys, but in Latin America and the Caribbean, for every 100 boys out of school there were 96 girls.
2. Place of residence: in 24 of the 80 countries studied, the number of children not in school was at least twice as large in rural areas as in urban areas. Because of large size of rural populations, inequalities in access resulted in the number of out of school children in rural areas to be very large.
3. Household wealth: it was found that children from the poorest 20% of households were three times as likely to be out of schools as children from the wealthiest 20%. The impact of household wealth on access to education was large for both boys and girls alike.
4. Mother's education: on average a child whose mother had no education was twice as likely to be out of school as a child whose mother had some education. For South Asia and Latin America the multiple was close to 2.5 and in 12 of the 80 countries it was 2.8 or higher.

The relationship between the literacy status of parents and school attendance of their children was also studied in the present household survey. It was found that overall school attendance was high (96.6%) when parents were literate as against 50.0% attendance when parents were illiterate. This finding is in conformity with the data reported by UIS (2005) cited above. It appeared that mother's literacy status had greater effect on school attendance than that of the father. The findings of the survey as shown in Tables 29 and 30 brought out the fact that 31.2% of the children were not attending school when fathers were illiterate as against 53.3% when mothers were illiterate and 75.0% when both parents were illiterate. Nguyen (2006) also reported similar findings in his study in Viet Nam.

Tables 25 to 28 also showed that school attendance was related to parents literacy status. In both urban and rural areas, school attendance of children were high when parents were literate. The school attendance rates in urban area being 98.2% when parents were literate as against 61.9% when parents were illiterate. Similarly in rural area, the attendance was 91.7% when parents were literate and 42.4% when parents were illiterate.

8.1.2.6 Developing bilingual or multilingual practices in teaching

Myanmar has more than a hundred ethnic races with as many languages. This made not only communication difficult between races but also in teaching in schools. The use of bilingual or multilingual approaches in classrooms would make teaching more effective and would also get more participation from pupils and their parents. This would naturally promote inclusion of otherwise excluded ethnic children in remote areas of the country. There is thus a need to recruit bilingual or multilingual teachers in schools, especially in areas with ethnic minorities. However to get multilingual teachers, especially those who could communicate in a local language, would be a daunting task and would be very difficult if not impossible in some remote areas of the country. It would mean trying to recruit teachers from local population, among which the qualification required to become teachers may indeed be very scarce.

Also as Johnston and Johnson wrote in 2002, the best language speakers were not trained as teachers and may need support in teaching methods and instructions. However, after giving them the required training in Pedagogy these teachers would then be a very valuable asset in the endeavour to achieve universal primary education.

8.2 Equity and Life Skills

This is one aspect of education that needs to be addressed in all countries. As Scheerens and Visscher pointed out in 2004, if the educational achievement is extensively distributed around a mean level in a given country, that is indicative of low education equity. One way of assessing equity in student learning is by examining the socio-economic gradients of learning achievement, which is also known as the "learning bar" (Willms and Somers, 2001). Recent comparative studies have shown that the level, slope and strength of socio-economic gradients were different between countries and even schools. Steep gradient lines indicate educational inequity.

GMR 2007 had shown a figure, Figure 2.20, based upon the work of Ross et al. in 2005 which showed that even though a country may have a high average score on Mathematics (Mauritius, Seychelles, and Kenya) but after considering the equity aspects of achievement (the slope and length of the socio-economic gradient lines) Kenya, Mozambique and United Republic of Tanzania were the top performers. It means that in addition to scoring above average mathematics scores their education systems were more equitable.

In the light of EFA goals equitable distribution of education is important so as to reach the goals of universal primary education, gender parity and equality, and increasing adult literacy. It is the mandate of education authorities in a country to see that equity as well as equality developed in a country so as to reach the EFA and Millennium Development Goals.

Life skills training and non-formal education

Life skills training and non-formal education are essential parts of the education process. Quite a number of definitions exist regarding 'life skills'

and as given in the Dakar Framework (2000), it is concerned with acquisition of knowledge, values, attitudes and skills by means of learning to know, to do, to be and to live together with others. It can be acquired through formal education in schools as well as non-formal education out of schools. Life skills is to facilitate learning by children and adults so that they can lead normal productive lives in the society. Life skills training in the form of SHAPE (School-based Healthy Living and HIV/AIDS Prevention Education) for in-schools and EXCEL (Extended and Continuous Education and Learning) for out-of-school children and Technical Vocational Education and Training (TVET) for both in-school and out-of-school children were being conducted. Life skills curriculum was introduced in primary schools in 1999-2000 and in secondary levels in 2000/2001. The following Table 41 showed the life skills and non-formal education targets for 2008 - 2010 and attainment of them in 2006-07 in Myanmar as reported in the EFA Mid-decade Assessment Report 2007.

Table 41. Target and Attainment of Life skills and non-formal education

Basic Education	Target		Attained(2006/07)			
	Township	Year	Township	School	Teacher	Student
Primary level	324	2008	144	16313	38447	2.174 millions
Secondary level	324	2010	137	1571	26764	1.038 millions
Education colleges	-	-	-	23	-	-
EXCEL	60	2010	13	-	-	-

The table showed the quantitative aspects of the efforts to implement the life skills and non-formal education programmes in selected townships, number of schools where they were introduced, the number of teachers

trained in the topics and approaches, and the number of students who had gone through the programmes. No mention was however made as to the actual achievement of the students, the impact these trainings were having on their capabilities not only to pass exams but also to lead effective, productive lives. But, to assess such achievements would be very difficult indeed. It would really be a challenge to develop an assessment tool which would be applicable to many situations and across countries.

It can only be pointed out that some indicators should be developed to show effectiveness of life skills training and non-formal education as both of these educational components are important not only for achievement of EFA goals but also for total overall development of a person. The need to define 'life skills' and develop assessment tools and indicators was also pointed out by the NET member during the personal interview. He said, *"You know, we really need to define what life skills mean. It is so wide and encompassing everything in life which is quite different in different environment. But, I believe there must be a common thing, a common theme between them which can help a youth, a person become better at leading his/her life. Something they can learn to be more successful in leading their lives."* At the same time the NET member also pointed out the need to collect reliable data concerning non-formal education as it is indeed a very important component of the community educational development. *"I think we also need to develop the non-formal education sector more as it can really help youths, especially out-of-school youths, to learn about leadership, communicating with people, working and living in communities, making decisions and be a contributing member of a community."* Together with life skills training non-formal education will be a great help for community development and poverty reduction as the millennium development goals envisioned.

8.3 Literacy status of the country

CI 16 to 18 deals with literacy status of people. The 2007 EFA GMR stated in bold letters that "**Literacy: the challenge remains.**" The United Nations had designated the years 2003 to 2012 as the Literacy Decade recognizing the essentiality and importance of literacy for poverty reduction and human development. The UN underscored the importance of literacy by writing that 'creating literate environment and societies is essential for achieving the goals of eradicating poverty, reducing child mortality, curbing population growth, achieving gender equality and ensuring sustainable development, peace and democracy' (UNESCO IIEP, 2001).

Literacy was the focus of 2006 EFA Global Monitoring Report, which advocated a three prong strategy: Universal Primary Education of good quality, greatly expanded literacy programmes for youths and adults, and more attention to literate environment. That report also emphasised that current literacy rates reported by countries were based upon conventional measures which tend to overestimate them and must thus be treated with caution. Until there are more direct, rather than indirect, methods of individual literacy skills assessment, this would remain a problem.

Literacy is certainly not only concerned with individuals but also with the communities and societies. The motivation to become literate is closely related to the environment at home, school and at work. The presence of written and printed materials like books, magazines, posters, pamphlets and visual materials urged people to acquire literacy skills so that they too can communicate better with other people. These materials also helped in learning by students. What then is a literate environment?

The EFA GMR 2007 referring to Easton's presentations defined that literate environments are locations (spaces) that provide four interrelating types of opportunities for the application and use of literacy skills:

- access to reading materials like books, magazines, newspapers, whose existence presupposes publishing facilities and the use of relevant languages to reach diverse readers;
- access to continuing education in one or both of two forms: (a) facilities for formal schooling where one may continue one's education by virtue of open or age-neutral enrolment policy; (b) variety of non-formal organized facilities that confer skills or knowledge of interest to the learner, e.g., life skills or livelihood training, trade apprenticeship, and short term professional training;
- opportunities to exercise and use their literacy skills in community environment by taking on new or more responsible roles and duties in local administration, agriculture, trade, etc.;
- opportunities to help manage or establish business or community services that require literacy skills.

The combination of these four types of opportunities in varying form or degree will constitute a literate environment. Governments and communities can help create such environments. Establishing libraries are one such endeavour and it can be set up in many varied forms - community libraries, rotating boxes of books, reading tents, reading corners, mobile libraries by using donkeys or camels as Makotsi wrote in 2005.

8.3.1 Youth literacy status

CI #16, Literacy rate of 15-24 year olds, is concerned with the percentage of persons aged 15-24 years who can both read and write with understanding a short simple statement on their everyday life. This rate reflects the recent outcomes of the basic education process. It is a summary measure of the effectiveness of the existing education system of a country. A high literacy rate among the 15-24 year-olds suggested a high level of access, participation and retention in primary education and its effectiveness in imparting the basic skills of reading and writing. Since these persons are

entering adult life soon, monitoring their literacy level is important in formulation of national human resources policies and also for forecasting progress in adult literacy.

The Myanmar EFA NAP gave the literacy rate of 15-24 year olds as 94% in 2002, and the target for 2005 was 96%. The Mid-decade Assessment Report of Myanmar gave the achievement for this indicator as 96.5% which exceed the target. Tables 35 to 39 show the literacy status of 15-24 year olds observed in the household survey of selected urban and rural areas. The overall literacy rate for 15-24 year olds was found to be 85.3% much less than the 96% reported for 2005. There was no significant difference between male and female literacy rates being 86.7% for males and 87.1% for females in urban area, while in rural area the rates were 85.3% for males and 79.4% for females. There was no significant difference between the rates in urban and rural areas for males (86.7% urban to 85.3% rural), and there was also no significant difference between urban and rural rates for females (87.1% urban to 79.4% rural) even though the difference appeared to be quite substantial.

All of these rates were found to be less than the national rates reported in EFA NAP and Mid-decade Assessment Report. The reason for this might be that the observed rates from the household survey, as stated before, might not be valid for generalization even though random stratified cluster sampling was carried out. Since self-assessment approach was used with the questionnaires there might also be errors in responses, but, the result was most likely to be over estimated than under. It was felt that the results, even though they did not come up to the national level and might not be applicable for generalisation, still hold true for the surveyed community.

The EFA GMR 2007 gave the literacy rates for 15-24 year olds for nearly all countries of the world representing the period 2000-2004. The rates for

Association of South East Asian Nations (ASEAN) countries were: Lao PDR 78%, Cambodia 83%, Viet Nam 94%, Myanmar 95%, Philippines 95%, Malaysia 97%, Thailand 98%, Indonesia 99%, Brunei Darussalam 99% and Singapore 100%. The rate for Myanmar is almost the same as given in the NAP 2003. The difficulties in using this indicator as stated by the EFA Expert Group in 2001 still holds true at the present time and will be discussed as follows. The first difficulty is concerned with the definition of the term 'literacy' so that it will be relevant both to the local context and international comparability. The second is validity and comparability of the measurement itself - based sometimes on different methodologies one being the self-assessment approach as used in the present household survey - all of which can be improved, but will be much more costly to collect. Third, using the percentage estimation of the population completing a certain grade of PE as a proxy indicator to measure literacy is indeed inadequate. But, up to this moment there does not appear to be any measure better. Fourth, is concerned with the frequency with which these indicators are obtained and updated. Usually they are collected at the time of population census which comes every ten years or more and the rates obtained will no longer be valid one or two years after collection. Special surveys and literacy assessments which can supplement the census data are also few and irregular in most countries. But, promoting the household surveys and literacy assessments so as to update the census data already in place appeared to be the best solution at the moment, even then after careful consideration as to the meaning of the term "literacy".

8.3.2 Literacy status of adults

Adult literacy component of EFA programme aimed at reducing the adult illiteracy rate (appropriate age group to be included to be defined by each country) to one-half its 1990 level by the year 2000, with special emphasis

upon female literacy so as to reduce the disparity in male to female illiteracy rates existing at that time. This target, of reducing 1990 adult illiteracy rate by one-half by the year 2000, was concerned with a range of basic literacy courses and skills development programmes with literacy component. Particular attention was given to address the specific needs of women, ethnic and cultural minorities, socially disadvantaged groups and other learners with special learning needs.

Data on the number of illiterate adults by gender, by age-group, by locality, and sometimes by target groups were obtained from population censuses, household and sample surveys, or through proxy indicators such as school enrolment data over time. As stated above, the literacy status of 15-24 year age-group need particular consideration since their literacy rate would indicate the effectiveness of the formal education system as well as an indicator of expansion or reduction of the illiterate adult pool in the coming years.

In addressing progress in this area, data on number of literacy centres in operation, attendance and completion rates at these centres and the information on the status of underserved areas and groups need to be collected and analysed. It is also important to look into the creation of "literate environment" (described above) and development of programmes to cultivate the culture of reading among the population so as to sustain the literacy drive and gains. The use of local language and literature (if it exists) in adult literacy programmes must also be considered carefully as it will certainly help in achieving progress in adult literacy status. Data relating to government spending for literacy and non-formal education, community support and family contributions could also be used as proxy indicators on efforts for adult literacy in countries.

CI #17, Adult literacy rate, is concerned with the percentage of the population aged 15 years and over who can both read and write with understanding a short simple statement on his or her everyday life. Generally, the term literacy also include numeracy, the ability to make simple arithmetic calculations. In short adult literacy consist of three 'Rs', read, (w)rite and (a)rithmetic, all being kept to the simplest forms. This is especially true for developing countries. For developed countries, like USA for example, literacy has being defined as follows: "Literacy is using printed and written information to function in society, to achieve one's goals, and to develop one's knowledge and potential" (Murray, Clermont & Binkley 2005). As this definition implies, literacy has a much wider implications in developed countries than developing ones. In the context of EFA the adult literacy rate reflects the accumulated achievement of primary education and adult literacy programmes in imparting basic literacy skills to the population so that they can apply such skills they have acquired in their daily living and continue learning and communicating with the outside world. Literacy may said to be the basis for an individual's advancement in life as well as a contribution to socio-economic and cultural development of the society.

The adult literacy rate of Myanmar was reported as 91.8% in 2002 and the target set for 2005 was 92.5% as given in Myanmar EFA NAP 2003. The actual achievement was said to be 94.1 in 2005 according to the draft of EFA Mid-decade Assessment Report 2007. The present household survey (Tables 32-34) showed the overall (both sexes, both urban and rural) literacy rate to be 80.2%. There was no significant difference between urban and rural areas. However, for the sexes, males had significantly higher rates ($p < 0.001$) than females in both urban and rural areas as well as in the overall (urban and rural combined) rates.

These findings are more comparable with the rates reported by the EFA GMR 2007 for Myanmar than with the Myanmar EFA NAP 2003. The EFA GMR 2007 gave the adult literacy rate of Myanmar in 2000 - 2004 to be 90.0%. This rate was also comparable with the rates for other countries in South East Asia region, where Viet Nam and Indonesia rates were also 90.0%, Brunei Darussalam, Singapore and Thailand all had 93.0%, Malaysia 89.0%, Cambodia 74.0% and Lao PDR 69.0% respectively. The present survey finding of 89 females being literate for every 100 literate males tallies exactly with the global rate reported by the EFA Global Monitoring Report 2007. In other words it meant that the adult literacy Gender Parity Index of 0.89 which was observed globally was also observed in the present household survey.

In considering the adult literacy rates one need to look at the rates in relation to variables like sex, area of residence (locality), social groups, economic status, family education level, etc., as the rates may vary between them. This may be the result of different groups having unequal access to education facilities and resources. In case of sex, cultural beliefs and practices may play a role as it does in many areas and societies in the world. In addition to finding out the literacy rates for these variables one should also look at the number of adult illiterates in the respective area at the same time. It is to say that one should not be satisfied with increase in literacy rates only as the absolute number of illiterates may also increase when there are changes in the population structure of the community.

8.4 Gender Parity, Equality and Literacy Gender Parity Index (GPI)

CI #18, Literacy Gender Parity Index is concerned with the ratio of the female to male adult literacy rates. It measures the progress towards gender parity in education and the level of learning opportunities available for women as against those available to men. It will also serve as an indicator of empowerment of women in society. The value of 1 means the female and male literacy rates are equal. Any value less than 1 would indicate less number or proportion of females being literate in relation to males. Values above 1 would indicate that more females are literate than males.

In Myanmar, there is no gender discrimination for the teaching job even though the number of female teachers is overwhelmingly high with the male to female ratio among the teachers was found to be 1:11.4 in the schools selected for this study. This can be seen in the data (Table 12) relating to teachers in the selected schools of the study where there were only 2 male teachers to 39 (95.1%) females in PE level classes and in classes of all levels there were 7 males to 73 (91.3%) female teachers. It is generally accepted in Myanmar society that women, who by nature are mothers or potential mothers looking after children at home, also more caring and gentle, are more suitable for teaching of children. Men preferred to go into jobs requiring more physical efforts, away from home and family. These cultural beliefs tend to be widely accepted at least in the Asian context if not universal and not limited to Myanmar society only. Call for changes in this concept have started coming up at the end of the 20th century. Cameron and Moss (1998) wrote about challenging prevailing assumptions about gender responsibility in early childhood programmes. It was also Cameron (2001) who wrote that male child care workers can be a role model for those looking after boys and girls alike.

It had been stated in EFA GMR 2007 that 64% of women adults worldwide could not read and write with understanding simple statement from their

everyday life. This percentage observed in 2000-2004 was virtually unchanged from the 63% recorded in 1990. The regions with lowest adult literacy GPI were South and West Asia (0.66), the Arab States (0.72) and sub-Saharan Africa (0.77). Gender parity had been achieved, on average, in many of the remaining regions while East Asia (0.93) was above the global average. Overall, all regions had experienced increases in GPI since 1990. Despite overall progress disparities still existed between adult literacy rates of men and women. Disparity favouring men can still be observed in many countries including those in West and Central Africa, South and West Asia - Afghanistan, Bangladesh, India, Nepal, Pakistan, and in Arab States - Morocco and Yemen. Disparity favouring women can be seen in a few countries like Jamaica (1.16), Lesotho (1.23) and according to EFA GMR 2006, also in Botswana and United Arab Emirates. However, EFA GMR 2007 reported that this trend is growing in other areas of the world, especially among the younger cohorts, which bodes well for poverty reduction and human development in general.

Girls more than boys have benefited from recent progress in increased access to schools and participation. The global gender parity index (GPI) for primary education as observed together with improvements in gross enrolment ratio in countries rise from 0.92 in 1999 to 0.94 in 2004. The progress was more rapid in developing countries, especially those with both low enrolment ratios and high gender disparity in primary education level. Overall, about two thirds of 181 countries for which 2004 data were available had achieved gender parity by that year. As EFA GMR 2007 reported, despite the overall positive trend significant gender disparity remain, most at the expense of girls. Gender disparities in primary education often arise as the results of girls faced in many societies. Among the obstacles were poverty and the related issue of direct and indirect costs of education, distance to school, language and ethnicity, social exclusion

and cultural barriers. The social and cultural barriers are met more by girls than boys at home, in school and in society at large.

However, once they have access to schools, girls perform as well as, or better than boys as seen by less repeater rates (rate for girls half that of boys) in the present household survey, and also as reported in GMR 2007 where it was reported that “the median percentage of repeaters in primary education was less than 4% for females in 2004 while the median for males was close to 5%.” In Chile according to UNICEF (2005) poor boys are four times more likely to leave school early and enter the workforce than girls. What is needed in most countries, as put forward by Lewis and Lockheed (2006), is to develop and implement policies to give educational support and physical safety the girls need to gain access to primary education and complete it.

Gender parity as used in education is to ensure that equal number of boys and girls have equal access and participation in school. As stated above, once the girls enter school they tend to do better or at least equal to boys. The repetition rates are half or nearly half of that of boys. This was also observed in the household survey of the present study. The dropout rates in girls tend to be less than that of boys even though variations are present all over the world. These achievements in education do provide parity between sexes in schooling but equality is another matter. Some professions and disciplines like education, medicine, and social sciences are designated consciously or unconsciously as suitable for the weaker sex and one can find women concentrated in them. Many, if not all, managerial, administrative and top positions in governments and businesses are still occupied by men. Women had to have higher qualifications to get the same job and pay as men. GMR 2006 thus very aptly indicated that public policies aimed at gender equality in education thus need to go beyond initiatives that focus exclusively on enrolment ratios.

Even though schools and curriculum emphasised gender equality actual teaching environment tend to be quite different. Teaching materials also tend to promote gender-specific role portraying boys/males as active and powerful, while girls/females as sweet, weak and needy. Game playing may also conform to stereotype, boys playing with blocks while girls stay in housekeeping corner with less access to more active toys (Evans, 1998). Sadker and Sadker also wrote in 1994 that teachers also tend to give more attention to boys as they needed more disciplining than girls. Changes made in the curriculum to foster gender parity and equality will not work unless the teachers also change their attitudes and behaviour. For this, changes are also necessary in teacher training curriculum so as to promote gender awareness and sensitivity.

In the present study, one point raised by the participants of the Focus Group Discussion was that gender parity existed in the schools in Myanmar, in contrast to the finding of a UNICEF study (2008) where teachers were found to favour boys more than girls. The teacher participants stated that gender equality still need to be addressed seriously as township education officers, who supervised all teachers and their teaching activities, were mostly males even though large majority of the teachers were females. Need for more and sustained efforts to promote public awareness of gender equality issue can be seen from a remark by a FGD male member at one of the session where he said, "*I feel there should be division of labour and responsibility between men and women, men working outside the home for family income and women taking care of the house and children at home. Women would be "queen" in the house and should be proud of that.*" This comment brought a swift response from women members, one of them saying, "*That is not fair. Look at me. I have to work at school during the day and also do house work when I go back home. I am contributing to family income but my husband is not helping me at home. He should.*"

Again, if you look, how many of us women are in decision making posts in the township? We can be as good an administrator as any men but we are not considered. I don't think that's fair." Another female member added, *"Men have received 'superior status' in Myanmar society as a tradition. I agree that only man can become a Buddha. Just because of that you cannot say they are better, I think some women are better than men in many aspects. Especially intellectually. However we do not receive equal status - look at administrative positions. Can you tell me of a woman in one top administrative post? We still have a long way to go for equality."*

It seemed that Myanmar society, being guided strongly by religious and cultural traditions as stated previously accept the idea of 'biogrammer' differences between men and women propounded by Tiger and Shepherd (1975). This theory suggested that because of biologically determined 'biogrammer' differences males are better disposed to action and adventure while females are disposed to pursue domestic and maternal activities.

8.5 Education Quality

Studies have shown that education quality is correlated with school participation especially in developing and transition countries (Editorial, International Journal of Educational Research 2006). The major challenges faced by countries was the need for more clear definition of what "quality education" means and the absence of assessment tool(s) which can be used internationally and be comparable between countries. In such a situation education quality is measured by means of proxy indicators which can be used cross-country. One need also take notice of what O'Sullivan discussed in 2006 where she argued that quality is grounded in culture, social, economic and political life of communities and that quality of education need to be measured within the context it takes place. Based upon this thinking the EFA CIs used to assess education quality need to be reviewed in

the light of Myanmar context and some of them, for example, repetition rate which was made artificially low may not be applicable for comparison with other countries.

The CI # 9 to 14 are concerned with the quality of PE shown indirectly by the qualification of teachers, low students - teacher ratio, and students' achievement of learning as shown by less number of students repeating a class, more students surviving to grade 5 and high coefficient of efficiency. The assumption behind looking at qualification of teachers appeared to be that qualified teachers will produce quality teaching which will be beneficial to students' learning and similarly with students-teacher ratio, as a teacher would be able to teach much more effectively with fewer students than with larger class. Similar logic applies to other CIs too.

As such, CI # 9 showed the proportion of primary school teachers who met the basic requirement in terms of academic qualification as specified by the country's authorities. In Myanmar, the basic academic requirement for a teacher is to pass matriculation (11th grade). In 2002 it was shown that 95% of the teachers were matriculates and the target set for 2005 was, quite pragmatically, 96%, or just a percentage point increase over 3 - 4 years duration. The actual achievement was shown as 97% in the mid-decade assessment report 2007, thus exceeding the target. The inspection of registers and records of selected schools as presented in Table 12 showed that 100% of the primary school teachers were either matriculates or university graduates, with university graduates (82.9%) being almost five times that of the simple matriculates (17.1%). Even though the data did not reveal it, nearly all of the matriculate teachers were in the rural school (6 out of 7). It might be that the teachers with only matriculation were unable to compete with the university graduates in urban areas and by natural selection became confined to the rural area where private tuition, for extra income, was practically nonexistent.

The rates for CI 9 in Myanmar compared quite favourably with the data from some regional countries. The number of qualified primary school teachers for Lao PDR in 1997-98 stood at 86.6%. In Bangladesh, the requirement was different for female and male teachers, being stricter for males (Bachelor degree required) than for females (Higher Secondary Certificate with certificate in Education). In 1999, 100% of the female teachers had the required qualification compared to 53% for the male teachers. This disparity in qualification rates was understandable as the qualification for female teachers was higher than that of the male teachers. What are quite incomprehensible were the reasons for specifying such different requirements for the two genders.

CI # 10 is concerned with teachers having the minimum organized teacher-training, either pre-service or in-service, required for teaching purposes. This indicator measures the proportion of primary school teachers trained in paedagogical skills, according to national standards, to use available instructional materials and teach effectively. It also reveal the country's commitment to invest in the development of its human resources involved in teaching activities as teachers are required to guide the students' learning experiences so that they acquire the knowledge, skills and attitude stipulated in a given curriculum. In Myanmar, it was reported that the percentage of teachers with paedagogical training was 80% in 2002 and the target for 2005 was 97%. The actually achieved rate was reported to be 97.7%. It was observed at the selected schools included in the study (Table 12) that only 51.2% of primary school teachers and 66.3% of all teachers had paedagogical training. This is in contrast to the possibly inflated figure of 80% reported for 2002 above.

The study figures even though somewhat less were more in line with the data reported for Myanmar 1999-2004 in the EFA GMR 2007, where the

percentage of trained teachers in primary education increased from 60% in 1999 to 76% in 2004. Again as the figures will certainly be based upon data supplied by the government and more often than not likely to be inflated. No data were available for pre-primary education. It had to be noted that some teachers without certification may have acquired the necessary paedagogic skills through experience over the years. In the opinion of teacher participants in the Focus Group Discussions only 30 - 40% overall (both urban and rural combined) were trained in Pedagogy. The teacher with paedagogic training *"strongly recommended that all (she said to underline all) teachers must be required to get this paedagogic training."* She strongly put forward that *"application of educational science principles and methods would make all teachers become better and effective teachers."*

The NET member had some ideas on the use of educational principles by teachers. He stated, *"We had a hard time giving paedagogic training to teachers as we have quite a large number of teachers to be trained. So we include that subject, Educational Science, in our teacher training curriculum. Recently trained teachers cannot say they do not know about paedagogy. But, with modern education principles we have to use student-centered approach and I believe teachers felt that they might be losing control and authority over the students. With teacher-centered approach they have that and with teachers giving private tuitions to their students taking fees, which I believe is ethically wrong, they want to have control on nearly everything. I really believe teachers giving private tuition for fees is ethically wrong. BUT a big but, what can you do when their salaries are so low. We have thought about increasing their salaries, then nearly all of the education budget would be spent on salaries. Even at the moment salaries of education staff took up about 65-70% of the recurrent budget."*

The need for paedagogical training as well as wider coverage of general topics in teacher training programmes was impressed upon the researcher during one of her field visits to schools in the districts. She was astonished to find a teacher teaching mathematics by making students repeat after her like rote learning rather than to teach them reasoning, logical thinking and problem solving skills. She was also aghast to hear an educational official giving wrong information about world history to teachers at a coordination meeting but none dared to point it out.

CI # 11 relates to student/teacher ratio. This ratio is generally considered an indicator of education quality. The lesser the number of students a teacher had to look after and to teach, more time and more attention could be given to individual students and thus contribute to better scholastic performance of the students. This indicator also measured the level of human resource input into the education system. However, it did not take into consideration factors like teachers' academic qualifications, paedagogical training, experience and status, teaching methods, availability and use of audio-visual aids, and classroom conditions which will affect teaching and learning. It is just a general indicator as it did not also take into consideration factors like teachers working part-time, or undertaking multiple-shifts or multi-grade classes, so that comparability between schools and countries became a problem. To overcome this EFA Expert Group proposed expressing the number of teachers in terms of "full-time equivalents" (FTE) instead of headcounts. In some countries, even the headcounts may still need to be reliable and accurate as there may be over-reporting of the number of teachers and students for financial reasons.

Pupil/teacher Ratio reported for Myanmar in 2002 was 33:1 and the target for 2005 was 32:1. The actual ratio reported in 2005 was 30:1, which exceeded the target. According to the registers and records of selected schools, the pupil/teacher ratio for the urban High School was 31:1 (Table

4); 36:1 in urban Middle School (Table 5); 50:1 in urban Primary School (Table 6); 14:1 in urban Private School (Table 7); 28:1 in a Monastic School (Table 8); 51:1 in rural Primary School (Table 9). Overall, the pupil/teacher ratio for the study area stood at 33.6 (Table 10). This ratio compared quite well with those in neighbouring countries as reported in the EFA Global Monitoring Report 2007, where Myanmar together with Lao PDR and Philippines had 25-39 pupils per teacher, Indonesia, Malaysia, Viet Nam and Thailand had 15-24 pupils per teacher and Cambodia had 55 and above pupils per teacher in 2004.

The figures from the present study also contained 5 teachers from a private primary school all of whom were trained in Pedagogy. It need also be mentioned that even though a centre conducting primary level classes privately was designated for the purpose of this study to be a private school, it was not officially registered with the local authorities as such. The school was more like private tuition classes conducted in a separate building in a compound of the house of one retired teacher. However, for all purposes it did meet the requirements of a school having full time teachers, who were former teachers from public schools, and with teaching/learning facilities which were far superior and advanced than those existing in the public schools in the area. The main drawback of using student data from this source was that some of their students were also enrolled in the public schools and there will be duplications in enumeration. For this study, it was found that none of the 72 students (Table 7) attending this private school were enrolled in the other schools included in the study.

The drive for UPE and based upon that the government designating "Enrolment Week" for schools did get more students into schools. This in a way put more load on the school system and may interfere with the quality of education the students are receiving as the NET member said once before. The NET member give a frank opinion on student-teacher ratio

saying, *"I think this drive for UPE and getting more students into schools with limited facilities and budget is in a way putting a strain on the school system. A teacher in some rural areas have to look after 50 to 70 students in a class and when there are only two or three teachers in the school and one called in sick, the other teacher(s) had to circulate between classes. It's a pity for them and they should be rewarded. But, with our country so poor there is only so much we can do."*

CI #15 is concerned with percentage of pupils having reached at least grade 4 of primary schooling who mastered a set of nationally defined basic learning competencies. The intention of this indicator is to gather information on the basic learning competencies of pupils, as measured against national standards, towards the end of first stage of basic education. A high value denotes that most of the students acquired the basic learning competencies required of them, low value being the reverse. The problem lies in defining what is meant by "basic learning competencies". Does it mean only literacy and numeracy only? Or, is it more than that like interpersonal relationships, community service, etc.? Examination results may be used as an indicator if it were to relate only to literacy and numeracy. Because of these limitations the use of this indicator for comparison across countries and systems would be difficult.

The Myanmar EFA NAP stated that the rate in 2002 was 57.2% and the target for 2005 was set at 68%. There were no rates available for achievement in 2005. If the final examination passing rate for grade 4 or the promotion rate for grade 4 were to be taken to reflect the learning assessment rate, then the rate at present would be quite high. The present household survey found the PE completion rate to be 84.1% which may in a way be addressing this indicator. However, as stated before there would be many reservations about generalizing from the present survey and the findings need to be accepted with caution.

National learning assessments are known by a number of names which include system assessment, learning assessments and assessment of learning outcomes. They are meant to provide national stakeholders with systematic information about the status of students' learning outcomes and the extent of their attainment of nationally defined standards or proficiencies. They describe levels of pupil achievement, not of individual students but of the whole education system or a defined part of it, e.g., fourth grade students or 9 year-olds, as describe by UNESCO-IIEP, 2001. As reported in GMR 2007, national learning assessments had developed quite recently, especially after 2001, and several trends were noticeable.

Most countries assessed student learning in the primary grade only though some in Asia and Latin America monitor progress at both primary and secondary level, and, even tertiary levels, e.g., Hong Kong, Republic of Korea, Singapore (EFA GMR 2006). Assessments were usually curriculum-based and subject-oriented, typically covering official and sometime foreign languages, mathematics, natural and social sciences as they did in Southern and Eastern African Consortium for Monitoring Educational Quality (SACMEQ, SACMEQ II and III) for reading and mathematics achievement, and, Trends in International Mathematics and Science Study (TIMSS) for mathematics and science achievement, rather than assessing cross-curricular knowledge, skills or competencies as Programme for International Student Assessment (PISA) did. PISA aims to assess their preparedness for adult life towards the end of compulsory schooling -primary education. Assessments were usually carried out by the Ministry of Education or a national research institute.

A baseline study of Child Friendly Schools was carried out in Myanmar by UNICEF in 2007. The study assessed child friendliness of the selected schools including Myanmar Language Learning Achievement (MLLA) on a sample of Grade 5 students. The findings showed four priority areas for improvement -

maintenance of healthy environment, gender disparity favouring boys, use of corporal punishment, and high incidence of bullying. The finding most disturbing to educators was that 76% of the students failed to meet the minimum level of competency in MLLA. This finding indicated a serious concern for Myanmar education authorities and indicated that remedial measures should be carried out as soon as possible. Myanmar is certainly not alone in such a situation as many developing countries faced serious problems with education quality as evidenced by achievement scores for SACMEQ II and III, TIMSS and PISA (EFA GMR 2006). The report also stated that TIMSS 2003 data show "a marked contrast between countries that combine high enrolment ratios with high achievement levels and countries where lower participation goes hand-in-hand with much lower achievement" (p.58). Myanmar appeared to be an exception in that enrolment ratios were high but achievement level for MLLA was very low as shown above. One point to note was that TIMSS assessed mathematics and science while MLLA assessed language and literature.

The researcher also learned during her field tours that school inspections were carried out by township education officers periodically and schools were categorized from category A to E, with A the best and E worst. The teachers in the schools said they only want 'C' and would not try to get better than that. The reason given by a head teacher was, *"It is hard to keep up and sustain category A or B once you got it. If you cannot sustain it you will be reprimanded at least and also "black marked" so that your career goes down the line. So we just try to maintain category C."* It seemed that the objective of school inspection is being defeated unnecessarily and maybe unknowingly.

Discussing about education quality would not be complete without including the curriculum used in schools. GMR 2005 the theme of which was "The Quality Imperative" did invariably include a suggestion to improve the

curriculum, teaching/learning strategies, learning materials like texts and use of teaching aids to improve educational quality. Regarding the curricula used in schools the NET member had some strong opinions. At the third interview he said, *"I think the curricula we are using in our schools are all outdated even though we made a gesture of revising it every year, with people whom the administrators choose, whom I think have never been a teacher. We did the revising without a study to find out if the curriculum needs revision. You know, we have never made any study to find out if what we are teaching in our schools are useful to the students, prepared them for their role in life. I tried telling that to my boss and my boss's boss, and nobody took notice. To be frank, the curricula are overloaded with content which are really of little use to prepare students to make a living."*

When asked about teaching methods and teaching aids he said, *"You know, teachers are more comfortable focusing upon their own teaching, which they understand is to provide information, than seeing that students learn. In most classes teachers only carried out didactic teaching and students take notes. The students never asked any questions. If they did, teachers usually did not answer. (Then laughing added) Well that's better than providing wrong answers isn't it? As to teaching aids, most rural schools just had blackboards and chalk. Anyway, I think if they can use blackboard and chalk well they can make teaching quite effective."*

The teachers in FGD's also made remarks on curriculum they used such as:

"the curricula overloaded with content which had no application in daily life."

"the curricula put more emphasis upon rote learning than on problem solving or critical thinking."

"teachers should be involved in making decisions for curriculum review and revision, and not made by some administrators sitting in their offices."

The above discussions will illustrate that the concept of education quality and how it should be measured are highly debatable. There are no instruments as yet which are satisfactory and applicable to all countries and contexts. As such, proxy indicators presented above will serve as a guide to decide on the education quality. Among them UNESCO (2003) indicated that there is a strong link between survival within the primary cycle (survival to Grade 5) and education achievement. Survival rate to Grade 5 also captures aspects of grade repetition, promotion policy and early drop-out. As such, the survival rate to Grade 5 was selected as a proxy measure of quality in determining the overall progress towards EFA by means of a composite index - EDI.

8.6 The EFA Development Index (EDI)

EDI is a composite measure of a country's situation regarding achievement of the EFA agenda. It was introduced in 2003/4 EFA Monitoring Report and is updated annually. Ideally, measures of all six EFA goals should be included in consideration. However at present only the four most easily quantified goals are included. They are:

- Goal 2, Universal Primary Education, proxied by the total net enrolment ratio;
- Goal 4, Adult Literacy, proxied by literacy rate for those aged 15 years and above;
- Goal 5, gender parity and equality, proxied by gender-specific EFA index (GEI) which is an average of the GPIs for primary and secondary gross enrolment ratios and the adult literacy rate;
- Goal 6, quality of education, proxied by survival to grade 5.

The EDI gives equal weight to the four proxy measures of the four goals. EDI may be expressed as a percentage (from 0 to 100%) or expressed as a ratio

from 0 to 1, 1 being equivalent to 100% and the lower rates described as 0.99 so on. GMR 2007 gave the EDI estimates for 125 countries from which required data were available. From these estimates countries may be grouped into three categories of high, medium and low EDI as follows:

- The high EDI group contains countries having EDI of 0.95 and above. It consists of forty seven countries. They are considered to have achieved EFA goals or are close to achieving them. Most countries are from America and Europe even though there are some countries from Latin America, Caribbean and Central Asia.
- The medium EDI group contains countries having EDI value between 0.80 and 0.94. There are forty nine countries in this category spread across all regions. Most of the ASEAN countries including Myanmar are in this group. Other ASEAN countries are Indonesia, Philippines, Malaysia, and Viet Nam. They have many combinations of the proxy measures, some with NER over 95%, but the EDI became reduced as a result of having less value in one or more other measures.
- The Low EDI group contains countries with EDI value of 0.43 to 0.79. They include two ASEAN countries Cambodia and Lao PDR, while two thirds of them are from sub-Sahara Africa, some Arab States and South and West Asia. Again some countries may have a high measure in one area but the other lesser measures brought down the EDI value. It was pointed out that in general there is a need for significant improvement in all EDI components.

EDI is the composite score of four quantifiable indicators:

1. Universal Primary Education (UPE) as measured by net enrolment ratio (NER) for primary education;
2. Adult literacy as measured by Adult Literacy Rate;
3. Quality of education as measured by the survival rate to grade 5; and,

4. Gender parity as measured by a composite index - gender-specific EFA index (GEI), calculated by adding up the GPI for primary education, GPI for secondary education and GPI for adult literacy, and, dividing the sum by 3, which in fact means that GEI is the average of the three GPIs just mentioned.

In the EFA GMR 2007, the EDI was calculated and analysed for 125 countries with a complete set of the required indicators described above. Many countries were not included as the data required for calculation were not available. So, because of the fact that many countries were missing in the analysis from which the high, medium and low groups were identified above, and also because EFA Dakar Framework (2000) goals number 1 and 3 were not included in its consideration, the EDI did not fully represent a comprehensive global overview of EFA achievement. However, it can still provide a general indication as to the progress of countries towards EFA goals, and as such, efforts should be made to request all countries to provide the necessary data for its estimation.

Issues identified in the interviews and focus group discussions

The NET member and the participants of the FGD brought out many issues relating to monitoring the implementation of EFA in Myanmar as presented in the results section. Looking at the issues identified in the interview and focus group discussions one can see that most of them were common to both. This may be the result of the researcher using the interview results as guide in preparing FGD questions. However, the difference of opinion between the NET member and the FGD participants surfaced in the case of motivation of teachers which will be discussed later.

Many of the issues have been discussed in assessing the achievement of EFA core indicators and were presented where-ever appropriate. For example, failure of students to attend after school enrolment had been discussed in looking at CI 5 and 6 - Gross and Net Enrolment Ratios. Relationship between parents' literacy status and school attendance of children has also been addressed. Likewise, difficulty in defining life skills and incomplete data regarding non-formal education has also been discussed separately above. Similarly gender and equity issues were discussed at many points also.

The issues identified by the interview and FGD sessions were more or less similar to issues raised in other countries. Arunatilake (2006) reported that despite the drive for UPE starting from 1990 in Sri Lanka only 93% of the 5-14 year-old age group were in school by the year 2000. The reasons for this non-participation were given as poverty, direct and indirect costs of schooling, cultural factors and school quality especially teacher shortages are negatively influencing school attendance. It seemed limited literacy of parents also affect schooling of children. Glewwe & Jacoby 1994, Case & Deaton 1999, and Brown & Park (2002) have shown schooling was affected by regional differences, school availability, school fees and contributions, teachers' qualifications and student-teacher ratios. UNDP report (1999) identified the constraining factors of education participation and achievement for Pacific Island Countries as economic constraints, geographic spread and numbers of school-age population, teacher shortage, limited provision of non-formal education, coordination of multiple stakeholders, customs and local languages. Looking at all of the constraints being experienced in other countries many of them have also being identified at interviews and FGD sessions of the present study.

There are still a number of issues left which will be discussed as follows. One issue identified, and which is related indirectly to education quality as

it will affect teaching, was the absence or inadequacy of computers and modern IT facilities in the schools. This was observed in all of the public schools. The exception being in the private school where computers were available but used only to prepare teaching lessons and not for data management. The result was that teachers had to manage school data manually, with the possibility of making more errors than with a computerised system. Another effect was that even most of the teachers were unable to use computers and as such were unable to teach the students. The NET member had said, *"Only schools in urban areas, even then in large cities, have computers. For the poor teachers in question, those in district towns, there were none. (Wistfully continued) Even if they have computers they will need electricity which I believe is not available 24 hours a day in all towns. That was also the constraint they face in using modern IT facilities in our schools."* This comment naturally brought to light the problem of not having constant electricity supply which is a hindrance not only for education but also for national development as a whole.

The FGD also brought out the fact that *"chairs and desks for students were inadequate."* This had to be considered together with the findings of the researcher in inspecting the physical conditions of the selected schools presented in Table 11. The physical condition was observed to be the best in the private school. Worst off was the Monastic School where everything need to be improved. Among the public schools, Basic Education High School in urban area was in the best position even though the class size was quite big. Next came the Middle School and then the Primary School in urban area with the rural Primary School also needing many improvements. The facility needing urgent attention was the sanitary condition of the schools. Drinking water was not satisfactory in the Primary Schools both in urban and rural, and of course in the Monastic School as well. The toilet facilities were also not sanitary in all schools except the private one. These sanitary conditions need to be addressed urgently as the health and in turn the education

status of the children depended upon them. One teacher pointed out in a FGD session, *"I wish we have a clean water supply and toilet facilities for students. I know that it is not satisfactory at the moment but what can you do when you have to carry water from a creek about a mile away. I think a tube well will benefit us all immensely."* At that point another teacher added, *"Then you will need a (electricity) generator to pump out the water and who will pay for that?"* The first teacher responded, *"We can definitely use a manual hand pump, can't we?"* Everybody agreed and wished that they could find a donor as they have been waiting for the education authorities to do that since the school was built.

The interviews and the FGDs also brought out the necessity of educating the public and local administrative authorities about the concept of EFA, and all of its components. The NET member during the interview said, *"I was asked by some community members if EFA was a 'socialist concept' and I was really glad I got the chance to explain to them about it. You know, their asking showed that they were interested and I think that's good."* The comments from the interview and FGD also showed that efforts should be made to involve the public and administrative authorities in the general management of the schools by including them as active members in PTA and school management boards. The stimulus these people could have on the teachers was also commented by the NET member as follows: *"They (PTA) can also ask teachers about EFA indicators, what they meant, how they can be measured. This would force (emphasis) the teachers to take more interest in EFA activities and learn more about the indicators which are crucial in monitoring progress as you very well know."*

The NET member and the participants of FGDs were also skeptical of teachers pointing out some of their weaknesses. All teachers need to be aware of and be appreciative of the EFA activities. They must also be trained to be able to undertake monitoring functions for EFA including the

skills to calculate and interpret EFA CIs. More teachers need to be appointed so as to reduce the student teacher ratio, which will reduce their work load. It will also be necessary to give them Pedagogy training and provide incentives so that they would find satisfaction in their jobs. All of these would reduce teachers' absenteeism which appeared to be a problem in many countries, for which the study in Bangladesh, Ecuador, India, Indonesia, Peru and Uganda reported by Chaudhury et al. (2005) can be cited as an example. Alcazar et. al. (2006) also reported on their study on absenteeism in public school teachers in Peru. They were able to identify some causes like poor working conditions; teachers with few ties to the school's community; contract teaching; low literacy rates among students' mothers and absence of private competition. These may also be applicable in many developing countries including Myanmar.

The study by Chaudhury (2005) found that on an average 19% of teachers were absent from their posts. The absenteeism was more among head teachers, better educated teachers, and male teachers. The native teachers, those who were born in an area and taught in that area, were less absent than those born elsewhere. Absenteeism was found to be less in schools with better infrastructure and in those near the ministry of education offices. More absenteeism was observed in contract teachers than regular civil service teachers, but the rate was not much different between teachers from public and private schools. In India however, teachers from private schools had lower absenteeism rates than those in public schools. One of the field observations made by the researcher was on absenteeism of teachers and school hours in rural areas. The researcher happened to ask some students of a rural primary school when classes started in the morning. The answer received was, *"The classes started when the teacher arrived."* As she had to come from town by bus, which did not keep regular hours for service, the teacher would arrive may be a few hours late or may not turn up at all. In that case the students said they *"all had a holiday."*

The teacher participants of FGD in the present study also very rightly brought out the fact that they were not involved in curriculum revisions. They also pointed out that the present curricula did not appear to be effective in preparing pupils for their daily lives, let alone to produce critical thinking and problem solving skills among the learners. It is up to the education authorities to correct these deficiencies. The NET member comments also brought out the defects in the approach for curriculum revision currently used in practice. It was said, *"You know, curriculum revision must be based upon objective assessment of the existing one. You cannot do it by subjective impressions and simply because the present one in use had been in existence for a long time. Regrettably that is what is happening at the moment."*

The NET member appeared to be quite firm about the belief that there was *"weak motivation on the part of quite a larger proportion of teachers."* This point cropped up several times during the three interviews with the NET member. The opinion of teachers themselves, participants of the FGD, was quite different. Half of the teachers thought the motivation was good while the other half thought *"it can be improved or found to be wanting"* (direct translation from Myanmar term meaning there is room for improvement). Some teachers said during FGD sessions that motivation was found to be wanting and that they were disheartened because as the teachers themselves explained they *"were overworked, being involved not only in academic activities but also in acting as "fill-in's" for many state ceremonies, where teachers as well as students were always summoned to attend by the local authorities."* It seemed their motivation could be improved simply by removing some of these 'fill-in' activities. The NET member appeared to be speaking from the administrator's point of view while the teachers, speaking from their own experiences, were more than likely to be nearer the true situation in the country.

Looking at the research questions, it can be seen that all of the questions have been addressed in the study some in more detail than in others.

Question 1 is concerned with achievement of CIs. This was addressed by reviewing two latest available EFA reports from MOE. Table 2 of the results summed up the reports. As stated at the start of this discussion section, no data were available for 4 indicators (CIs 1, 2, 12, 15), targets were not achieved in 4 (CIs 5, 6, 13, 14) and exceed targets in remaining 10 CIs. As expressed before Myanmar EFA NAP reports were able to provide data relating to 14 indicators while internationally only 13 on average were reported. CIs with no data available relate to ECCE and education quality. CIs where targets were not met relate to PE participation and partly to quality. This indicated that even with political backing and pressure from authorities children were not reaching the schools and schools were not able to prevent students from dropping out. Exceeding targets for the other indicators might possibly be result of inflation as interviews and FGD results indicated or may even be real progress which would be more than welcome by the world community.

Question 2 was concerned with the use of other indicators in place of some CI and it can only be addressed partially by giving some suggestions for some indicators. For example, to use “PE completion rate” in place of “percentage of children reaching at least grade 4 or equivalent competencies,” and, also the use of “attendance rates” in place of “enrolment ratios.”

Regarding question 3, to assess the reliability and accuracy of education data by looking at the source and collecting agency, only some assumptions could be made from the interview and FGD results as it was not possible to meet and get answers from the official source mainly responsible for EFA

programmes. The following comments by the NET member may shed some light on this issue. The NET member said, *"Availability and use of computers in our public schools would make many things about data management including reporting easier for the teachers. But, as you must know, we cannot afford it and the poor teachers have to do data recording, compilation, storage, everything manually on paper and being overworked or with little interest, the data can be very challenging for us. And, as I said before, the teachers being overworked, due to some teachers not coming in for duty, the data they produced may naturally be wanting in accuracy."* The NET member also said, *"There are many teachers in many schools who do take their work seriously and labour day in and day out, teaching students, maintaining records and registers manually but taking pains to see that they are accurate and up to date."* The possible weakness of reliability and accuracy of the officially reported data do exist. However, as the UNESCO used MICS data from UNICEF in its GMR report 2007, the referred data should be reliable and accurate. This was shown by the results from analysis of school records and registers and household survey conducted in the present study. The results of above study showed that they agreed with the GMR 2007 data with slight variations only.

Regarding question 4, many of the data from analysis of school records apparently agreed with the MOE data. The main reason previously discussed was the presence of two copies of records and registers, one for official use and another showing the actual existing situation. The reports sent to MOE by the schools would be the official one and since EFA reports were based upon them there should be minimal differences between them. The household (HH) survey on the other hand provided data from the selected samples and would have limitations representing the whole country. However, the survey was able to provide some data which were used to fill in values for some indicators which were not provided in official reports, e.g., CI 12 Repetition rates by grades and for CI 15 not in the form given in

the CI list but in the form of completion rates. Quite a number of rates and ratios observed in the HH survey were similar to the official reports but there were also some, e.g., CI 11 Pupil/teacher Ratio, CI 16 Literacy rate for 15-24 year olds; CI 17 Adult literacy rate and CI 18 Literacy Gender Parity Index, which agreed more with UN reported data, be they GMRs or MICS results.

Questions 5 and 6 are related to one another with outputs for 6 leading to activities for 5. The interviews with NET member and FGD sessions identified many issues relating to difficulties, constraints and limitations faced in monitoring implementation of EFA. These have been reported in detail in the results section. Many of them are common to all developing countries and their broad classification include issues relating to: political system, poverty/economy, technological development, cultural traditions, education system and infrastructure, human resources, and community involvement. Similar issues were reported in other countries too.----- - ----
As some of them were concerned with accuracy and reliability of data they would be providing cues for question 5, e.g., unavailability of computers, teachers not having EFA training, etc., and correcting them would lead to making the reported data more accurate and reliable thus resolving question 5. However, one will have to think really hard how to overcome the politicizing of education which surfaced during the discussions.

Since the aim and objectives of the study were based upon the research questions ability to address the research questions would lead to achievement of the intended objectives of the study.

In the light of the above discussions, Myanmar's achievement of EFA goals as shown by the scores for the EFA core indicators, appeared to be progressing slowly with the possibility that some goals might still be missed by the year 2015. The country was able to meet or exceed the target set for

2005 for majority (10 out of 18) of the core indicators. There were 4 indicators for which data were incomplete or not available, namely, CI 1 - Gross enrolment in ECD; CI 2 - Percentage of entrants to Grade 1 with ECD exposure; CI 12 - Repetition rates by grades; and, CI 15 - Percentage of children reaching grade 4 or equivalent competencies. The target was not achieved in another 4, namely, CI 5 - Gross enrolment ratio; CI 6 - Net enrolment ratio; CI 13 - Survival rate to grade 5; CI 14 - Coefficient of Efficiency. The household survey findings and the review of school records and registers also, more or less, support the rates reported in the EFA reports, even though there were limitations in generalizing from the survey findings as stated in the results section. The interviews and focus group discussions also identified many issues which need to be addressed and corrected so as to increase achievement of the EFA targets and goals. Some of these issues were not new as they have appeared in reviewing the achievement of EFA core indicators.

9. Conclusion

The thesis was able to show the complementary effects of combining quantitative and qualitative approaches in conducting research. The quantitative study brought out the empirical aspects of a phenomenon while the qualitative study supported and contributed towards the understanding of why it occurred. In this study, the quantitative study showed the extent of EFA targets and goals achievements while the qualitative part gave some insight as to why things were as they were, the factors which were hindering or obstructing achievement and how they could be overcome. The thesis was also able to demonstrate the beneficial effects of triangulation - method triangulation, where more than one method was used to study a topic, one method serving as a crosscheck against the other, and the reality being at the point where the findings from two or more methods converged.

The above process was used to find answers to the research questions. The conclusions reached were as follows.

Research Question 1. Achievement of EFA goals through EFA CIs

The official reports gave data on 14 CIs out of 18 CIs, 11 of which were verifiable by means of school records and registers analysis, and, household survey. The findings indicate that in 3 indicators with political implications like Adult Literacy Rate, 15-24 year old Literacy Rate and Literacy Gender Parity Index the data were definitely inflated. Out of the remaining 8, 4 were acceptable and in the other 4 it is likely that there were errors in calculation.

A. Early Childhood Care and Education (ECCE)

It was not possible to assess CI 1 and 2 relating to ECCE. However, the data from schools analysis and household survey was able to show that 15.7 to 20.0% of Grade 1 students had attended ECD schools (CI

2) which may not represent the whole country. It would not be wrong to say ECCE targets were not achieved as yet.

B. Universal Primary Education (UPE)

- a. Regarding access to PE (CI 3 and 4), expected targets and achievements in 2005 were given in the 2007 MDA report. It was possible to cross check the reported data with findings from household survey and could be concluded that there was satisfactory access for PE.
- b. Regarding participation and capacity of PE, (CI 5 and 6), the reported values for 2005 were less than the targets. Household survey data could only be calculated for CI 5, GER, and it also showed that the target was not achieved. The participation and capacity of PE was still found to be wanting.
- c. Data for investment and prioritization of PE (CI 7a, 7b and 8) were calculated for 2005 and were found to exceed the targets but since the values were calculated from 2004 National Budget and not corrected for inflation, and, based upon GDP than GNP in case of CI 7 (a and b), the values may considered not to be valid.
- d. CI 12, 13 and 14 are concerned with internal efficiency of the PE system. CI 12 - repetition rate was not applicable in Myanmar context as MOE was using "continuous assessment system" which ensured that there was only minimal, more often negligible, repetition in classes. CI 13 and 14 could not be cross checked but the reported achievements for them were less than the targets. This showed that there was room for improvements.

Overall, achievement of UPE could not be said to be satisfactory even though there was access.

C. Life skills and equity

EFA Core Indicators does not include any indicators for life skills and equity as these areas are difficult to define and measure. Since they tend to be context specific they may not be useful for comparison across countries.

D. Literacy

CI 16 and 17 were concerned with literacy status of 15-24 year olds and adults. The 2007 MDA report contained achievement data for them which appeared to be inflated as political implications were attached to them. Household survey showed data (CI 16 - 85.3%, CI 17 - 80.2%) which were much less than the MDA report but quite close to UNESCO GMR data and were most likely to be near the true existing situation.

E. Gender parity and equality

CI 18 (Literacy Gender Parity Index) (GPI) was concerned with gender parity regarding adult literacy and also had political connotations and was thus inflated in the MDA report. Household survey finding of 89 % exactly matched the rate reported in GMR reports. GPI was also taken to present empowerment of women in society and may be because of that there was no separate indicator for gender equality in the CIs.

F. Education quality

Education quality was indicated by use of proxy indicators (CI 9, 10, 11, and 15) 100 % of primary school teachers were found to have required academic qualifications (CI 9) in the household survey as against 97 % shown in MDA report 2007. MDA reported that 97.7 % of primary school teachers certified to have national standard (CI 10)

while schools analysis indicated only 51.7 % had the qualification. Pupil/teacher ratio was reported in MDA report to be 30:1 while schools analysis showed 33.6:1. CI 15 which showed education achievement indirectly was assessed by means of primary school completion rate and was found to be 84.1 % in household survey, well above the target of 68 %. Overall, based on these indicators education quality appeared to be quite satisfactory.

Overall, by looking at the achievement EFA Core Indicators, there was progress in working towards the EFA goals but many improvements were still needed to achieve most of the goals by 2015.

Research Question 2. Alternative indicators for some CI

Except for use of GDP in place of GNP in PE investment and prioritization, and, Repetition Rate all CIs were applicable in Myanmar context. Some alternative indicators were also suggested for consideration. One is the use of Attendance Rate in place of Enrolment Ratios and Primary School Completion Rate in place of CI 15 % of children reaching at least Grade 4 or equivalent competencies. The reasons were discussed in the preceding sections.

Research Question 3. Accuracy and reliability of data used by MOE

From the discussions with the NET member and FGD sessions and also from personal experience of the researcher in the field it can only be concluded that the official data are mostly inaccurate and unreliable. The CI values for some were found to be inflated, some overestimated and some underestimated probably not intentional but as the result of inability to do the calculations.

Research question 4. Comparison of official reported data with UN publications and study findings

The household survey findings very closely approximate the data for Myanmar in the UNESCO reports which were based upon many sources, MICS for one example, which may assumed to be closer to the true situation. For one indicator (CI 18) the survey result was the same as that reported in UN report (GMR). The survey results may therefore be assumed to be quite accurate and reliable. As such, even though the majority of the official data, especially those with political implications like literacy rate, gender parity, were certainly inflated some indicators (CI 3, 4, 5, 6, 9) may assumed to be accurate and reliable.

Research question 5. How to make MOE data more accurate and reliable

Suggestions relating to this question could be seen as part of the recommendations which follows this section.

Research question 6. Identifying difficulties, constraints and limitations in implementing and monitoring of EFA activities

The difficulties, constraints and limitations identified could be summarized as follows.

1. The following EFA CIs were found to have some limitations for application in Myanmar context:
 - Early Childhood Care and Education - No data for these indicators were available in Myanmar except some (incomplete) data like number of children enrolled in some ECD programs, number of persons trained for ECD centres which could not be used for estimation of CI 1 and 2.
 - Enrolment Ratios - cannot show true participation and capacity of PE as some students did enroll but did not attend or dropout soon after school opened.

- Repetition Rate - cannot show real situation as the present practice in Myanmar was directed towards passing all attending students in a class.
 - Current public expenditure in PE - the calculation was supposed to be based upon GNP but as only GDP was available in country the computation had to be based upon that, even than without correcting for inflation or using base year monetary value and the results may be of doubtful validity.
 - Proxy indicators for education quality - the cross-checked values for the respective proxy indicators indicated that the quality in Myanmar is not unsatisfactory. However, a survey on Monitoring Learning Achievement showed that less than 25 % of the primary level students acquire minimal competency in Myanmar Language Assessment which cast doubts on the education quality in the country.
2. The difficulties, constraints and limitations relating to EFA data include:
- Inability to get population data from local authorities for CI calculation.
 - Education authorities using updated population data based upon 1983 census for CI reporting.
 - Enumeration of children usually did not include children who were away from home working as house maids or helpers in urban homes and shops.
 - Teachers not fully aware of the usefulness of education data.
 - Majority of teachers not trained in EFA CI calculation methods.
 - Most schools did not have computer facilities for data compilation, storage and retrieval.
 - Teachers and staff were not able to use available computers effectively.

- Authorities wanting to hear/receive only progress and achievement not otherwise.
- This prompted some township education officers to keep two sets of data, one actual and one inflated, the inflated data being submitted officially.
- The required data not submitted in time or not at all by some schools.
- There is a need to develop indicators for life skills, equity and non-formal education.
- More specific definitions needed for literacy, life skills, equity and non-formal education which are comparable across countries.

3. Other general findings include:

- Teachers' salaries so low that it forced them to get extra income by giving private tuition to their own students which might not be ethical.
- Because of low salary the motivation of some teachers were low.
- Some teachers were absent from their work station without applying formally for leave of absence.
- Need teachers who are bilingual (Myanmar and local ethnic language).
- Need more male teachers.
- Need more female education officers (administrators) for higher level positions.
- All teachers should have compulsory training in paedagogy.
- Students dropout from school or failed to attend mainly due to economic reasons.
- Children of literate parents attend school more than children of illiterate parents, more so if mother is literate than father.

- Curricula used in schools were overloaded with facts which require rote learning, and did not have any application in daily lives.
- Revision of the curriculum should involve practicing teachers than administrators.
- Many schools need teaching aids and sanitary water and toilet facilities.
- Absence of regular school inspections by education officials.
- Parents and community need more awareness of EFA and ECCE activities.
- Parents and community members should be involved more in school management.

Overall, looking at the spectrum of EFA achievement in countries worldwide, Myanmar appeared to be situated in the lower middle part of the spectrum. And, as the EFA Global Monitoring Reports indicated year after year starting from 2002, there are some goals which are not likely to meet the targets even by the year 2015, for example, ECCE and equitable access of all young people and adults to appropriate learning and life-skills programmes, and, gender equality. This indicated that Myanmar still need to make special efforts to reduce the gap between target and achievement. Some activities which interfere with the efforts to reach the EFA targets and goals were identified during this study as presented above and measures to correct or alleviate them will be presented as recommendations (which in actuality comprises the second part of question 6). Implementation of these recommendations will provide means of achieving the targets and catch up with other developing countries, especially those that are progressing more quickly within the ASEAN region.

10. Recommendations

Based upon the findings and conclusions stated above the recommendations to improve implementation and monitoring of EFA National Action Plan in Myanmar are presented as follows:

1. The public, especially administrative authorities, need to be made aware of the concept and practice of EFA and ECCE programmes.
2. They need to be convinced of the importance of EFA in poverty reduction and national development.
3. They also need to be convinced of the necessity of using data which is complete and up-to-date in making educational decisions essential for educational development.
4. Greater commitment of government to increase education budget, especially primary education budget, in relation to country GNP, and to consider the budget in terms of constant, base year monetary value have to be advocated.
5. Acquisition of political and administrative backing for promoting literacy among the population especially those living in rural and remote areas, and, among women have to be advocated.
6. The education authorities have to be convinced of the necessity for evidence based decisions in making curriculum review and revisions.
7. Education programmes and facilities for children with disabilities should be developed.
8. More teachers, especially male teachers, should be recruited for schools.
9. Development of policy and practice of appointing bilingual teachers especially in areas with ethnic minorities need to be advocated.
10. EFA monitoring skills development should be included in teachers training programmes and courses, and, impress upon them the need for correct data to make correct, effective decisions.

11. Job satisfaction among teachers should be enhanced by providing training in pedagogy and necessary incentives.
12. Incentives, including higher salaries for teachers serving in remote areas of the country should be practiced.
13. Some form of incentive, maybe with help from UN agency(ies) or some International NGO(s), should be provided to children for staying or continue studying in schools.
14. Computers and modern IT facilities should be provided for schools together with training programmes to use them effectively.
15. Advocate use of IT facilities in education management - especially data recording, storage, retrieval and reporting.
16. An internationally acceptable definition, assessment procedures and indicators for gender equality, life skills, education equity and non-formal education should be developed.
17. More direct and valid indicators for assessing education quality need to be developed.
18. Greater accuracy and completeness of data for life skills, equity and non-formal education programmes need to be promoted.
19. Studies/research should be undertaken to use attendance rate in place of enrolment rate for monitoring EFA or develop alternative internationally acceptable indicator.
20. Advocate gender equality as part of EFA programme by lobbying and recommending qualified female teachers for higher administrative positions at Township as well as State and Divisional levels.
21. Educators should review effectiveness of using "continuous assessment practice" in promoting educational achievement of students.
22. Regular school inspections must be enforced by education authorities.
23. Advocate greater community involvement in education programmes.

- 24. Ensure more involvement of community and local administrative authorities in school management.
- 25. Fulfill sanitary requirements of schools as a priority as it will invariably promote retention of students.
- 26. Make school curricula more relevant for personal development of learners as it will increase the desire to complete the studies.

11. References

1. Agassi, J.B. (1989) Theories of Gender Equality:: Lesons from the Israeli Kibbutz. *Gender & Society* 3:160-186. Downloaded from <http://gas.sagepub.com> on 14 May 2009.
2. Alcazar, L., Rogers, F.H., Chaudhury, N., Hammer, J., Kremer, M., Muralidharan, K. (2006) Why are teachers absent? Probing service deliveryin Peruvian primary schools. *International Journal of Educational Research*, 45, 117-136.
3. Arunatilake, N. (2006) Education participation in Sri Lana - Why all are not in school. *International Journal of Educational Research*, 45, 137-152.
4. Asia Development Bank (2008), *Policy on Education*. From the internet
<http://www.adb.org/documents/policies/education/educ0300.asp?p=policies> downloaded on 26 December 2008.
5. Barnett, W.S. (1995) Long-Ter Effects of Early Childhood Programs on Cognitive and School Outcomes. *The Future of Children*, 5 (3), 25-50.
6. Barnett, W.S. and Boocock, S.S. (1998) Long-Term Cognitive and Academic Effects of Early Childhood Education on Children in Poverty. *Preventive Medicine*, 27 (2), 204-207.
7. Baum, A.C., and McMurray-Schwarz, P.(2007) Tools for Reading and Interpreting Early Childhood Research. *Early Childhood Education Journal*, 34 (6), 367-370.
8. Bickel, D.D., Zigmond, N. & Strayhorn, J. (1991) Chronological age at entrance to first grade: Effects on elementary school success. *Early Childhood Research Quarterly*, 6, 105-117.
9. Boyd, B.L., Herring, D.R., Briers, G.E. (1992) Developing Life Skills in Youth. *Journal of Extension*, 30 (4), 4FEA4 downloaded from www.joe.org on 17 December 2008.

10. Bradley, J. (1993) Methodological issues and practices in qualitative research. *Library quarterly* 63: 431-449.
11. Bray, M. (1986) If UPE is the answer, what is the question? A comment on weaknesses in the rationale for Universal Primary Education in Less Developed Countries. *International Journal of Educational Development*, 6 (3), 147-158.
12. Brooks, D.K. Jr (1984) A life-skills taxonomy: Defining elements of effective functioning through the use of Delphi technique. Unpublished doctoral dissertation, the University of Georgia. Cited by Picklesimer, B.K., & Miller, T.K. (1998) in *Journal of College Student Development*. Downloaded from internet on 10 May 2009 http://findarticles.com/p/articles/mi_qa3752/is_199801/ai_n8771905/pg
13. Brown, J.K. (1970) "A Note on the Division of Labor by Sex." *American Anthropologist* 72:1073-78.
14. Brown, P., & Park, A. (2002) Education and poverty in Rural China. *Economics of Educational Review*. 21, 523-541.
15. Bureau of Policy and Strategy (2004) *The National Education for All Plan of Action for Thailand (2002 - 2016)*, Office of the Permanent Secretary, Ministry of Education, Express Transportation Organization of Thailand, Bangkok.
16. Cameron, C. (2001) *Promise or problem? A review of the literature on men working in early childhood care services*. Gender, Work and Organization, Vol.8, No.4, 430-453.
17. Cameron, C. and Moss, P. (1998) *Men as carers for children: an introduction*. Owen, Moss, P. and Cameron, C. (eds), *Men as Workers in Services for Young Children*. London, Institute of Education, University of London.
18. Case, A., & Deaton, A., (1999) School inputs and educational outcomes in South Africa. *Quarterly Journal of Economics*. 114(3), 1947-1084.

19. Central Statistical Organization (2004) *Socio-economic Indicators 2003*. Ministry of Planning and Economic Development, Yangon.
20. Central Statistical Organization (2005) *Statistical Profile of Children and Women in Myanmar 2004*, Ministry of National Planning and Economic Development, Yangon.
21. Chaudhury, N., Hammer, J., Kremer, M., Maralidharan, K., and Rogers, F. H. (2005) Missing in action: teacher and health worker absene in developing countres. *The Journal of Economic Perspectives*. Vol. 20, No. 1, 91-116.
22. Chatman, E.A. (1992) *The information world of retired women*. Westport, Con., Greenwood.
23. Chodorow, N. (1978) *The Reproduction of Mothering*. University of California Press, Berkeley.
24. Cohen, L. and Manion, L. (1986) *Research methods in education*. Croom Helm, London
25. Colclough, C. (2003) Rights, goals and targets: how do those for education add up? *Journal of International Development*, 17 (1), 101-111.
26. Cooper, P. (2009) Personal communication.
27. Courtney, J. (2008) Do monitoring and evaluation tools, designed to measure the improvement in the quality of primary education, constrain or enhance educational development? *International Journal of Educational Development* 28, 546-559.
28. Courtney, M.E., Zinn, A., Zielewski, E.H. Bess, R.J., Malm, K.E., Stager, M., Pergamit, M. (2008) Evaluation of the Life Skills Training Program, Los Angeles County, California: Final Report. SO-Administration for Children and Families, US Department of Health and Human Services.
29. Crosser, S. (1991) Summer birth date children: Kindergarten entrance age and academic achievement. *Journal of Educational Research*, 84, 140-146

30. Demir, C.E., Paykoc, F. (2006) Challenges of primary education in Turkey: Priorities of parents and professionals. *International Journal of Educational Development*, 26, 640-654.
31. Denzin, N. K. and Lincoln, Y. S., eds.(1994) *Handbook of Qualitative Research*. Sage, London.
32. Department of Basic Education 1 (2003) *Education for All National Action Plan*, Ministry of Education, Yangon.
33. Department of Basic Education 1 (2007) *EFA Mid-Decade Assessment Report*, Ministry of Education, Yangon.
34. de Vaus, D.A. (2001) *Research Design in Social Research*. SAGE: London.
35. Department of Health Planning (2000) *Multi-Indicator Cluster Survey*. Ministry of Health, Yangon.
36. Department of Health Planning (2005) *Health in Myanmar 2004*. Ministry of Health, Yangon.
37. Dewdney, P., and Harris, R.M. (1992) Community information needs: the case of wife assault. *Library and Information Science Research* 14: 5-29.
38. Editorial (2006) *International Journal of Educational Research*, 45:97-101.
39. Elkind, D. (1987) *Miseducation*. Alfred A. Knopf, New York.
40. Engels, F. ([1884] 1972) *The Origin of the Family, Private property, and the State*. Pathfinder Pres, New York.
41. Evans, K. S. (1998) Combating gender disparity in education: guidelines for early childhood educators. *Early Childhood Education Journal*, Vol.26, No.2, 83-87.
42. Flores, J.G. and Alonso, C. G. (1995) Using focus groups in educational research. *Evaluation Review* Vol.19, No.1, 84-101.
43. Glewwe, P., & Jacoby, H. (1994 Summer) Student achievement and schooling choice in low-income countries: Evidence from Ghana. *The Journal of Human Resources*, 29 (3).

44. Graue, E. & DiPerna, J. (2000) Redshirting and early retention: Who gets the "gift of time" and what are its outcomes? *American Educational Review Journal*, 37, 509-534.
45. Guimbert, S., Miwa, K., and Duc Thanh Nguyen (2008) Back to school in Afghanistan: Determinants of school enrollment. *International Journal of Educational Development*, 28 (4), 419- 434
46. Hakim, C. (1986) *Research Design: Strategies and Choices in the Design of Social Research*. Allen and Unwin: London.
47. Han Tin (2000) Myanmar Education: Status, Issues and Challenges. *Journal of Southeast Asian Education: challenges in the new millennium*, Vol.1, No.1, p.113-126, SEAMEO Bangkok.
48. Heyneman, S. P. (1998) The transition from Party/State to open democracy: The role of education. *International Journal of Educational Development*, 18 (1), 21-40.
49. Heyneman, S.P. (2000) From the Party/State to Multiethnic Democracy: Education and Social Cohesion in Europe and Central Asia. *Educational Evaluation and Policy Analysis*, 22, 173-191
50. Heyneman, S.P. (2004) Education and corruption. *International Journal of Educational Development*, 24, 637-648.
51. IIASA (2008) Economic Growth in Developing Countries: Education Proves Key. *International Institute for Applied System Analysis Policy Brief #03*, Austria.
52. Ilg, F., Ames, L., Haines, J., & Gillepsie, C. (1978) *School readiness: Behavior tests used at the Gesell Institute*. Harper & Row, New York.
53. James, D. (2002) "To take the information down to the people: life skills and HIV/AIDS peer educators in the Durban area. *African Studies* 61 (1):169-191.
54. Johnston, B. and Johnson, K. A. (2002) Preschool immersion education for indigenous languages: a survey of resources. *Canadian Journal of Native Education*, Vol.26, No.2, 107-123.

55. Jones, C. (2004) *Qualitative and Quantitative Research: Conflicting Paradigms or Perfect Partners?* Downloaded from the Internet www.shef.ac.uk/nlc2004/Proceedings/Symposia/Symposium4/Jones.htm on 3 April 2005.
56. Jones, L.D., & Sutherland, H. (1981) Academic red-shirting: A positive approach to grade retention. *Education*, 102, 173-175.
57. Khaniya, T., Williams, J. H. (2004) Necessary but not sufficient: challenges to (implicit) theories of educational change: reform in Nepal's education system. *International Journal of Educational Development*, 24, 315-328.
58. Ko-Chi Tung (2006) in *EFA Mid-Decade Assessment Meeting Report*, AIMS, UNESCO, Bangkok.
59. Krueger, R.A. (1994) *Focus Groups*, 2nd Ed. SAGE :Thousand Oaks, CA.
60. Kumar, R. (1999) *Research Methodology, A Step-by-Step Guide for Beginners*. SAGE: New Delhi.
61. Langer, P., Kalk, J., Searls, D. (1984) Age of admission and trends in achievement: A comparison of Blacks and Caucasians. *American Educational Research Journal*, 21, 61-78.
62. Lewis, M. and Lockheed, M. (2006) *Who's Out-of-School? Excluded Girls in a Globalizing World*. Center for Global Development, Washington DC.
63. Lwanga, S.K. and Lemeshow, S. (1991) *Sample Size Determination in Health Studies*. World Health Organization, Geneva.
64. Mackinnon, C.A. (1987) *Feminism Unmodified: Discourses on Life and Law*. Harvard University Press, Cambridge, MA.
65. Makotsi, R. (2005) *Sharing Resources - How Library Networks Can Help Reach Education Goals*. London, Book Aid International (Research paper) quoted in EFA GMR 2007.
66. Mason, K.O. and Lu, Yu-Hsia (1988) Attitudes Toward Women's Familial Roles: Changes in the U.S. *Gender & Society* 2:39-57.

67. Mays, N. and Pope, C. (1996) eds. *Qualitative research in health care*. BMJ Publishing Group, London.
68. Mehta, A.C. (2002) Can there be Alternative Indicators of Enrolment ? A Critical Review of the Frequently Used Indicators. *Journal of Educational Planning and Administration*, XVI:4, 551-565.
69. Meisels, S.J. (1987) Doing harm by doing good: Iatrogenic effects of early childhood enrollment and promotion policies. *Early Childhood Research Quarterly*, 7, 155-174.
70. Merton, R. K. and Kendall, P. L. (1946) 'The Focused Interview'. *American Journal of Sociology* 51: 541-557.
71. Ministry of Education (1993), *EFA Nation Plan of Action 1993*, Yangon.
72. Ministry of Education (2000) *Education Sector in Myanmar 2000*, Yangon.
73. Ministry of Education/UNDP/UNESCO (1992) *Education Sector Study Phase I*, Myanmar Educator Research Bureau, Yangon
74. Ministry of Education/UNDP/UNESCO (1993) *Education Sector Study Phase II*, Myanmar Education Research Bureau, Yangon
75. Ministry of Information (2008) *Constitution of the Republic of the Union of Myanmar*, Printing & Publishing Enterprise, Yangon.
76. Ministry of National Education (2005) *Education for All National Action Plan*, Republic of Indonesia, Jakarta (CD soft copy).
77. Ministry Report (2006) *Myanmar's Economic Development 2006*. Ministry of Planning and Economic Development, Yangon.
78. Ministry of Social Welfare, Relief and Resettlement (1993) *The Child Law*. Yangon.
79. Moloi, F., Morobe, N., and Urwick, J. (2008) Free but inaccessible primary education: A critique of the pedagogy of English and Mathematics in Lesotho. *International Journal of Educational Development*, 28: 612-621.

80. Morgan, D.L. (1988) *Focus groups as qualitative research*. Sage, London.
81. Morgan, D. L. (1997) *Focus groups as qualitative research*, 2nd Ed. Sage, London.
82. Murray, T.S., Clermont, Y., Binkley, M., (ed.) (2005) Measuring Adult Literacy and Life Skills: New Frameworks for Assessment. Catalogue no. 89-552-MIE, no.13. Statistics Canada, Ottawa.
83. Myanmar Red Cross Society (2006) *Primary School Red Cross Project Paper*. Yangon.
84. Nguyen, P. L. (2006) Effects of social class and school conditions on educational enrollment and achievement of boys and girls in rural Viet Nam. *International Journal of Educational Research*, 45, 153-157.
85. O'Sullivan, M. (2006) Lesson observation and quality in primary education as contextual teaching and learning processes. *International Journal of Educational Development*. 26 (3), 246-260.
86. Patton, M. Q. (1990) *Qualitative evaluation and research methods* (2nd ed.) Sage Publications, Newbury Park, CA.
87. Piaget, J. (1970) *Science of education and the psychology of the child*. Orion Press, New York.
88. Reskin, B.F. (1988) Bringing the Men Back In: Sex Differentiation and the Devaluation of Women's Work. *Gender & Society* 2:58-75.
89. Rich, A.A. (1980) Compulsory Heterosexuality and Lesbian Existence. *Signs: Journal of Women in Culture and Society* 5:631-660.
90. Robinson, C. (2005) Promoting literacy: What is the record of Education for All? *International Journal of Educational Development*, 25 (4), 436-444.
91. Sadker, D. and Sadker, M. (1994) *Failing at Fairness: How Our Schools Cheat Girls*. New York, Touchstone.
92. Sanday, P.R. (1973) Toward a Theory of the Status of Women. *American Anthropologist* 75:1682-1700.

-
93. Sarantakos, S. (undated) *Social Research Workbook - Points to remember* downloaded from the internet on 17 January 2005
<http://www.palgrave.com/sociology/saranakos/workbook/varieties/pints.htm>
 94. Scheerns, J. and Visscher, A. J. (2004) *School Factors Related to Quality and Equity*. (PISA thematic report) Paris, OECD.
 95. Schlegel, A. (ed.) (1977) *Sexual Stratification: A Cross-Cultural View*. Columbia University Press, New York.
 96. Seidman, I. E. (1991) *Interviewing as qualitative research: A guide for researchers in education and the social sciences*. Teachers College Press, London.
 97. Senechal, M. and Young, L. (2008) The Effect of Family Literacy Interventions on Children's Acquisition of Reading From Kindergarten to Grade 3: A Meta-Analytic Review. *Review of Educational Research*, 78 (4), 880-907.
 98. Social and Rural Research Institute (2005) *All India Survey of Out-Of-School Children in the 6 - 13 Year Age Group*. SRI, Government of India, Educational Consultants India Ltd.
 99. Spitzer, S., Cupp, R., & Parke, R. (1995) School entrance age, social acceptance, and self-perceptions I kindergarten and 1st Grade. *Early Childhood Research Quarterly*, 10, 433-450.
 100. Spoth, R.L., Clair, S., Shin, C., Redmond, C. (2006) Long-Term Effects of universal preventative interventions on methamphetamine use Among Adolescents. *Archives of Pediatric & Adolescent Medicine*.
 101. Stipek, D. (2002) At what age should children enter kindergarten? A question for policy makers and parents. Social Policy Report. Society for Research in Child Development.
 102. Stipek, D., & Byler, P. (2001) Academic achievement and social behaviors associated with age of entry into kindergarten. *Journal of Applied Developmental Psychology*, 22, 175-189.

103. Taylor, P., Richardson, ., Yeo, A., Marsh, I., Trobe, K., and Pilkington, A. (1995) *Sociology in Focus*. Causeway Press, Ormskirk.
104. Tiger, L. and Shepher, J. (1975) *Women in the Kibbutz*. Harcourt, Brace Jovanovich, New York.
105. United Nations (1948) *Universal Declaration of Human Rights*. New York.
106. United Nations (1989) *Convention on the Rights of the Child*, UNGA Document A/RES/44/25 (12 December 1989) downloaded from the Internet <http://www.cirp.org/library/ethics/UN-convention> on 7 July 2006.
107. United Nations (1997) *Declaration of the Rights of the Child (1959)*, Office of the High Commissioner for Human Rights, Geneva.
108. United Nations (1999) *Press Release, HR/4445, 3 December*. Concluding Session of the Committee on Economic, Social and Cultural Rights, New York
109. United Nations (2001) *The Millennium Development Goals, United Nations Millennium Declaration*, New York.
110. United Nations (2005) *The Millennium Development Goals Report 2005*, United Nations, New York.
111. UNDP(1999). *Pacific human development report*. Suva, UNDP
112. UNESCO (1990) *World Declaration on Education for All. Adopted by the World Conference on Education for All Meeting Basic Learning Needs*. Jomtien, Thailand. Published by UNESCO for the Secretariat of the International Consultative Forum on Education for All.
113. UNESCO (1996) *The Amman Affirmation, Report of the Mid-Decade Meeting of the International Consultative Forum on Education for All*, UNESCO Paris.
114. UNESCO(1997) *Education for All Status Report*. Paris
115. UNESCO (1998) *International Consultative Forum on Education for All. "Education for All: The Year 2000 Assessment. Technical Guidelines."* Paris, 1998 downloaded from

- <http://www.unescobkk.org/infores/efa2000/tech2.htm> on 10 December 2005.
116. UNESCO (2000) *EFA Dakar Framework for Action*, The World Education Forum, Dakar, Senegal 2000 downloaded from the internet on 10 December 2005 http://www.unesco.org/education/efa/ed_for_all/dakfram_eng.shtml.
117. UNESCO (2001a) *EFA Core Indicators*, UNESCO downloaded from the Internet <http://unesdoc.unesco.org/images/0012/001204/120469Eo.pdf> on 21 Nov 2003.
118. UNESCO (2001b) *The EFA assessment 2000: Lao PDR Country Report*, downloaded from the Internet on 18 Nov. 2006 <http://www.unesco.org/education/wef/countryreports>.
119. UNESCO (2001c) *The EFA assessment 2000: Bangladesh Country Report*, downloaded from the Internet on 18 Nov. 2006 <http://www.unesco.org/education/wef/countryreports>.
120. UNESCO (2002a) *EFA Global Monitoring Report 2002, Education for All: Is the World on Tract ?* UNESCO Paris.
121. UNESCO (2002b) *EFA Goal 1: ECCE, APEAL Early Childhood*, AIMS Bangkok.
122. UNESCO (2003) *EFA Global Monitoring Report 2003/4, Gender and Education for All: The Leap to Equality*. UNESCO Paris.
123. UNESCO (2004) *EFA Global Monitoring Report 2005, Education for All: The Quality Imperative*. UNESCO Paris.
124. UNESCO (2005a) *Sixth Working Group for EFA Meeting Report*, UNESCO Paris 2005 downloaded on 25 June 2006 from <http://www.unesdoc.unesco.org/images/0014/001413/141308e.pdf>.
125. UNESCO (2005b) *EFA Global Monitoring Report 2006, Literacy for Life*. UNESCO Paris.

126. UNESCO (2005c) *The Report at a glance, EFA Global Monitoring Report 2006*. Downloaded from http://portal.unesco.org/education/en/ev.php-URL_ID=43140&URL_DO=DO_TOPIC&URL_SECTION=201.html on 25 June 2006.
127. UNESCO (2006a) *Final Communiqué, Fifth Meeting of the High-Level group on EFA*, Beijing, China 2005, UNESCO Paris.
128. UNESCO (2006b) *EFA Mid-Decade Assessment Meeting Report 2005, Bangkok, Thailand*, AIMS Unit, UNESCO Bangkok.
129. UNESCO (2006c) *EFA Global Monitoring Report 2007, Strong foundations: Early childhood care and education*. UNESCO Paris.
130. UNESCO (2009a) *EFA Global Monitoring Report/About the Report* downloaded on 1 May 2009 from the Internet <http://www.unesco.org/en/efareport/about-the-report/>
131. UNESCO (2009b) *EFA Global Monitoring Report/About the Report/Editorial Board* downloaded from the Internet on 1 May 2009 <http://www.unesco.org/en/education/efareport/about-the-report/editorial-board/>
132. UNESCO-IIEP (2001) *Using assessment to Improve the Quality of Education*. UNESCO International Institute of Educational Planning, Paris.
133. UNESCO Institute for Statistics (2001) *Report of the Expert Group Meeting on EFA Indicators 25-26 June 2001, Paris*, UIS Montreal.
134. UIS/UNICEF (2005) *Children Out of School: Measuring Exclusion from Primary Education*. Montreal/New York. UNESCO Institute for Statistics/UNICEF.
135. UNICEF (2005) *Gender Achievement and Prospects in Education*. New York.
136. UNICEF (2008) *Baseline Study of 1000 Schools in the Child Friendly Schools Programme in Myanmar in 2007*. Yangon.

-
137. Venezky, R.L., Bristow, P. & Sabatini, J. (1997) When less is more: Methods for placing students in adult literacy classes. *Adult Basic Education*, 7 (1), 3-22.
 138. Vygotsky, L., (1978) *Mind in Society: The development of higher psychological processes*. Harvard University Press, Cambridge, MA.
 139. Wagner, D.A. (2003) Smaller, quicker, cheaper: alternative strategies for literacy assessment in the UN Literacy Decade. *International Journal of Educational Research*, 39, 293-309.
 140. Wagner, D.A. and Venezky, R.L. (1999) Adult Literacy: The Next Generation. *Educational Researcher*, 28, 21-29. Downloaded from <http://er.aera.net> on May 12 2009.
 141. Wedgwood, R. (2007) *Education and poverty reduction in Tanzania*. *International Journal of Educational Development*, 27 (4) 383-396.
 142. Wildemuth, B. M. (1993) Post-positivist research: two examples of methodological pluralism. *Library quarterly* 63: 450-468.
 143. Willms, J. D. and Somers, M.-A. (2001) Family, classrooms, and school effects on children's educational outcomes in Latin America. *School Effectiveness and School Improvement*, Vol. 12, No.4, 409 - 445.
 144. Wilson, J. (2002) Is education a good thing? *British Journal of Educational Studies*, Vol. 50, No. 3, 327-338.
 145. WHO (1977) *Thirtieth World Health Assembly, Resolutions and Decisions*, Geneva.
 146. WHO (1978a) *Declaration of Alma Ata*. WHO, Geneva.
 147. WHO (1978b) *Primary Health Care*. HFA Series No. 1. WHO, Geneva.
 148. WHO (1979) *Thirty-second World Health Assembly, Resolutions and Decisions*, Geneva.
 149. Yin, R.K. (1993) *Applications of Case Study Research*. SAGE: Beverly Hills and London.

150. Yoshikawa, H. (1995) Long-Term Effects of Early Childhood Programs on Social Outcomes and Delinquency. *He Future o Children*, 5 (3), 51-75.

Abbreviations

AIR	Apparent Intake Rate
ASEAN	Association of South East Asian Nations
BEHS	Basic Education High School
BEMS	Basic Education Middle School
BEPS	Basic Education Primary School
CI	Core Indicator
CIS	Commonwealth of Independant States
DFA	Dakar Framework for Action
DSW	Department of Social Welfare

EAP	East Asia and the Pacific
ECCE	Early Childhood Care and Education
ECD	Early Childhood Development
EDI	Education for All Development Index
EFA	Education for All
EMIS	Education Management Information System
FGD	Focus Group Discussion
FTI	Fast Tract Initiative
GDP	Gross Domestic Product
GER	Gross Enrolment Ratio
GMR	Global Monitoring Report
GNP	Gross National Product
GPI	Gender Parity Index
HIV/AIDS	Human Immuno-deficiency Virus/Acquired Immune Deficiency Syndrome
ICT	Information Communication Technology
IMR	Infant Mortality Rate
IT	Information Technology
Lao PDR	Lao Peoples Democratic Republic

LB	Live Birth
MDA	Mid-Decade Assessment
MDG	Millennium Development Goals
MICS	Multiple Indicator Cluster Survey
MLLA	Myanmar Language Learning Achievement
MMR	Maternal Mortality Rate
MS	Monastic School
NAP	National Action Plan
NER	Net Enrolment Ratio
NET	National EFA Team
NFE	Non-Formal Education
NGO	Non-governmental Organization
NIR	Net Intake Rate
PE	Primary Education
PIRLS	Progress in Reading Literacy Study
PISA	Programme for International Student Assessment
PTA	Parent Teacher Association
PRSP	Poverty Reduction Strategy Paper

SACMEQ	Southern and Eastern Africa Consortium on Monitoring Educational Quality
SEA	South East Asia
TIMSS	Trends in International Mathematics and Science Study
UIS	UNESCO Institute for Statistics
UN	United Nations
UNESCO	United Nations Educational, Scientific and Cultural Organization
UNICEF	United Nations Children's Fund
UPE	Universal Primary Education
WGEFA	Working Group on Education for All
WHO	World Health Organization

Annexes

Annex (1)

Guidelines for data collection

1. Review of National EFA Report – NAP implementation

Achievement of 18 Core Indicators published in two latest reports will be compared to see progress over the years and may be presented in the following table.

Core Indicators		Achievement of CI in two latest reports		Remarks
Sr	Indicator	year	year	(Progress or otherwise, possibility of achieving targets)
1				
18				

2. Interview of National EFA Coordinator

The Coordinator will be asked to comment on the followings:

- a. Comments on applicability of CI in country context.
- b. Constraints, deficiencies and defects encountered in implementation of EFA NAP, for each EFA goal and, or CI.
- c. The possible causes or reasons for above (b).
- d. Suggestions for correction of each of them.

3. Focus Group Discussions

The constraints, deficiencies and defects identified by the National Coordinator for EFA will form the basis for the discussions:

- (i) For each item identified, the group will discuss whether they really exist, and to add any other items to the list.
- (ii) Possible causes/reasons for each.
- (iii) How to correct/solve them.

4. Data to be collected from schools

The following data relate to primary education:

- a. Enrolments in each class for the year 2006/2007, male-female ratios.
- b. Number of cohorts (students starting from the kindergarten continuing to study) in each class, male and female separately.
- c. Number of students completing primary education (passing grade 4 or 5) and those passing national board examinations, male and female separately.
- d. Number of children of primary school age , males and females, for each school district for last five years (From local administration departments).
- e. Data relating to teachers:
 - (i) Teacher student ratio for each class
 - (ii) % with training in pedagogy
 - (iii) % completed high school
 - (iv) % with tertiary education
 - (v) Average years of teaching service for all teachers or by class
 - (vi) Male female ratio
- f. Teaching/learning aids available and in use
- g. Curriculum:
 - (i) Standardised or not, year last reviewed
 - (ii) Use of local language

- (iii) Content of life skills training
- h. Amenities:
 - (i) Classrooms – size, lighting, ventilation, space per child
 - (ii) Student desks – adequate or not
 - (iii) Black board – distance from last row students
 - (iv) Drinking water supply – sanitary or not, number of students per source
 - (v) Toilets – sanitary or not, number of students per toilet, separate for girls and boys
 - (vi) Play ground – present or not, size
- i. Use of local language in teaching
- j. Support for students – supply of text books, school meals
- k. Parent Teacher Association – present or not, involvement in school administration

5. Household Survey

This survey will collect the following data for households by means of semi-structured questionnaire:

- Total number of children
- Distribution by age, sex
- Number of children who are enrolled, attending and completed pre-primary and primary education by class, sex
- If out-of-school, reasons for it
- Number completing primary education total and by sex
- Number of disabled children in household and number studying in schools or centres
- Number of persons in the family
- Family income per year
- Educational status and occupation of parents and adults in the family

Annex (2)

HOUSEHOLD QUESTIONNAIRE SURVEY FORM

Name of State or Division/Township/Town or Village _____

Household No. _____

Family No. _____

(Above Data to be entered by the researcher)

Family particulars	Head of family	
	Father	Mother
Name		
Age		
Education status*		
Occupation		
Family income per year		
Number of members in family		

*Read/write(RW) Primary education (PE) Secondary education (SE) University Ed. (UE)

Children

Age groups	No. of children			No. enrolled in school			No. attending school			No. out of school*		
	M	F	T	M	F	T	M	F	T	M	F	T
<2.5 years												
2.5 - <5yrs												
5-9 years												
Over 9 yrs												
Total												

M – Male

F – Female

T – Total

*Reasons for not in school

Number of children who completed PE

M – () F – () T – ()

Disabled children

Total number () M – () F – ()

No. attending school, M () F () T () Please specify regular school or special school/centre

Date of data entry: / / .

Annex (3)Transcript of the second interview with member of NET(Original transcript is in Myanmar, 32 minutes)

Researcher (R): Good morning. How are you today? *(Said while turning on the recorder and placing it between them)*

NET: Good morning. Fine. You know, I was thinking about the previous interview. *(Quite earnestly continued)* Let me say again that I would not like to be quoted in any form other than in your thesis, which I believe will be kept confidential in the university archives isn't it? OK?

R: Sure, like me, I am sure the university will respect your confidentiality.

NET: OK then. I think you will understand how things are at present in the country and I am taking risk giving you this interview especially as it is not formal or official.

R: Of course I understand. Thank you so much for this. My thesis will not be complete without the input from the NC of the country and with your vast experience you can tell me so much.

NET: Right then. What do we do today?

R: *(laughing)* Coffee first isn't it? I brought some croissants for us.
(NC and R made some small talk about pastry shops)

NET: OK now. Let's get on with your interview, it's nearly 10 and I have a meeting at 10:30.

R: Thank you. Remember you were talking about the difficulties and constraints encountered in monitoring EFA implementation in Myanmar. You were saying that PTAs were not involved in educational monitoring in schools. That they were involved only in censoring some wild students.

NET: Right. I wish that they take interest in monitoring how the school is progressing, not only physically but also in educational achievements. They can be a regulating factor in seeing that teachers report the real picture about their students and their school. *(Continued defensively)* Not that the teachers were not reporting the real existing situation, but there are few teachers and

they are really overworked as I said yesterday. They (PTA) can also ask teachers about EFA indicators, what they meant, how they can be measured. This would *force* (*emphasis*) the teachers to take more interest in EFA activities and learn more about the indicators which are crucial in monitoring progress as you very well know. At the moment I don't think the PTA members can ask such questions as they themselves are quite ignorant of EFA as I said yesterday, remember? I am really not very confident all or most of our teachers really know about these educational indicators at the moment. I wish they take as much interest as they take in their tuitions, for which, I cannot really blame them as they have to live, survive, and their salaries so low.

R: Yes. I agree. Their salaries are so low. But, you do have training sessions for teachers regarding EFA isn't it?

NET: We do. Every summer holidays there are training sessions for many teachers. But, with thousands and thousands of teachers all over the country, the number we can train was just a small fraction of the total number. There is always a limitation as to what they can do in their schools. If the trainee was a teacher other than the Head, she would have a hard time trying to convince the Head about the importance and usefulness of educational data in educational planning, implementation and evaluation. One previous trainee told me that when she tried to explain about the core EFA indicators to the Head Master he just looked away and told her to take responsibility for reporting them. So she asked the head to have some teachers help her with the school records and the Head looked at her quite severely and asked who she think is free. She mentioned a name and the Head told her that the mentioned teacher was assigned the duty to see that children crossed the road safely coming in and going away from school and during school hours she will have to teach her class as well. That is in addition to the security rounds teachers have to make during school hours. The Head even scolded her saying that with such few teachers in the school she will have to cope on her own if she wanted to make the data reporting better. It seemed that the Head was not really keen on school reports.

R: How do Heads choose teachers for these training programmes? Do you know?

NET: We gave certain criteria to Heads which they can use in choosing teachers for training. The main criterion is to choose teachers who are reliable, active and take interest in teaching activities. Of course we hope to give training to all teachers eventually. But, at the moment, we can only cope with a certain number each holiday season. Carried out in many towns simultaneously the total number country-wise would be quite substantial you know.

R: How long do you think it will take to train all teachers?

NET: Certainly some years, but we hope to increase the number of trainees year by year so that we can complete the programme in as few years as possible. But, mind you, the training programmes will go on as new intake of teachers will be coming in yearly. However, we may not need to give the training programmes yearly. Once every two years may even be enough. I would prefer only few trainees in each programme so that we can put more focus on quality. In that case, we may need yearly training programmes, even refresher ones as time goes on.

R: It would be hard for the poor teacher to cope on her own if she had to do everything manually. Can she use a computer for data storage and retrieval?

NET: (*Laughing*) You must be joking. Only schools in urban areas, even then in large cities, have computers. For the poor teachers in question, those in district towns, there were none. (*Wistfully continued*) Even if they have computers they will need electricity which I believe is not available 24 hours a day in all towns. That was also the constraint they face in using modern IT facilities in our schools. Some of our teachers are quite skillful in use of modern IT facilities but as the electricity was not available they cannot use them. Availability and use of computers in our public schools would make many things about data management including reporting easier for the teachers. But, as you must know, we cannot afford it and the poor teachers have to do data recording, compilation, storage, everything manually on paper and being overworked or with little interest, the data can be very challenging for us. And, as I said before,

the teachers being overworked, due to some teachers not coming in for duty, the data they produced may naturally be wanting in accuracy.

R: What about the PTA, the local authorities, they can help supplying a computer and a printer for the school, can't they?

NET: Well, let me be quite frank. Many local authorities are simply not interested in schools or only make a show of some interest. Well, unless their children are attending one. However, there are few who are really interested in schools itself, but not in the students and teachers welfare. They would take interest in seeing that the schools in their locality have good physical facilities – like classrooms, chairs, desks, building. But ask them for teaching aids and teachers training facilities and they think it is the duty of the teachers to make them available. Not theirs. Tell them the exam results and they would like to hear that everyone passed. In that case, the responsible teacher would be praised and rewarded. As you know, it is quite not possible to see that all children passed. When some failed the pressure would come to see that the teacher make a revision and simply passed them. *(pause to think)* I am not sure if the local administrative authorities think they will get more merit and look good to their superiors if they report only achievements and not the failures. But, I also think that the authorities in the central position also want to hear only achievements and progress whether it is really there or not. It is no wonder then that some local administrators may overstate the achievement. To tell the truth I am not sure who is influencing whom. So you can imagine the reliability and accuracy of data from such a situation. Now I am treading on thin ground and should not be going on about it. Won't you agree? But, it is not to say that all teachers and schools are like that. There are many teachers in many schools who do take their work seriously and labour day in and day out, teaching students, maintaining records and registers manually but taking pains to see that they are accurate and up to date. Those are the teachers we would like to see in our training programmes. We have talked about IT facilities available in school yesterday, haven't we? Like I said then, our schools will have to try finding ways together with PTA members to get the facilities and use them or our students will be backward in many ways compared to other students in other countries.

(NET looking at wrist watch) Well, its nice talking to you but have to run now.
Call me again for the last session, and I will let you know whether I am free or not.

R: Thank you so much. I will call again and make an appointment soon. That will be the last.

NET: Just remember what I said about confidentiality, OK?

R: You can count on me for that. Thank you for seeing me.

NET: OK, bye.

R: Bye.

Annex (4)

Consolidated responses to questions raised during
Focus Group Discussions

(Please note: The participants have been briefed as to what is expected of them, to discuss on the topic or issue raised, and also to give some advice how it could be remedied.)

Question 1: Have you heard of the term Education for All? Any idea what it is?

All teachers in the groups have heard of EFA and also knew what it is. For the two PTA members in urban area, they have heard of it but did not have any idea about it. The remaining community elders both from urban and rural areas have not heard of it at all.

Question 2: Have you heard of Early Childhood Care and Education (ECCE)? Know what it is?

All teachers in the groups know about it. But, only one PTA member knew about it. The other PTA member and two community elders have not heard the term before but knew about the day-care centres, as mentioned by one teacher, run by Social Welfare Department, except for the elder from the rural area who did not have any idea at all.

Question 3: Do you think ECCE is important for education of children?

All teachers in the groups thought it is important because they said “*children started learning even at that age.*” The two PTA members and one community elder from urban area were not sure whether it’s important or not. The community elder from rural area thought it maybe important but said “*it will make the mother free to attend to house work*”.

Question 4: Should you send your children or grand children to pre-primary schools or Social Welfare Day-care Centres?

All members agreed they should be sent even though in the case of PTA members and community elders reasons for sending them was to *“keep the children occupied and gave family members opportunity to have some rest.”* However, the teachers from the rural school and community elder from the village pointed out there were no such facilities in most of the villages.

Question 5: (For teachers) Have you had any training for monitoring EFA? Any idea about core EFA indicators (CI) and their importance?

Only two senior teachers from urban area have had training for a month during the summer vacation period. Even then the teachers could only recall very vaguely they were *“about enrolment, student teacher ratio, exam pass rates,”* but, *“could not really recall how they are calculated and not sure about their importance.”* All teachers agreed that they need training and were willing to attend. The teachers complained of the selection process of teachers for training in EFA as well as Pedagogy, one even going so far as to say *“I think the township education officer is not fair, (adding after some hesitation) maybe even dishonest, choosing teachers who will approach him with gifts, you know.”* The teachers said it will take a long time to complete training of teachers at this rate and would advise special training programmes through out the year.

Question 6: Are all children in your community enrolled in schools?

All members of the groups were of the opinion that all or nearly all of the children were enrolled in schools. This was more or less the result of national compulsory school enrolment movement carried out by the education authorities with help from general administrative people. One teacher said *“it shows the importance of political will.”* One community elder also pointed out that, *“there were still children not enrolled or not in school like children from rural areas working in tea shops and those working as house maids in urban homes. These children would not be in the population count and would not be considered in compulsory school enrolment movement”*. Some teachers commented that even though the children may enroll in

schools they may not attend. Similarly some children invariably missed their classes and would drop out half way through the year. The reasons for these were said to be mainly economic. The elder from rural area fully agreed that *"reason for not attending school was mainly economic as children had to contribute towards family income/welfare by contributing some form of service, especially in poor families. That was the reason for sending their children out as house maids and errand boys to more affluent areas."* Everybody agreed that unless the economy gets better there will always be practices going on.

Question 7: What about education of disabled children, do they attend regular schools?

(Researcher/Moderator had to explain what was meant by the term disabled) The participants agreed that naturally disabled children were present in both urban and rural areas. The teachers said that the children with disability they had in their schools were mainly physical in nature like squint, paralysis in one leg, deformed limbs. One teacher told of a student with epilepsy and that the child had to leave after sometime as the bouts of seizures became more and more severe and managing them became a problem. The participants have heard of special schools for deaf and dumb, blind children in Yangon. They thought it would be quite impossible to have such schools in their area, and they could not afford sending their children to such schools in Yangon city.

Question 8: Do parents education status influence their children schooling?

All think that it certainly did. When asked if they could think of any incidence otherwise, one PTA member told the group *"You know, there was a child of educated parents who had to leave school as his parents, both mother and father, were drunk all the time. The parents are both hopeless and are a burden to the community."* Some members commented that it could be an exception and that children of educated or literate parents were usually in schools.

Question 9: What do you think about literacy status of adults (*explained as those over 15 years of age*) in your community?

(The term Literacy had to be explained as, the ability to read and write, with understanding, a short simple statement on his/her everyday life, literacy also including numeracy. This was explained especially for the benefit of PTA members and community elders even though some teachers also need to know it.)

The group members said the literacy rates would be quite high in urban areas but likely to be low in rural areas. Nobody could make any guess as to the possible rates. One PTA member said, "*Literacy is better in men than in women.*" This was refuted by one female teachers who said, "*As far as I can recall, most of the women in households I knew in urban as well as rural areas were literate. They had to make records of household expenses. It is the men who are illiterate.*" However, the teachers were of the opinion that literacy among adults would improve as the community mobilization for 3R (read, (w)rite and (a)rithmetics) classes and the drive for universal primary education undertaken with 'political' support should take effect.

Question 10: How would you rate the motivation of teachers for their work?

Half of the teachers thought the motivation was good while the other half thought "*it can be improved or found to be wanting*" (*direct translation from Myanmar term meaning there is room for improvement*). Some said motivation was found to be wanting because as the teachers themselves said they "*were overworked, being involved not only in academic activities but also in acting as "fill-in's" for many state ceremonies, where teachers as well as students were always summoned to attend by the local authorities.*" Some complained about low salary of teachers, and to make ends meet they had to give private "tuitions" in their free time which should be spent with families. *(The PTA members and community elders were quiet, giving comments only when they were requested to contribute to the discussion.)* They expressed sympathy for the teachers as they were "*unofficially delegated to attend local administrative functions, and which they could not refuse because they did not want to be in the 'bad book' of the local administrators .*" One PTA member said quite

frankly that practicing "*private tuitions made the teachers lax in their teaching activities at school.*"

Question 11: Are computers available at school and can you use them for EFA purposes?

The teachers stated that only two computers were available at state high school and not in other public schools selected for the present study. The private school possessed two computers used only by teachers for lesson preparation and making lecture notes. Five teachers out of eleven in the groups knew how to use the computers. They received training at private computer schools at their own expense. In schools computers when available were used mainly for typing letters and not for storage, retrieval and reporting of educational data.

Question 12: Can you not get support from the local authorities and community for IT equipment for schools?

All of the members in the discussion groups agreed that it depends upon individual authorities. If they take interest in school development they would solicit donations for providing IT equipment including computers to the school. However, the general opinion was that maybe because they were very busy their interest in education and schools was not much. Also as the community was not very affluent, donations to schools were rather limited so that in the rural area, as some teachers put it "*there were not enough chairs and desks for the students, let alone computers.*"

Question 13: Should the local administrative authorities and community be involved in management of schools and education activities in general?

Everybody, especially the PTA members felt that they should all be involved in educational activities. It was just that they do not know how. But, the teachers and community elders pointed out that "*the authorities were only interested to hear 'good' things about anything including education.*" Some comments were given that authorities, including township education officer, "*reported only progress expecting favours from higher authorities.*" Or, as one group member stated, it could be that the

central authorities only wanted to hear ‘good’ news and the local authorities were just following the wish of the central authorities.

Question 14: What about accuracy and reliability of educational data?

All teachers agreed that there may be a definite weakness regarding accuracy and reliability of education data. The causes of such weakness were suggested to be many, but mainly due to education staff not being fully aware of the importance of data in education planning and management; poor recording, collection, consolidation, storage and reporting of data; education staff not being trained in data management; absence of and/or inability to use modern IT facilities; and other social reasons like wanting to hear and reporting only ‘good’ news by *authorities*. One teacher said, *"I don't agree that education staff are not aware of data importance. I and many of us think it is important. But, when you have to do everything manually, and having to do so many other things which I think are not directly related to teaching, we became lax in managing the data. Give us IT facilities, and (laughing) of course electricity, and we will show you."*

Question 15: What do you think about gender parity and equality in education?

The teachers felt that there was gender parity in schools among the student body. They also said that disparity sometimes even favoured girls over boys (more girls than boys in class/school). Looking at teacher population they pointed out that nearly 90% of the teachers were women. But, the township education officers were mostly men and as such they say gender equality still need to be addressed seriously. One female teacher felt very strongly about this. She said, *"Men have received 'superior status' in Myanmar society as a tradition. I agree that only man can become a Buddha. Just because of that you cannot say they are better, I think some women are better than men in many aspects. Especially intellectually. However we do not receive equal status – look at administrative positions. Can you all tell me of a woman in one top administrative post? We still have a long way to go for equality."*

Question 16: Should teaching be women's profession only? What about male teachers?

(Quite an active debate ensued participated by all members)

The male participants discussed that *"because women are by nature more gentle, caring and because they are good at looking after children, with their motherhood attitude, are more suitable to be teachers"*. Female members agreed to a certain extent about this, but think there is definitely a role for male teachers too. They pointed out that *"in all families both mother and father have to share responsibility to bring up their children. Likewise in schools too, male teachers should participate in educating the children not only as controllers of discipline or administrator, but also in active teaching also."* Some female teachers pointed out that *"female heads are even better at maintaining discipline and better administrators than male heads. So administrative functions should be shared between the sexes,."* The male members accept that but still felt teaching and training of children especially training of pre-school children in social welfare pre-school centres and day-care centres are more suitable for female teachers. Again, one female member thought that even in pre-primary schools male teachers should take part as teachers.

Question 17: What about the qualification of teachers?

The teachers pointed out that 99% of them were matriculates (passed grade 11) and over 90% had university degrees but the number of teachers with training in Pedagogy were rather limited still, being a total (urban and rural) of about 30-40% at the moment. The teacher with paedagogic training *"strongly recommended that all (she said to underline all) teachers must be required to get this paedagogic training."* She strongly put forward that *"application of educational science principles and methods would make all teachers become better and effective teachers."* She also pointed out that this applies not only to teachers from regular schools of basic education but also to pre-primary schools and centres. All teachers agreed that *"training is especially needed for teachers from those pre-primary schools and centres as they are looking after very young children and the training/and education the children received at that stage will have an impact on their attitude towards*

schooling in later years." However, they all felt that their teaching of subject content at present was quite satisfactory even though there may be some weakness in education techniques being used.

Question 18: What do you feel about the curricula being used in schools at present?

The teachers all thought *"the curricula were overloaded with content which they feel had no application in daily life."* The teacher who had attended pedagogy training commented that *"the curricula put more emphasis upon rote learning than on problem solving or critical thinking."* The teachers all felt that *"they should all be involved in making decisions for curriculum review and revision, and not be made by some administrators sitting in their offices."* They did not have any idea when the curricula were last revised and by whom. *(The PTA members and community elders did not make any comments even when requested of them by the researcher repeatedly. They simply did not seem to have any idea at all.)*

Question 19: Are you satisfied with the school records and registers in your school?

The teachers said they did try to keep the school records and registers as complete and accurate as possible and they think they are. One teacher from the urban high school pointed out that the 11th grade students even though registered with the school would not attend classes, take private tuition classes outside school but their absence would not be recorded in the school register. So in such instances the accuracy of such records would be questionable.

Question 20: What proportion of the students in the 11th grade who do not take private tuition passed in the state exams ?

All participants agreed that the number of students who did not take private tuition outside the school were very few indeed. The passing rate between the two groups, those who take private tuition and those who did not, were quite similar, except that those taking private tuition got higher marks and subject "distinctions" in the exam. Since the marks obtained in the 11th grade decided which subject and specialty the respective student could follow/take up in higher education, in a way deciding the

child's future, most parents see to it that their children take private tuition and get better marks in the state examination?

Question 21: What do you think about the location of your school in relation to the children who are entitled to attend it? Is access to school quite convenient?

Most of the participants, teachers as well as community members, *"were not really 'happy' with the location of the school. Some students have to spend over an hour to come to school and the buses serving that area were very few."* One school was said to be *"built in the present location due to some political pressure and was not convenient to both students and teachers."* The community elders also commented that as the teachers lived quite far away from school, it was no wonder that absenteeism was quite high, as they heard from the children. *(This provoked angry responses from the teachers, and the researcher had a hard time trying to get the discussions back to normal.)* The teachers refuted that and pointed out that *"many of them have not even taken 'earned leave' because there was no one to relieve them from their posts and replace them during their absence on leave."* Some teachers also pointed out that they have to teach more than one class/grade every day as there were not enough teachers to take care of all classes.

Question 22: Are there any other things you want to say about EFA?

All members have nothing to add to what they have said. *(The researcher thanked all of the group members for their help and gave presents as a token of her gratitude to all of them.)*

Out of school children



Urban school girls



¹ No window shelter, one of the reasons for low attendance rate in rainy season



Dream school with play ground and nice toilet drawn by a student

Monastic school



Government school

