Myanmar Education Consortium

BASELINE STUDY REPORT

DantDaLun Management and Consulting Services
December 2014

Acknowledgements

Acronyms

ECCD	Early Childhood Development
ECDI	Early Children Development Index
EGRA	Early Grade Reading Assessment
EGMA	Early Grade Math Assessment
FGD	Focus Group Discussions
IDP	Internally Displaced Populations
MEC	Myanmar Education Consortium
MLRC	Myanmar Literacy Resource Center
NFPE	Non-Formal Primary Education
PTA	Parent Teacher Association

Table of Contents

List of Tables

List of Charts

Executive Summary

The Myanmar Education Consortium (MEC) is a multi-donor program supporting improved outcomes in basic education for children in Myanmar. The MEC starting funding 13 civil society organisations in June 2014 in four programme areas – early childhood development, complementary basic education in ethnic areas, inclusive education for children with disabilities and non-formal education for out-of-school children. Consequently, the MEC coordinated a joint baseline with its new partners to collect initial data for the goal and outcome indicators in the overall MEC program logframe as well as the partner project logframes. In addition, the baseline study sought to provide descriptive information on result indicators and factors which have an effect on students' educational attainment in the survey sites.

Data was collected for the program as a whole. Although not addressing individual partner projects, the study included one township from each partner and seeks to provide specific information on the different programme components implemented by the partners. The study used a mixed methods approach involving a household survey, school visits to proposed intervention schools for data collection and key informant interviews with principals/senior teachers and caregivers/teachers, a reading and mathematics assessment with children in Grade 3 and Grade 5, and focus group discussions with school management bodies and community members.

The survey was conducted in 11 townships in seven states/regions. Many of the survey sites are remote rural villages which are or have until recently been affected by conflict. Two of the sites are camps for internally displaced populations. Only three sites are urban/peri-urban wards, one located outside Yangon. Two sites are in the Delta region.

The baseline values for the key indicators for the MEC programme are shown in the summary table. The results show that Net Primary Enrolment in the survey areas (84.9%) is comparable to the national figure[1]. There is no difference in enrolment between boys and girls and this gender parity is reflected in most indicators for primary education. A comparison with the Gross Primary Enrolment Ratio (107.8%) shows that many of the children in primary school are over-aged; some children of 17 years are still in primary school. This is in part due to late entry into school which is reflected in the relatively low Net Primary Intake Rate (47.2%) but much higher Gross Intake Ratio (155.2%). Enrolment in early childhood development education is much lower than primary school (22.7%). Data on the proportion of children in the first grade of primary school who have benefitted from an ECCD intervention is however considerably higher at 60.3%. As a proxy for readiness for school, the study calculated an Early Childhood Development Index which showed that about 73.6% of children are developmentally on track in four domains – literacy-numeracy, physical, socio-developmental and learning.

While the study was not able to calculate the MEC outcome indicator, Survival Rate for Grade 3 and Grade 5, single grade promotion rates indicate that there is a high degree of repetition and dropout with Grade 3 and Grade 5 Promotion Rates at about 70%. The Grade 3 Promotion Rate in complementary education areas is lower than that in other survey areas (68.0% compared to 75.7%). Most children leave school after the age of 13 years and the data shows that about 43% of children

---

[1] (Ministry of Health, Lao Statistics Bureau, UNICEF, UNFPA, 2012)

14-15 years are not in school. The Net Secondary Enrolment Rate at 40.2% is consequently lower than primary enrolment.

Summary Table of Key MEC Indicators

Indicator Number	Key Baseline Indicators	Disaggregation			Total
		Boys	Girls	Children with Disabilities	
1a	Net primary enrolment rate	83.6%	86.2%	81.9%	84.9%
1b	Gross primary enrolment ratio	108.9%	106.8%	105.7%	107.8%
2	Grade 3 promotion rate	76.9%	74.6%	66.7%	75.7%
3	Grade 5 promotion rate	72.2%	72%	54.5%	72.2%
4a	Net Primary school completion rate	12.1%	16.5%	6.7%	14.1%
4b	Gross Primary school completion ratio	63.0%	82.7%	53.3%	72.3%
5	Transition rate to secondary school	89.8%	83.3%	90.9%	86.4%
6a	Net secondary enrolment rate	37.2%	43.1%	27.5%	40.2%
6b	Gross secondary enrolment rate	42.9%	51.2%	30.4%	47.1%
7a	Net intake rate in primary education	48.7%	45.7%	63.1%	47.2%
7b	Gross intake rate in primary education	158.5%	152.0%	200.0%	155.2%
8	Early Child Development Index	70.6%	77.4%	86.7%	73.6%
9	Percentage of children with disabilities who attend primary school with at least 80% attendance in the previous month	16.7%	35.7%	NA	22.0%
10	Percentage of children currently in the first grade of primary school who benefitted from an ECCD intervention	58.5%	62.2%	76.3%	60.3%
11a	Net ECCD enrolment rate	22.3%	23.3%	21.4%	22.7%
11b	Gross ECCD enrolment ratio	34.8%	37.0%	28.6%	35.8%
12	Grade 3 promotion rate in complementary education system schools	68.6%	67.4%	66.7%	68.0%
40	Out-of-school children	19.2%	16.6%	21.2%	17.8%

*Percentages in red indicate calculations of coefficient of variation above 10% reflecting a lower reliability of the estimate due to smaller sample sizes. It is not possible to calculate standard error and coefficient of variation for gross and composite indicators.

The study shows that children with disabilities are attending primary school at a comparable rate (81.9%) as other children. In general, other indicators show that children with disabilities have lower levels of educational attainment than other children. However, it should be noted that these other indicators are of lower reliability due to the smaller sample size.

The study used an adapted Early Grade Reading Assessment (EGRA) and Early Grade Mathematics Assessment (EGMA) tool to assess literacy and numeracy levels. The literacy test involved reading a passage and answering 4 comprehension questions while the mathematics test included a question each on the four mathematical concepts – addition, subtraction, multiplication and division. The tests were of Grade 3 level and were conducted with children in Grade 3 and Grade 5 in each of the survey sites. Although not designed to be statistically significant, the results provide an idea of the literacy and numeracy levels of children in the survey sites.

Indicator	Grade 3			Grade 5		
	Boys	Girls	All	Boys	Girls	All
Percentage of students with **oral reading fluency** (who could read at least 50 cwpm)	63.3%	77.3%	70.7%	91.9%	95.8%	93.8%
Percentage of students who answered all **comprehension** questions correctly	15.3%	18.2%	16.8%	38.4%	37.9%	38.1%
Percentage of students who answered **addition and subtraction** questions correctly	57.1%	62.7%	60.1%	75.8%	84.2%	79.9%
Percentage of students who answered all **mathematics** questions correctly	11.2%	9.1%	10.1%	34.3%	33.7%	34.0%

The majority of children are able to read with adequate fluency. However, reading comprehension is low, with about 62% of Grade 5 students not able to answer all questions about a Grade 3 level text correctly. For the mathematics test, the majority of students are able to carry out addition and subtraction tasks. However, only about 34% of Grade 5 students were able to answer all questions correctly with most students having problems with the multiplication and division questions.

There is a primary school in almost every village/ward visited. The majority of schools are government schools or schools run by Ethnic Education (Departments) Organisations where the medium of instruction is the local ethnic language. Some sites do not yet have a pre-school but in some of these villages informal community day care centers have been established. Distance and transportation are not generally a problem but this is likely because the survey focused on sites where the MEC partner has or is planning an intervention. Primary schooling is free and the government provides textbooks, school materials and uniforms but most pre-schools charge a fee to cover the cost of the caregivers' salaries and other needs. Many sites, particularly in remote ethnic areas do not have a secondary school and children have to travel or move to a different town to attend secondary school. Children taught in their own ethnic languages have difficulties going to government schools for secondary and higher education due to poor command of the Myanmar language. Nevertheless, participants in focus group discussions indicate that it is important for children to learn their mother tongue and most households with an ethnic language as the mother tongue know of a school that offers this. Most schools and pre-schools have trained teachers who use different types of teaching materials but these are often insufficient and not adapted for children with disabilities. Most school facilities are also not adapted for children with disabilities and only about half are accessible to children with disabilities. No additional support is available and most teachers have not been trained to work with children with disabilities although some schools say that teachers are asked to give priority to children with disabilities.

Overall about 17.8% of school aged children 5-15 years from the household survey are not in school. About 12% of children are working outside the home, about half of them for pay. The baseline

collected information on three non-formal education centers outside Yangon. The centers are small and have about 15 students each. Most children are between 11-14 years and there are fewer girls than boys. The curriculum used appears to follow that of the government recognised alternative Non Formal Primary Education programme. No fee is collected and a stipend is given to each student. The facilities are very basic with only one center in a permanent building.

Most schools have established School Management Committees and Parents Teachers Associations but in some areas these are not yet functioning well. Most of these school bodies are led by the school principal and usually include the village administrator or 10-Household leader, teachers, parents and other community leaders such as church leaders. They usually have a limited management role except in community schools. Some schools indicate that they raise funds as government funding is not enough and there are many needs for infrastructure, furniture, teaching materials, play materials, as well as for activities such as sports competitions and prize giving for outstanding students. However, in the Delta, the schools indicated that Parents Teachers Associations are no longer allowed to raise funds and the government provides school grants but these are complicated to manage.

The following are the key implications of the findings of the study.

1. While children with disabilities are being enrolled in regular schools, no additional support is available and regular attendance is poor. Most teachers have not been trained to assess and work with children with disabilities. MEC should support its partners to pilot models for inclusive education which can be promoted for wider acceptance in the government education system.
2. The study shows that children who speak the same language at home as in school have better comprehension levels. The majority of the households interviewed consider it important to learn mother tongue, in addition to Myanmar and English in the ethnic areas. The MEC should consider supporting partners to:
    - Develop methods and materials for teaching Myanmar as a second language to students in ethnic areas.
    - Support schools to introduce and strengthen methods for teaching of ethnic languages in schools where Myanmar is the medium of instruction.
    - Provide support for use of mother tongue in the classroom for explaining concepts and instructions where Myanmar is the medium of instruction. This may include supporting teacher assistants and adapting teacher recruitment policies so that there is a teacher who can speak the language of the children in each classroom.
3. Many of the children in school are over-aged. In addition to tracking net enrolment rates, MEC should assess the gross enrolment rates to better understand enrolment levels in schools. Furthermore, MEC should support partners to better understand why children are starting school late in order to be able to better address this issue.
4. There are significant numbers of children who are not in school. However, the coverage in non-formal education centers visited is very low, particularly among girls. MEC should support its partner working with out-of-school children to identify the barriers for attending non-formal education, particularly for girls in order to increase its coverage.
5. A number of indicators from the study are not consistent with the findings from other studies, in particular the lower reading ability of students who have attended a pre-school in comparison

with those who have not, as well as the high percentage of children in first grade who have attended a pre-school. MEC should carry out additional studies to better understand the reasons for the differences.

6. Most of the schools have inadequate facilities, in particular for water and sanitation in non-government schools. MEC should consider providing support for these areas to its partners.

7. Although there appears to be significant community involvement in school management bodies and Parent Teacher Associations, these bodies have a minimal role. MEC should support partners to find ways to better promote community involvement, for example in contributing to extra-curricular activities.

8. Most schools have inadequate funds and fees are currently being collected in pre-schools limiting accessibility by some children. MEC should support a cost and financing study to better understand financial management and financing needs in non-government schools, including in community and Ethnic Education Department schools and non-formal education centers.

I.   Introduction

The Myanmar Education Consortium (MEC) is a multi-donor program supporting improved outcomes in basic education for children in Myanmar. The MEC is designed to increase the quality of and access to early childhood, primary and non-formal education programs being implemented by civil society in Myanmar by supporting the delivery of education services and strengthening the capacity of education sector stakeholders. MEC's target group is hard to reach children who are faced with significant barriers to educational achievement.

In June 2014, the MEC started funding new projects with 13 civil society organisations. Following this, the MEC engaged DantDaLun Management and Consulting Services to conduct a jointly designed, planned and coordinated baseline in collaboration with its new partners. The study is a joint baseline for the MEC program encompassing 12 of the 13 the partner projects[2]. The rationale for conducting a joint baseline for the program is:

1. MEC's organizational assessment of the partners indicated that the capacities available for conducting a quality baseline vary significantly and many of the partners would benefit from a MEC coordinated baseline.
2. A joint baseline ensures consistency of the methodology and approach, tools and techniques, measurement of indicators, analysis and presentation of findings across the different implementing partners.
3. It helps ensure overall quality of the baseline, specifically the data collection at the field level, thus increasing the confidence of the baseline results.
4. A baseline design workshop bringing together all the partners will provide an opportunity for the organizations to build a common understanding and share their previous experiences with baselines.
5. A joint baseline is likely to be more cost effective as the requirement for a statistically valid sampling frame will require fewer field sites and respondents than the number of field sites and respondents required to conduct different baseline studies.
6. It provides an opportunity for the MEC to build the capacity of many of its new partners in various aspects related to conducting a quality baseline study through learning by doing.

---

[2] One partner, Linguistic Society was not included as it is a pilot project in the first year involving only the development of an ethnic language curriculum.

II.   Study Objectives and Framework

The objectives of the baseline study are to collect information to 1) provide benchmarks based on which to assess progress, change and impact resulting from the project interventions and 2) provide benchmarks to refine project objectives to guide project implementation and set project targets. In addition to providing comparisons for an endline study, the baseline also provides contextual information which can assist project implementation by the partners.

The 12 MEC partners involved in the baseline are each engaged in one of four programme components -- five partners are engaged in early childhood development (ECCD), four partners in complementary basic education in ethnic areas, two in primary education for children with special needs or inclusive education for children with disabilities and one in non-formal education for out-of-school children. These 12 projects are implemented in 10 states and regions across Myanmar.

The MEC has an overall program logframe developed at the beginning of the program, prior to the identification of partners. In addition, each of the partners developed a project logframe for their specific projects. Following the approval of proposals, MEC worked with the partners to align the partner project logframes and indicators based on the type of project funded. Together the MEC and partners developed a set of common indicators and minimum standards for partners working on the same program component. Annex A provides a list of the MEC logframe indicators.

The baseline study provides initial data for the goal and outcome indicators in both the overall MEC program logframe as well as the partner project logframes. In addition, it provides descriptive information related to result indicators and factors which have an effect on students' educational attainment in the survey sites.

The baseline collected data for the program as a whole and provides information on the indicators for the study areas as a whole. Although not specifically addressing individual partner projects, the study included one project township from each partner organization and has attempted to characterize major variations in programme components, geographic and demographic parameters. Information on education services available and the extent to which these meet MEC minimum standards have been collected in the village sites where interventions related to those specific services will be carried out (i.e. information on pre-schools was collected from ECCD project locations, information on primary schools from complementary education and inclusive education project locations, and information on non-formal education centers from the project locations working on out-of-school children).

III. Methodology

The baseline is a cross-sectional study representative of the MEC program areas. The study used a mixed quantitative and qualitative approach. Given the breath of program areas and the number of partner program interventions, the study sought to keep study coverage and estimates to a minimum so as to limit costs and study duration. This approach has implications on the study results, which remain limited in their representativeness across all domains. The study methods were developed in consultation with MEC and the partners with input provided at different stages of the design and implementation of the study.

i. Review of secondary information

The baseline team reviewed numerous documents and reports including the MEC and partner proposals and logframes, global and Myanmar education sector reports[3], reference documents on education assessments, surveys and indicators[4] as well as documents on disability[5]. These provided information for design of the study and interpretation of the data.

Table 1: List of townships and villages/wards in the baseline survey

Partner	State/Region	Township Name	Village/wards	Project Type
Plan International	Sagaing	Indaw	Pae Kone, Awang Khone, Gyone Gyone Gya, Than Bo	ECCD
Meikswe Myanmar	Shan (North)	Lashio	Nam Ma Baw Da, Nawng Kwe, Loi Tauk	ECCD
Pyinya Tazaung Association (PTZA)	Shan (North)	Lashio	Maihen, Lashio Q1, Lashio Q12	ECCD
Kayin Baptist Convention (KBC)	Kayin	Kyainseikgyi	Plaw Htoo Khi, Gay Tha Say Ma Nar, Kwin Gyi/Htee Khaing	ECCD
Metta Foundation	Shan (South)	Pinlaung	Loi Maung, Thane Lar Pyar/Wah Pyone, Lai Long/Lae Char	ECCD
Shalom Foundation	Kachin	Moemauk	Mai Ja Yang, Mai Ga Yang, Je Yang	Complementary education
Karen Teachers Working Group (KTWG)	Shan (North)	Kunlong	Ho Li, Kaung Hone, Pan Tan	Complementary education
Kayan New Generation Youth (KNGY)	Shan (South)	Pekhon	Snaik Lae Kwin, Kong Kin, Wah Sie Saung, Kan Klone	Complementary education
Adventist Community Services (ACS)	Kayin	Hlaingbwe	Htee Lin Win Thar, Shwe Aung, Htee Thaw Khe Khe	Complementary education
Karuna Myanmar Social Services (KMSS)	Ayeyarwady	Einme	Thee Kwin, Taw Gyi Saung, Kan Ka Lay	Children with disabilities
Myanmar Independent Living Initiative (MILI)	Ayeyarwady	Yegyi	Thin Taw Aing, Kaing Ngu, Ba Htu, Myo Ma	Children with disabilities
S4SK	Yangon	Hlegu	Indine, Yait Thar/Mya Oat Su, Kyuk Kae Kwin	Out-of-school children

---

[3] In addition to the documents cited in the report, the following documents were also consulted and referenced in the bibliography: (JICA, 2013), (Lwin & Reagan-Fascell, 2007), (Hayden & Hayden, 2013), (Ministry of National Planning and Economic Development, UNDP, UNICEF, SIDA, 2011)

[4] (Education Policy and Data Center, 2009), (UNESCO, 2009)

[5] (Poverty and Disability in Myanmar: Why empowering persons with disabilities reduces poverty, 2012), (WHO, 2011)

Map of Partners and Project Types
in the MEC baseline Survey

Legend

☆	Capital
◉	State/Region Capital
	River and Shore
	Township Boundary
	State/Region Boundary
	International Boundary
+++	Railway
	Road
	River/Water Body
■	Project Townships

ECCD - Early Childhood Development
COMP - Complimentary Primary Education
SN - Special Needs
OOSY - Out of School Youth

Map ID : MIMU1225v01
Creation Date : 28 November 2014, A4
Projection/Datum : Geographic/WGS84

Data Sources: MEC
Base Map : MIMU
Booundries : WFP/MIMU
Roads and Rivers : MIMU/DCW

Map produced by the MIMU.
E-mail : info.mimu@undp.org
Website : www.themimu.info

Project labels on map:

ECCD - Plan International
COMP - Shalom Foundation
COMP - Karen Teachers Working Group (KTWG)
ECCD - Pyinya Tazaung Association (PTZA)
ECCD - Meikswe Myanmar
ECCD - Metta Foundation
COMP - Kayan New Generation Youth (KNGY)
SN - Myanmar Independent Living Initiative (MILI)
SN - Karuna Myanmar Social Services (KMSS)
OOSY - S4SK
COMP - Adventist Church Services (ACS)
ECCD - Kayin Baptist Convention (KBC)

Disclaimer: The names shown and the boundaries used on this map do not imply official endorsement or acceptance by the United Nations.

ii.   Partner workshop

A two day workshop with all the MEC partners was held to establish a common understanding of the objectives of the baseline. This was important because of the diversity of partner approaches, capacities and interests. During the workshop, the partners provided input on the proposed methodology for the baseline, the indicators and methods for data collection as well as on the selection of survey sites and planning of the fieldwork for data collection. The workshop highlighted the complexities of working across many partners, projects and sites, as well as the logistical difficulties in reaching many of the partner sites which are situated in remote areas across the country, including in non-government controlled areas.

iii.   Sampling

A multi-cluster sampling approach including one township from each partner project area was used. The details of the sampling approach are described in Annex B. The map[6] and Table 1 show the townships and village/ward sites involved in the survey.

iv.   Data collection methods

The following data collection methods were used.
1) A household survey of households with children 5-9 years
2) Visits to existing planned intervention schools[7] in survey sites for:
    i.   observation and secondary data collection;
    ii. key informant interviews with principals or senior teachers; and
    iii. key informant interviews with caregivers or teachers.
3) A reading and mathematics assessment of students in Grades 3 and 5[8] in primary education schools in the survey sites.
4) Focus Group Discussions with School Management Committees, Parent Teacher Associations, Community Groups or networks, where these bodies were present or with community members and village leaders.

Data collection tools were developed for each of these methods.

Household survey

The household survey was administered to households with a child 5-9 years selected randomly in the survey townships. The household survey consisted of three components:
1) a general component on household information, data on the educational status of children ages 3-18 years and the hours they spend working in and outside the house;

---

[6] Map prepared by the Myanmar Information Management Unit (MIMU).

[7] In this report, the term "school" is used to refer to all types of schools covered in the study – pre-schools or ECCD centers, primary schools in government and non-government controlled areas as well as non-formal education centers.

[8] This report uses the international school grading system as this is used in the MEC logframe indicators while the data collection instruments used the Myanmar school grading system so as not to confuse enumerators and respondents. Basic Education in Myanmar currently consists of five years of primary education, Kindergarten to Standard 4 (equivalent to Grade 1 to 5 in the international system), four years of lower secondary education and two years of upper secondary education. Grade 3 is thus equivalent to Standard 2 in the Myanmar system and Grade 5 to Standard 4.

2) a component on Early Childhood Development for households with children under five years; and

3) a component on Children with Disabilities for households with children with disabilities ages 3-18 years.

The household survey collected information for the MEC goal indicators -- Net Primary Enrollment Rate and Grade 3 and 5 Promotion Rates (as a proxy for Survival Rates) -- and the outcome indicators -- Primary School Completion Rate, Net Primary Intake Rate and Readiness for School.

A proxy indicator, an Early Childhood Development Index[9] (ECDI), was used to measure readiness for school for pre-school aged children. The index is a measurement of the literacy and numeracy skills, physical growth, socio-emotional development and readiness to learn of children under five years. It was based on the indicator developed for the Lao Social Indicator Survey and is calculated using answers to 10 questions in each of the above mentioned domains. (Further information on the ECDI is provided in Annex C.)

In addition to the MEC goal and outcome indicators, the household survey provided data on a number of result indicators and household factors that affect educational attainment.

School visits

Visits were conducted to planned interventions schools in the survey townships (i.e. to ECCD centers in ECCD locations, primary schools in complementary basic education and inclusive education locations and to non-formal education centers in the project locations for education for out-of-school children). In some sites, these schools had not yet been established and school visits were not conducted. During the school visits, interviews were held with the principal or other senior teacher to collect information on school enrollment and school administration. Interviews were also held with one or two caregivers/teachers on teacher training and teaching methods. The data provided information on the current level of attainment of minimum standards established for the MEC result indicators.

Student reading and math assessment

The reading and math assessment was administered to randomly selected students from Grades 3 and 5 to provide insights on the reading and math abilities of students in the survey locations. This included locations where no interventions were planned in the primary schools (i.e. also in ECCD and out-of-school children project locations). The assessment used a simplified version of the global Early Grade Reading Assessment (EGRA) and Early Grade Math Assessment (EGMA) tools[10]. The data provides a proxy for key stage literacy and numeracy rates which should be collected using a comprehensive tool in schools at different levels towards the end of a school year. MEC will conduct a separate exercise to support partners to collect this information early in 2015. The simple

---

[9] The Early Child Development Index is adopted from the Lao Social Indicatory Survey (LSIS) 2011-2012. (Ministry of Health, Lao Statistics Bureau, UNICEF, UNFPA, 2012, p. 211).
[10] EGRA is an individually administered oral assessment of foundation literacy. It has been designed as an inexpensive and simple diagnostic of individual student progress in reading (edddata II, USAID, 2014). EGMA is an oral assessment designed to measure a student's foundation skills in numeracy and mathematics in the early grades (RTI International, 2014).

assessment tool developed for this study provides a snapshot of the reading and math abilities in the survey sites.   Further information on the tool is provided in Annex D.

Focus group discussions

Focus group discussions (FGDs) were held with School Management Committees, Parent Teacher Associations (PTAs) and established community networks on their role and involvement in the functioning of the existing planned intervention schools visited. Where the intervention schools had not yet been established or where school bodies did not yet exist, a focus group discussion was held with parents and other community members such as village leaders on their views on the potential role of the community in supporting access to education.

v.   Data collection

Data collection was carried out by three teams, each led by a Team Leader working with four enumerators. The Team Leaders are trained researchers with previous research experience. The enumerators are staff or volunteers of the partners from the project areas. This approach of involving partners in the fieldwork was proposed to help build the capacity of partner organizations as well as ownership of the baseline data. In addition, local enumerators better understand the local situation, speak the local language and have more trust from local authorities and communities. Where possible, the same enumerators were used in several partner sites. Training was provided to all the enumerators on the data collection tools, interpersonal skills needed and ethical issues prior to the start of fieldwork.

A total of 879 household interviews were conducted in households with children 5-9 years as Net Primary Enrolment was used as the key determining indicator for the study. Among these, 545 households also completed the under-five component on early childhood development, and 130 completed the disability component. Interviews with school principals and teachers were conducted in 31 schools – 9 pre-schools, 19 primary schools and 3 non-formal education centers. A total of 29 principals/senior teachers and 42 caregivers/teachers were interviewed from these schools. The distribution of interviews with principals/senior teachers and caregivers/teachers conducted in the different types of education facility is shown in Table 2. Reading and math assessments were conducted with 402 children in 35 primary schools. These included primary schools in locations implementing projects for early childhood development and out-of-school children.   In addition, a total of 36 focus group discussions were conducted with members of School Management Committees, Parent Teacher Associations, parents, teachers and other community leaders[11].

Table 2: Data collection in educational facilities

Type of School	Interviews with Principals/Senior Teacher	Interviews with Caregivers/Teachers
Early Childhood Development Centers	8	9
Primary Schools	18	30
Non-Formal Education Centers	3	3
Total	**29**	**42**

---

[11] The numbers exclude interviews which were discarded due to incomplete information.

vi.   Study ethics and Do No Harm approach

Verbal informed consent was obtained from all study respondents and all data collected was kept confidential. Information on risks and Do No Harm was provided to members of the survey team. The team was careful not to raise expectations and took precautions to not destroy the trust that had been built by the local partners in the survey sites

vii.   Data management, analysis and reporting

Quantitative data was computerized and analysed in SPSS software. The data was error checked utilizing a number of standard checking strategies. Qualitative data from key informant interviews and focus group discussions was analysed using qualitative interpretive approaches. The Lead Consultants and National Consultant examined the data to observe patterns, themes and issues that emerged from the data. Patterns, themes and issues were categorized and organized from the analysis of individual responses.

In addition to this baseline study report, a report on lessons learned from the baseline study was prepared by the baseline team. The lessons learned report is attached as Annex G.

viii.   Limitations of the study

The study faced the following limitations.

One survey township was selected for each partner. However, the partner projects vary in size and number of townships covered, with, at one extreme, one partner working only in one township and another, at the other extreme, in more than 30 townships in four states/regions. The study is thus not representative of each partner's project areas and is skewed towards the smaller partners. It was felt however that each partner should be represented within the survey and it was not possible to cover more than 12 sites given the time, financial and human resources available.

The study only provides data on the MEC program as a whole and does not provide information specific to each partner. Partners may thus have to conduct additional situational assessments in each of their project sites in order to collect the baseline information required for project planning.

A number of different teams were used in different survey sites thus contributing to possible differences in the way data is collected. The Team Leaders tried to minimize this by providing training to each team and close oversight of the enumerators. The Lead Consultant also travelled to the field to visit each of the Team Leaders to ensure that similar methods were employed. The use of enumerators linked to partners may also introduce bias into the study as respondents may seek to provide answers that they believe the partner is seeking. Despite the weaknesses of using local enumerators, it was considered the best option available.

IV.   Baseline results: Logframe indicator values

Table 3 provides a summary of the baseline values for all the MEC and partner logframe indicators collected by the household study. In addition to net indicators, gross indicators for all relevant education indicators were also calculated for comparison. The definitions of these indicators are detailed in Annex E. The indicator values are further analyzed in Section VI of the report.

The study used the Net Primary Enrolment Rate to calculate the sample size for the study. The standard errors for some of the indicators when disaggregated are high due to the smaller sample size. The coefficient of variation (CV) indicates how much part of the estimate can be attributed to error and thus provides an idea of the reliability of the estimate. In general, indicators which have a coefficient of variation (the percent of standard error of the mean) over 10% should be interpreted with caution. The standard errors, 95% confidence intervals and coefficient of variation for the MEC logframe indicators are presented in Annex F.

Indicators with a coefficient of variation higher than 10% are shown in red in Table 2. The Net Primary School Completion is the only indicator where the coefficient of variation is higher than 10% for the total population as this indicator is calculated for the group of children of age 9 years who are in school. However, the coefficient of variation for most of the indicators for children with disabilities is high with the exception of the Net Primary Enrolment Rate.

Table 3: Baseline values of MEC and partner logframe indicators

Baseline indicator	Boys	Girls	Children with Disabilities	Total	Indicator definition
Impact Indicators					
Net primary enrolment rate	83.6%	86.2%	81.9%	84.9%	Percent of children 5-9 years who are enrolled in primary school
Gross primary enrolment rate	108.9%	106.8%	105.7%	107.8%	Percent of children of any age enrolled in primary school over the children 5-9 years
Grade 3 promotion rate	76.9%	74.6%	66.7%	75.7%	Proportion of children who are in Grade 3 this year and were in Grade 2 last year
Grade 5 promotion rate	72.2%	72.0%	54.5%	72.2%	Proportion of children who are in Grade 5 this year and were in Grade 4 last year
Outcome Indicators					
Net primary school completion rate	12.1%	16.5%	6.7%	14.1%	Proportion among children nine years old who are in the last grade of primary school
Gross primary school completion rate	63.0%	82.7%	53.3%	72.3%	Proportion of children of any age who are in the last grade of primary school over children of age nine years
Transition rate to secondary school	89.8%	83.3%	90.9%	86.4%	Percentage of children in the first year of secondary school (Grade 6) this year who were in the last year of primary school the year before (Grade 5)
Net secondary enrolment rate	37.2%	43.1%	27.5%	40.2%	Percent of children 10-15 years who are enrolled in secondary school
Gross secondary enrolment rate	42.9%	51.2%	30.4%	47.1%	Percent of children of any age enrolled in secondary school over the children 10-15 years
Early Childhood Development					
Net intake rate in primary education	48.7%	45.7%	63.1%	47.2%	Percent of children in the first grade of primary school (Kindergarten in Myanmar) who are of the official primary school-entrance age (5 years)
Gross intake rate in primary education	158.5%	152.0%	200.0%	155.2%	Percent of children in the first grade of primary school (Kindergarten in Myanmar) of any age over the children of 5 years
Early Child Development Index[12]	70.6%	77.4%	86.7%	73.6%	Percentage of children who are developmentally on track in at least three of these four domains -- literacy-numeracy, physical, social-emotional, and learning domains
Children with disabilities					
Percentage of children with disabilities who attend primary school with at least 80% attendance	16.7%	35.7%	NA	22.0%	Percent of children with disabilities with at least 80% attendance at primary school in the previous month

---

[12] See Annex C for a full explanation of Early Child Development Index.

Baseline indicator	Boys	Girls	Children with Disabilities	Total	Indicator definition
Results Indicators					
Early Childhood Development					
Percentage of children currently in the first grade of primary school who have benefitted from an ECCD intervention	58.5%	62.2%	76.3%	60.3%	Percent of children in first grade (KG) who attended pre-school during the previous school year
Net ECCD enrolment ratio	22.3%	23.3%	21.4%	22.7%	Percent of children 3-4 years who are enrolled in a pre-school
Gross ECCD enrolment ratio	34.8%	37.0%	28.6%	35.8%	Percent of children any age enrolled in a pre-school
Percentage of households with school-going children where one member has attended parenting education training				8.6%	Percent of households with pre-school aged children where one member has attended parenting education training
Percentage of respondents who have positive attitudes towards parenting practices				89.3%	Percent of respondents who have 2 of 3 positive attitudes towards parenting practices (physical punishment, time for play, equal opportunities for girls for schooling)
Complementary Education					
Grade 3 promotion rate in complementary education system schools	68.6%	67.4%	66.7%	68.0%	Percent of children in Grade 3 in 2013-2014 school year and were in Grade 2 in 2012-2013 school year in complementary education project townships
Percentage of households where an adult has had contact with the school				12.1%	Percent of households where an adult has had contact with the school
Children with disabilities					
Percentage of respondents with positive attitudes towards inclusive schooling for children with disabilities				77.7%	Percent of respondents with at least 2 of 3 positive attitudes towards children with disabilities (ability to attend school, integration into regular schools, special help in regular schools)
Out-of-School Children					
Percentage of respondents with positive attitudes towards education for out of school children				93.2%	Percent of respondents with 1 of 2 positive attitudes towards education for out of school children (ability to receive non-formal education, knowledge of non-formal education facilities)

V. Literacy and numeracy levels

Key stage literacy and numeracy levels are a key MEC outcome indicator. Literacy and numeracy levels were determined using a modified Early Grade Reading Assessment (EGRA) and Early Grade Math Assessment (EGMA) tool. The following results were obtained from the assessments.

i. Literacy

The reading assessment calculated oral reading fluency (ORF) using the indicator "correct words read per minute – cwpm" which is the ability to correctly read a connected text (story) within a minute. This assessment used 50 cwpm as the benchmark for oral reading fluency. (See Annex D for the full description of the assessment methodology). After reading the passage, students were asked to answer 4 questions about the passage. Each question was given a score of 25 for a maximum score of 100.

The average oral reading fluency for all students is 92 words a minute and the average comprehensive score for all students is 50. Table 4 shows the summary of the results of the reading test and Table 5 shows the results of the comprehension test for the two grades assessed.

Table 4: Results of reading test

Indicator	Grade 3			Grade 5		
	Boys	Girls	All	Boys	Girls	All
Mean oral reading fluency – average number of words read correctly within a minute	70.8	88.2	80.0	103.7	108.1	105.8
Percentage of students with oral reading fluency (who could read at least 50 cwpm)	63.3%	77.3%	70.7%	91.9%	95.8%	93.8%
Percentage of students who could not read at all	25.5%	11.9%	18.4%	3.1%	1.1%	2.1%
Percentage of students who could read the whole text within a minute	19.4%	26.4%	23.1%	54.5%	61.1%	57.7%

Table 5: Results of comprehension test

Indicator	Grade 3			Grade 5		
	Boys	Girls	All	Boys	Girls	All
Mean reading comprehension score (of a maximum of 100)	37.4	41.6	37.3	63.9	64.2	64.0
Percentage of students who could not answer any questions correctly	48.0%	32.7%	39.9%	12.1%	12.6%	12.4%
Percentage of students who answered all questions	30.6%	40.4%	35.7%	56.3%	53.3%	55.0%
Percentage of students who answered all questions correctly	15.3%	18.2%	16.8%	38.4%	37.9%	38.1%
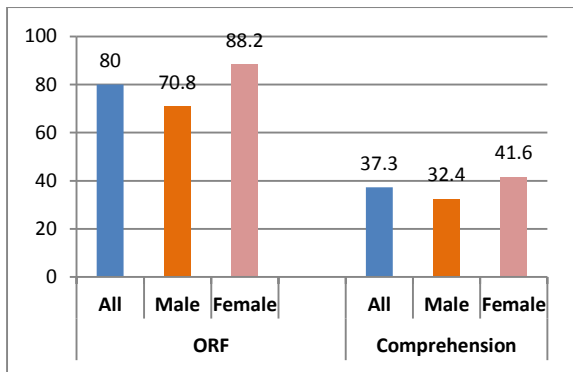
Chart 1: Grade 3 Reading Scores
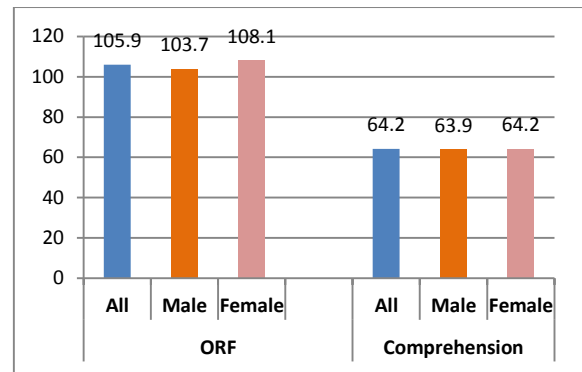
Chart 2: Grade 5 Reading Scores

Chart 1 and Chart 2 show disaggregated scores for oral reading fluency and reading comprehension by grade and gender. For Grade 3, the average ORF is 80 words per minute and the average comprehension score is 37.3. In Grade 3, girls perform better than boys in reading but there is no significant difference in comprehension. This may be interpreted with the general perception that girls develop their language faster than boys in their early childhood. For Grade 5, mean ORF is 105.9 words per minute and average comprehension score is 64.2. However, there is no significant gender difference in both ORF and reading comprehension among Grade 5 students.
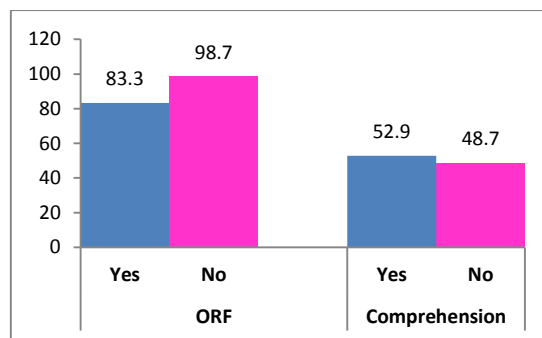
Chart 3: Reading Scores by ECCD Experience

There is a significant difference in reading scores between those who have received some form of early childhood development services before they enrolled in school and those who have not but no significant difference in comprehension scores. The results show that **children without ECCD experience are better for ORF than** those who have ECCD experience. This finding is counter to findings from other studies that children with ECCD experience perform better in primary school. An ECCD impact study conducted by the Save the Children in 2004 indicates a clear overall pattern of significantly higher achievement among children with ECCD experience in all three subjects in Grade 1[13]. As the survey did not collect any detailed information about the students or the type of ECCD experience of these students, it is not possible to explain the difference in findings.

---

[13] (Save the Children, 2004)
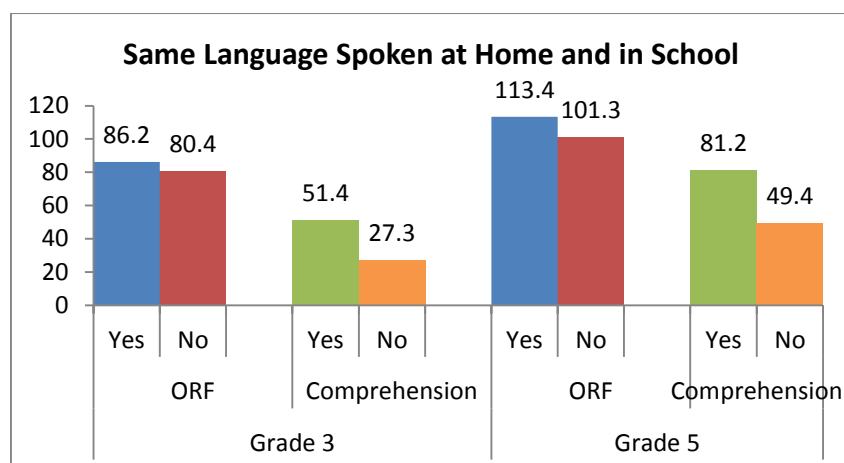
Chart 4: Literacy Test Scores by Language Background

Chart 4 illustrates that the score of the literacy test is lower for both reading and comprehension when the language the children speak at home differs from the language used in schools. Although the effect of language background on reading appears to be smaller (and is not statistically significant in Grade 3), their comprehension abilities are considerably lower when children do not speak the same language as the teachers in the classroom.

As expected, the ORF and comprehension scores are higher in Grade 5 compared to Grade 3 as the reading text is at the Grade 3 level. The ORF scores for Grade 3 are encouraging as a large majority of students in Grade 3 (71%) are able to achieve the 50 words per minute threshold (Table 4). Only 10% of the children (mostly from Grade 3) scored zero in ORF (i.e. they were not able to finish reading the first line). About 40% of the children (23% in Grade 3 and 58% in Grade 5) are able to read the whole text within a minute. The students who could read the whole text within a minute did this in an average of 45 seconds. Nevertheless, it is also important to note that **about 23% of Grade 5 students were not able to read a Grade 3 level text with a desirable ORF (at least 100 words per minute) (See Table 6).**

Table 6: ORF Scores by Categories

Grade	ORF Scores					Total
	0-19	20-49	50-79	80-99	>100	
Grade 3	18.3%	10.6%	9.1%	6.3%	55.8%	**100.0%**
Grade 5	2.1%	3.6%	7.2%	9.8%	77.3%	**100.0%**
Total	**10.4%**	**7.2%**	**8.2%**	**8.0%**	**66.2%**	**100.0%**

Despite a notable achievement in ORF by most of the students, the ability to comprehend what they read appears to be rather low, even for Grade 5 students. Approximately 77% of Grade 5 students have desirable level of ORF but **only 38% of the students are able to get a perfect score for reading comprehension of Grade 3 level.** For Grade 3, approximately 40% of students did not answer, or answer any question correctly at all.

Table 7: Comprehension Scores for Individual Questions

Grade	Comprehension Score					Total
	0	**25**	**50**	**75**	**100**	
Grade 3	39.9%	17.3%	13.5%	12.5%	16.8%	100.0%
Grade 5	12.4%	14.9%	14.9%	19.6%	38.1%	100.0%
Total	**26.6%**	**16.2%**	**14.2%**	**15.9%**	**27.1%**	**100.0%**

ii.   Numeracy

For the mathematics test, students were asked to answer four questions, each one dealing with one of the four basic mathematical concepts of addition, subtraction, multiplication and division. All these concepts are taught in Grade 3. Each question was given a score of 25 for a maximum score of 100.   Table 8 shows the results of the mathematics test.

Table 8: Results of mathematics test

Indicator	Grade 3			Grade 5		
	Boys	**Girls**	**All**	**Boys**	**Girls**	**All**
Mean mathematics score (of a maximum of 100)	52.8	52.1	52.4	70.5	71.3	70.9
Percentage of students who could not answer any questions correctly	7.1%	6.4%	6.7%	2.0%	1.1%	1.6%
Percentage of students who answered addition and subtraction questions correctly	57.1%	62.7%	60.1%	75.8%	84.2%	79.9%
Percentage of students who answered all questions correctly	11.2%	9.1%	10.1%	34.3%	33.7%	34.0%

The mean score for numeracy in Grade 3 is 52.4 and Grade 5 is 70.9. There was no significant difference in scores by gender in both grades. However, the majority of students had difficulty in calculating multiplication and subtraction, even for Grade 5 students.
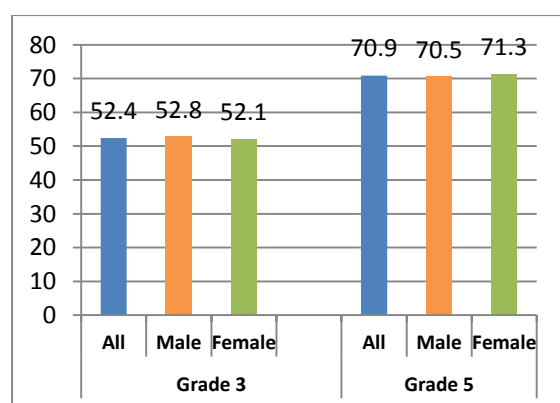
Chart 5: Mathematics Scores
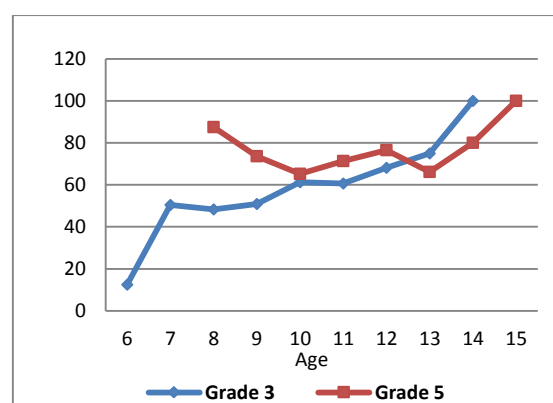
Chart 6: Mathematics Scores by Age and Grade

The results also show that students' age play a significant role in developing numeracy skills even among students of the same grade. It is especially apparent for Grade 3 students -- the older the children are, the better their scores (See Chart 6). This could be because the test is done orally and oral maths is usually better handled by older age children.
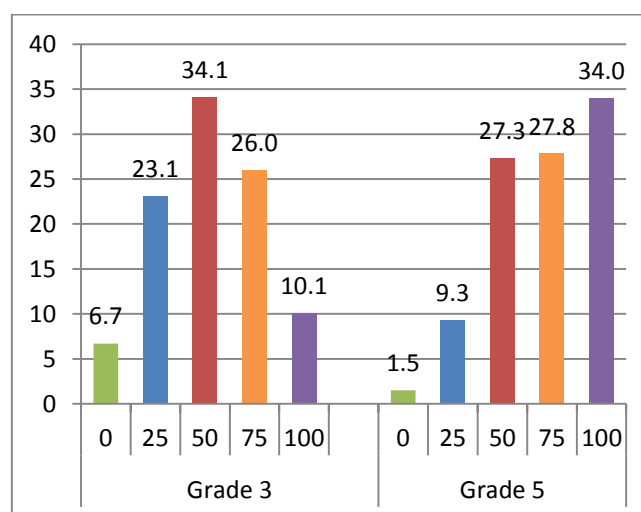
Chart 7: Percentage of Students' Math Scores by Grade

Although overall maths scores appear to be satisfactory, it does not reflect the reality of different numeracy skills. When examining individual skills, about **70% of students in Grade 3 could not go beyond simple addition and subtraction** problems (Table 9), and only about **34% of students in Grade 5 could answer all questions correctly** (Chart 7). This low level of achievement in basic numeracy skills at both Grade 3 and Grade 5 has been consistently seen in other studies. A recent study conducted for the baseline of the UNICEF-MDEF education programme shows that approximately 75% of Grade 3 and over 60% of Grade 5 students only achieved initial level of learning outcomes in mathematics[14]. Mathematic abilities usually go beyond understanding of concepts, and involve practical application of the concepts; consequently, rote learning which is often used in the Myanmar education system will not help the students to achieve that level.

Table 9: Students who Answered Individual Questions Correctly

Grade	Addition	Subtraction	Multiplication	Division
Grade 3	83.7%	65.4%	29.8%	30.8%
Grade 5	93.8%	84.5%	61.3%	44.3%

---

[14] (UNICEF, 2013). Using a 4 band framework of learning outcomes: initial, intermediate, advanced and exceptional.

VI.   Analysis of Study Findings

The following section provides an analysis of the findings from the household survey, key informant interviews and focus group discussions. The report analyses the data collected in relations to the progression of educational levels of the MEC programme components, starting from early childhood education, moving on to primary education and then to education for out-of-school children. Within each stage, the report analyses the educational attainment levels of children at that age, the education services provided by existing educational institutions for those children and factors affecting educational attainment in the communities studied. The report also includes a section on education for children with disabilities.

i.   General information

The survey was conducted in 11 townships in seven states/regions. Three villages or sub-wards in each township were selected; however in some selected villages, there were too few households and additional neighboring villages were added. Table 10 shows the population size, number of households and number of education facilities in the villages visited.

The majority of the survey locations were rural villages with only three locations involving urban/peri-urban wards. The location for the out-of-school children project is a poor peri-urban area outside Yangon while the two sites for children with disabilities are in the Ayeyarwady Delta. Locations for ECCD and complementary education projects are primarily poor rural villages in mountainous ethnic regions and include two camps for populations displaced by internal conflict.

A total of 879 households were interviewed with 5,070 individuals including 2,798 children of ages 0 to 18 years. Of the households visited, 95.7% had a child aged 5-9 years while 35.7% had a child 3-4 years. The age distribution of the children in the households is shown in Chart 8.
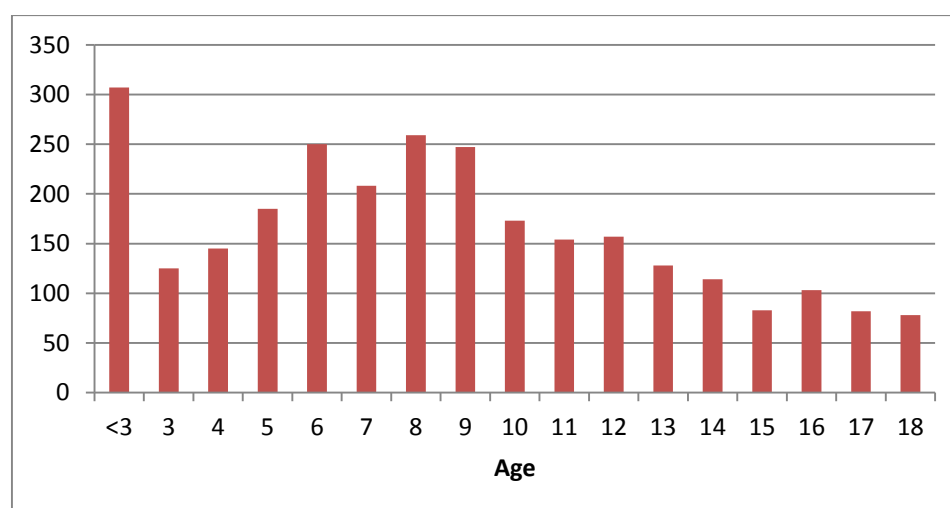
Chart 8: Age distribution of children in survey

The ethnicity, religion and mother tongue of the heads of households interviewed are shown in Table 11, Table 12 and Table 13. A number of households (n=50) did not answer the question on mother tongue.

Table 10: General description of villages/wards in survey sites

Partner	Township	Setting	Population			Households		Educational facilities (ECCD centers, primary schools and non-formal education centers)[15]
			Male	Female	Total	Female headed	Total	
Early Childhood Development								
Plan	Indaw	4 rural villages	3173	3421	6594	NA	1342	4 ECCD centers and 4 primary schools
Meikswe	Lashio	3 rural villages	1407	1382	2789	NA	554	3 ECCD centers and 3 primary schools
PTZA	Lashio	3 urban sub-wards	NA	NA	NA	NA	NA	4 ECCD centers and 6 primary schools
KBC	Kyainseikgyi	3 rural villages	375	694	1069	11	199	1 community day care center and 3 primary schools
Metta	Pinlaung	3 rural villages	866	983	1849	59	363	2 community day care centers and 3 primary schools
Complementary Education								
Shalom	Moemauk	1 village, 2 IDP camps	6174	6638	12812	NA	2511	8 ECCD centers and 4 primary schools
KTWG	Kunlong	3 rural villages	NA	NA	2677	NA	593	4 ECCD centers and 4 primary schools
ACS	Hlaingbwe	3 rural villages	1148	1195	2343	95	409	1 ECCD center and 3 primary schools
KNGY	Pekhon	4 rural villages	NA	NA	699	4	120	1 community school and 4 primary schools
Children with disabilities								
KMSS	Einme	3 rural villages	1236	1290	2526	NA	528	1 ECCD center and 3 primary school
MILI	Yegyi	2 urban wards, 2 rural villages	984	1146	2130	NA	826	3 primary schools
Out-of-school children								
S4SK	Hlegu	3 peri-urban villages/sub-wards	NA	NA	NA	NA	1511	2 ECCD centers, 3 primary schools and 3 non-formal education centers

NA = Not Available

[15] ECCD centers may be attached to a primary school and a primary school may be part of a middle school or high school. Middle schools and high schools not shown.

Table 11: Ethnicity of head of household

Ethnicity	Percent
Myanmar	28.6
Kayin	21.2
Kachin	14.4
Shan	8.2
Kayah	5.9
Pa O	5.3
Lahu	4.8
Wa	4.2
Chinese (Kokang)	4.0
Other	3.4
Total	100.0

Table 12: Religion of head of household

Religion	Percent
Buddhist	56.1
Christian	41.8
Animist	1.3
Muslim	0.9
Total	100.0

Table 13: Mother tongue of head of household

Mother tongue	Percent
Myanmar	30.9
Kayin (Sagaw)	21.6
Jingphaw	13.3
Kayan	8.3
Tai Lon Shan	7.8
Pa O	5.8
Lahu	5.1
Kokang	3.0
Other	5.2
Total	100.0

Among the children in school in the household survey, the majority, 75.2%, are attending government schools or pre-schools, 12.1% are in complementary education systems and 8.7% are attending community schools/pre-schools. A very small number are enrolled in monastic education or in faith-based schools. Chart 9 shows the type of school children in the survey sites are attending.
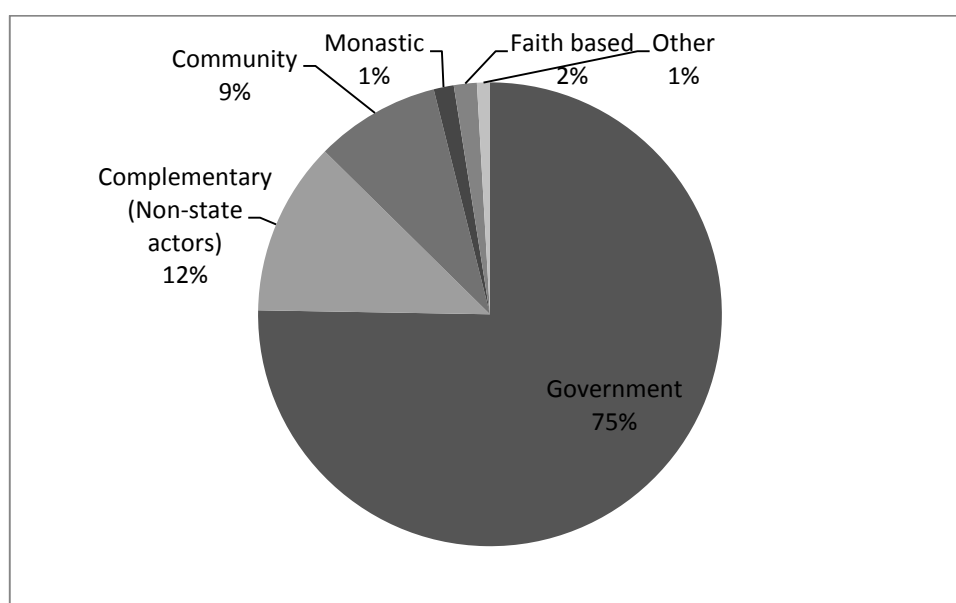
Chart 9: Type of school or pre-school children are attending

ii. Household factors affecting children's education

This section provides information on household factors that affect children's education.

Availability of electricity

More than 60% of households surveyed do not have electricity, and of those that do, many have it for less than 5 hours a day. This hampers children's ability to study in the night time. In a number of villages, teachers have established night classes to provide extra support to students who need it, at times pooling their resources to buy solar panels and batteries for lighting for the night school.

Table 14: Availability of electricity

Hours per day	Percent
0	60.9
1-5	10.2
6-10	2.2
11-15	3.7
16-20	6.6
21-25	16.4
Total	**100.0**

Access to school

From the household surveys, it appears that distance from school is not a key issue in the sites surveyed. Most households have a pre-school and primary school within 15 minutes from their home although the time to primary school is longer. The majority of students go on foot to school. Parents or guardians make substantial financial outlays for both pre-school and primary school even though primary schooling is supposed to be free, as shown in Table 17 and Table 18. This appears to be a key factor affecting access to school for poor families. The survey did not collect data on the breakdown of expenditures and it is not possible to analyse the data in relations to the type of school attended.

Table 15: Duration to School

Time	Pre-school (%)	Primary school (%)
Less than 15 minutes	90.4	76.1
16-30 minutes	9.6	19.4
31-60 minutes	0.0	2.8
More than 1 hour	0.0	1.7
Total	**100.0**	**100.0**

Table 16: Mode of Transport to School

Mode of Transport to School	Pre-school (%)	Primary school (%)
On foot	82.4	93.2
Bicycle	5.1	3.8
Bus	0.7	0.4
Car/Motorbike	11.8	2.6
Total	**100.0**	**100.0**

Table 17: Expenditures for Pre-School

Amount per Year (Kyats)	Percent of households
<10001	33.3%
10001-20000	8.8%
20001-30000	14.0%
30001-40000	12.3%
40001-50000	11.4%
>50000	20.2%
Total	**100.00%**

Table 18: Expenditures for Primary School

Amount per Year (Kyats)	Percent of households
<20001	31.8%
20001-40000	13.2%
40001-60000	19.4%
60001-80000	5.2%
80001-100000	9.7%
>100000	20.7%
Total	**100.0%**

Parental support

Of the children in the survey, 6.7% are single or double orphans and 10.8% are not living with their parents. These figures appear to be higher for children with disabilities.

Surveys such as the MICS have shown that the educational attainment of the mother or caretaker has an influence on the likelihood that the mother will engage in learning activities with the child at an early age and in enrolment in pre-school[16]. The household survey found that a majority of mothers or caretakers in the survey areas either did not finish primary school or stopped at this level. Only a small number finished secondary education and less than 5% went further.
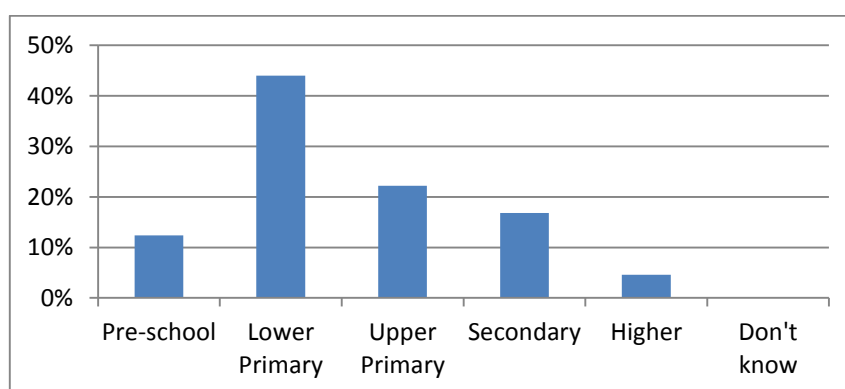
Chart 10: Educational Attainment of Mother or Caretaker

Of the households interviewed only 12.1% have had contact with the school and 8.6% have attended parenting education training. Nevertheless, 89.3% of respondents demonstrated positive attitudes towards parenting including rejection of physical punishment, allowing time for play after school and supporting equal opportunities for boys and girls[17].

Working children

About 63% of children in the survey work in the home. Of these, about 20% spend two to four hours working and 20% work for more than four hours. About 12% of children work outside the home,

---

[16] (Ministry of National Planning and Economic Development, Ministry of Health, UNICEF, 2011, pp. 41-42)
[17] At least two of three attitudes are positive.

about half of these for pay and half without pay. Of those who work for pay, the majority work for more than four hours while most of those who work without pay do so for less than two hours.
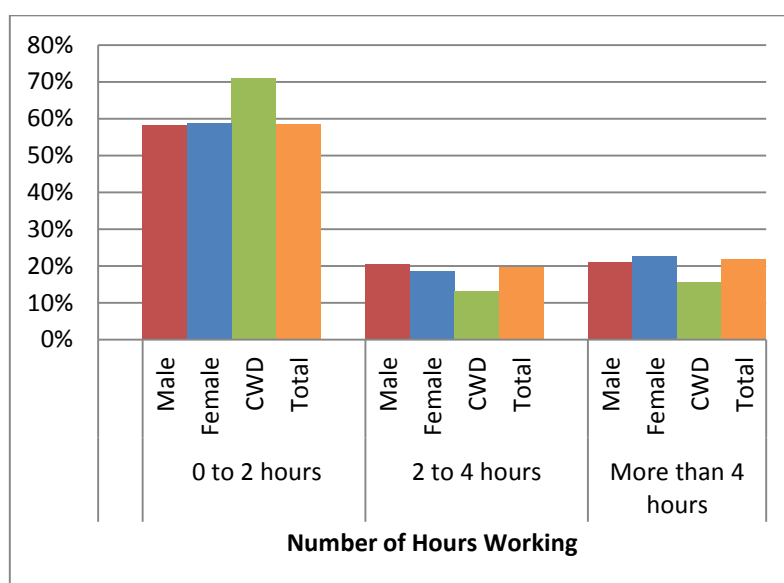
Chart 11: Hours Worked at Home (for those who do work)
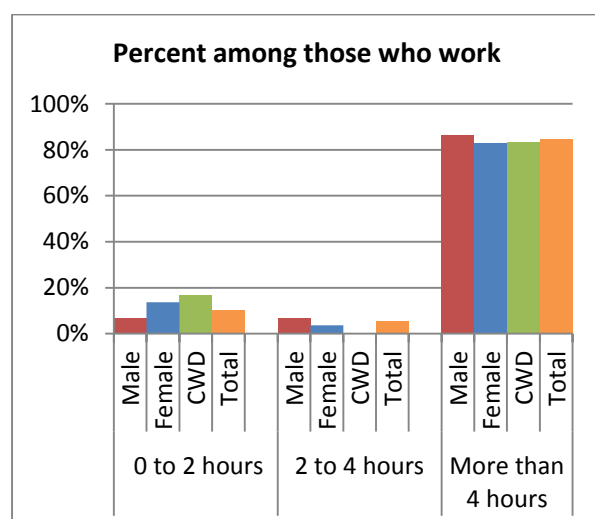
Chart 12: Paid Work Outside the Home
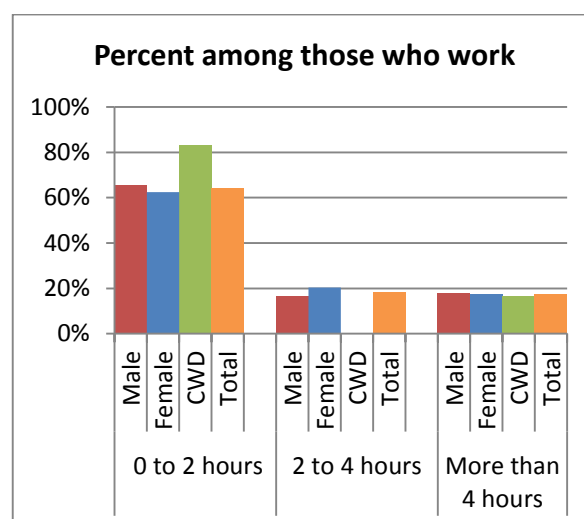
Chart 13: Unpaid Work Outside the Home

Mother tongue instruction

In the household survey, about 73.4% of respondents thought that it is important for children to receive mother tongue instruction[18]. The percentage was the same for both households with Myanmar as the mother tongue of the head of the household and those with other ethnic languages as the mother tongue (Table 19). The majority of households (69.6%) where the mother tongue of

---

[18] The question in the household questionnaire was not clear if it referred to mother tongue as the medium of instruction or teaching mother tongue as a subject.

the head of the household is an ethnic language, know of a school or class that provide mother tongue lessons. In focus group discussions, many respondents in ethnic regions indicated that it is important for children to learn their mother tongue in school; however, they also recognised the importance of learning English and Myanmar. They noted that the inability to speak Myanmar is a barrier for children in ethnic areas to attend secondary and higher education as they have difficulties to attend government schools and there are fewer secondary and higher education schools within the ethnic education systems.

Table 19: Attitudes to mother tongue instruction

Mother tongue of head of household	Percent of households in survey	Percent who consider it important to receive mother tongue instruction	Percent who know of schools that provide mother tongue lessons
Myanmar	30.9%	73.8%	24.3%
Ethnic languages	69.1%	72.2%	69.6%

iii.   Early Childhood Development

The following are the key findings for children under five years.

Children's educational attainment

The indicators related to educational attainment for early childhood development are shown in Table 20.

Table 20: Educational attainment for early childhood development

Early Childhood Development	Boys	Girls	Children with Disabilities	Total	National figures (where available)
Net Intake Rate in Primary Education	48.7%	45.7%	63.1%	47.2%	74.4% (MICS)
Gross Intake Rate in Primary Education	158.5%	152.0%	200.0%	155.2%	
Early Child Development Index	70.6%	77.4%	86.7%	73.6%	
Percentage of children currently in the first grade of primary school who have benefitted from an ECCD intervention	58.5%	62.2%	76.3%	60.3%	39.8% (MICS)
Net ECCD Enrolment Rate	22.3%	23.3%	21.4%	22.7%	22.9% (MICS)
Gross ECCD Enrolment Rate	34.8%	37.0%	28.6%	35.8%	

On-time enrolment in primary school

> **Net Intake Rate in Primary Education** is the percent of children in the first grade of primary school (Kindergarten in Myanmar) who are of the official primary school-entrance age (5 years)
>
> **Gross Intake Rate in Primary Education** is the percent of children in the first grade of primary school (Kindergarten in Myanmar) of any age over the children of 5 years

On-time enrolment in primary school is an outcome indicator for MEC ECCD projects which is calculated using the Net Intake Rate in Primary Education. The Net Intake Rate in the MEC programme areas is 47.2%. This is relatively low in comparison with national rate of 74.4% reflecting

the fact that a low percentage of children in the survey areas do not enter primary school at age five. When examining the Gross Intake Rate in Primary School, the figure 155.2% indicates that the number of children in Grade 1 far exceeds those of the official school-entrance age. Table 21 shows that the mean age of children in Grade 1 in the survey is 7 years with the oldest child already 13 years old. The late entry age is reflected throughout all grades and all gross enrolment indicators are significantly higher than net enrolment. There is no statistical difference in the intake rates between boys and girls (this is true of all key enrolment indicators in primary schools in this survey).

Table 21: Age profile of children in different grades (in years)

Grade	Official age	Mean age	Minimum age	Maximum age
Pre-school	3-4	4.63	3	6
1	5	6.98	4	13
2	6	8.19	6	15
3	7	9.21	6	16
4	8	10.43	6	17
5	9	11.02	8	17
6	10	12.28	8	17
7	11	12.58	7	18
8	12	14.02	11	17
9	13	14.96	13	18
10	14	15.93	15	18

Readiness for school

Net ECCD Enrolment Rate is the percent of children 3-4 years who are enrolled in a pre-school

Gross ECCD Enrolment Rate is the percent of children any age enrolled in a pre-school

Early Childhood Development Index shows the percentage of children who are developmentally on track in at least three of these four domains -- literacy-numeracy, physical, social-emotional, and learning domains

Attendance at pre-school education in an organized learning or early childhood education programme is important for the readiness of children to go to school. The household survey found that many children in Grade 1 did in fact benefit from an ECCD intervention, with 60.3% having attended some form of pre-school in the previous year. This is much higher than the figure from data collected in the schools visited which showed only 34% of children in the first year of primary school had attended a pre-school; this figure is closer to the figure of 39.8% from the Myanmar Indicator Cluster Survey (MICS) of 2009-2010[19].

This high figure is also at odds with the much lower figures for Net ECCD Enrolment Rate (22.7%) and Gross ECCD Enrolment Rate (35.8%) which indicate that the majority of children do not attend pre-school. The Net ECCD Enrolment Rate is comparable with the national figure of 22.9%. The low

---

[19] (Ministry of National Planning and Economic Development, Ministry of Health, UNICEF, 2011)

ECCD enrolment rate was also consistently noted by participants in focus group discussions who said that many parents take their pre-school aged children with them to the fields for shifting cultivation or during work in rubber plantations. Furthermore, many families are not able to afford to pay the fees for pre-school as the government does not yet support free education for children of these ages although primary school education is free.

It is to be noted that the survey did not define an "ECCD intervention"; in some survey sites, there were community day care centers run informally by the church or primary school. However, these centers do not have proper schedules, buildings, materials or any trained staff. It is possible that these may have been counted as a pre-school by the respondents.

The survey also used an Early Childhood Development Index as a proxy for the indicator on readiness for school. As noted before, the ECDI is adapted from the Lao Social Indicator Survey and is an indication of the extent to which children meet the benchmarks that they are expected to reach if they are progressing in their development as the majority of children in their age group. The index is calculated as the percentage of children who are developmentally on track in at least three of these four domains -- literacy-numeracy, physical, social-emotional, and learning domains. The data from the household survey suggests that 7 out of every 10 children are developmentally on track. This corresponds to figures in Laos for children that come from rural areas with limited access, where poverty is high and where ethnic minority populations reside. The ECDI in Laos was 81.3% country wide in 2011-2012[20].

The overall index however masks the differences in development among the domains as shown in Table 22. More children are developmentally on track physically and in social-developmental aspects than in literacy-numeracy and learning.

Table 22: Children 3-4 Years Developmentally on Track

	Literacy-Numeracy	Physical	Socio-Developmental	Learning	Total
Boys	48.4%	82.1%	84.8%	62.0%	**70.6%**
Girls	52.1%	93.8%	96.6%	72.6%	**77.4%**
Total	**50.0%**	**87.3%**	**90.0%**	**66.7%**	**73.0%**

Education services for early childhood development

Data on education services for early childhood development was only collected in the five locations implementing projects on early childhood development. Three of the five locations, two in Lashio and one in a remote area in Sagaing, had ECCD centers. Data was collected from eight pre-schools, of which four (one in Indaw and three in Lashio) are run by the government as school-based pre-schools and the remaining are community-based pre-schools, one run by a monastic school and three by faith-based organizations. In the remaining two locations, one in Kayin and one in a PaO area in Southern Shan, there were no ECCD centers although in some villages, there were informal community day care centers. Data was not collected from the day care centers.

---

[20] (Ministry of Health, Lao Statistics Bureau, UNICEF, UNFPA, 2012)

All the locations had predominantly ethnic populations. In Lashio, the communities were primarily Lahu, Kokang and Shan but also included Palaung, Wa, Kachin, Myanmar and Indian populations.

Access to services

The eight pre-schools visited had a total of 250 children, mainly children of the age of four years. More than half of the children enrolled are girls.

Table 23: Enrolment in pre-schools by age and sex

Age	Boys	Girls	Total	Percentage
< 3 years	25	25	50	20.0%
3 years	21	23	44	17.6%
4 years	45	79	124	49.6%
5 years	17	15	32	12.8%
Total	**108**	**142**	**250**	**100.0%**

Seven out of eight pre-schools have a code of conduct signed by the caregivers. The codes of conduct include issues of work ethics such as punctuality, procedures for taking leave, working with the committees, and proper appearance of teachers and students. Only two school-based pre-schools indicated that non-discrimination and gender equality are part of the code of conduct for the caregivers.

The pre-schools indicated that they usually accept all children who would like to attend the school unless the children are too young or no more space is available. However, there are no specific strategies or actions to encourage children with disabilities to come to the school in both school-based and community pre-schools. This is because the caregivers do not have any experience of working with children with disabilities. Two of the pre-schools stated that they encourage caregivers to pay special attention to children with disabilities if there are any.

Four of the school-based pre-schools and one community pre-school mentioned that they have written rules and regulations for children's behaviour, and that they are displayed on the notice board. Six also mention that they have procedures for resolving conflicts; for this, they appear to be referring to the disciplinary committees traditionally formed at schools in Myanmar.

All eight pre-schools visited are located within 30 minutes' walk from home for most of the children. The majority of children walk to school. This information is confirmed from the data in the household survey. The schools usually operate slightly more than the normal school hours of six hours per day for five days a week. Only two community-based pre-schools practise flexible school hours.

All of the pre-schools collect a form of fee or contribution from the families. School-based pre-schools collect an annual fee of Kyat 50,000 to 70,000 per year while community pre-schools collect Kyat 1,000 to 20,000 per year. For one school-based pre-school in Indaw, the contribution is rice not money; each household contributes about 3 baskets of rice per year which is equivalent to about Kyat 15,000. The collection of fees is confirmed by information from the household survey as well as from focus group discussions where the participants indicated that pre-schools collect between 1,000 and 7,000 Kyat per month to support caregivers' salaries and learning materials as the

government does not yet provide support for pre-schools although there appears to be an indication from the government that it will do so. The fees are a barrier to attending pre-school for some poorer community members. The school-based pre-schools have no policy on fee exemption: everyone has to pay. However, three community-based pre-schools practice fee exemption policy for poor children and in the 2013-14 school year, a total of eight children were exempted from fees in two of these schools. The higher fees are charged by the three school-based pre-schools in Lashio which likely cater to better off families in the urban/peri-urban areas. One of the pre-schools has been recently nominated the best ECCD center in Lashio raising the question of the need for additional assistance from MEC.

Learning environment

The majority of the pre-schools have only one classroom housed in a larger building. One community-based pre-school is in a temporary building and in the focus group discussion, the participants noted that some parents do not send their children to the school because they feel the building is not secure. Half of the ECCD classrooms are accessible for children with disabilities. Only about half of the pre-schools have adequate furniture and proper bedding for the children.

Five pre-schools mentioned that children bring their own drinking water in bottles. For the three school-based pre-schools in Lashio where children do not bring water from home, the main water source is tube-wells and wells, and water is usually treated through boiling or using a water filter. Drinking water is properly stored but cups are not available for each child. Most of the pre-schools have no special arrangements to provide drinking water for children with disabilities since they do not have children with disabilities in their schools.

The data shows that the ratio of students per toilet is around 9 to 1 but in most cases, the children have to share toilets with older children from primary grades. Only two schools have their own toilets, separating boys and girls. Most of the pre-schools mention that they have hand-washing facilities and while water is available most of the time, it is not clear if soap is available in the facilities. None of the pre-schools provide for accessibility to those facilities by children with disabilities.

Teaching and learning approach

Almost all the pre-schools have a timetable or activity schedule and at only one school the children do not work according to the schedule. For all these schools, the schedule balances between different types of activities. Table 24 shows a summary of different routine and learning activities commonly seen in those pre-schools.

Seven pre-schools have inside learning corners with creative materials, blocks and books. Six pre-schools have learning corners with imagination and games and four centers have learning corners with music. Five pre-schools have external learning corners with sand activities, four pre-schools have free play and creative play and three pre-schools (which is less than half of the centers) have water play activities, swings and movable play materials. Out of the eight pre-schools, five have playgrounds but only one playground in a community-based pre-school is properly prepared and safe to use throughout the year and it is also the only playground which has play equipment.

Table 24: Scheduled Activities in the Pre-schools

Routine Activities	Specific Learning Activities

• Greeting
• Prayers
• Meditation
• National anthems
• Attendance list
• Refresh for the whole week
• Tiffin time, food (snack)
• Rest (sleep/nap)
• Health and cleaning
• Daily evaluation
• Closing prayer
	• Reciting poems, singing songs and dancing
	• Games and play
	   o Outdoor play
	   o Group play
	• Story-telling
	• Painting
	• Reading and writing
	• Specific lessons

All the pre-schools make use of learning materials in the classroom, but only one school-based pre-school has enough materials. The type of play and learning materials used range from real objects and picture cards created and collected by the caregivers to commercially available materials such as storybooks and picture books, posters, woodblocks, jigsaws and dice games, various toys, and raffle games. Only two school-based pre-schools adapt the materials to children with disabilities.

Only three centers keep records of children's progress. At four centers they assess children's progress once a month and at three other centers they do this as needed. The assessment is generally done through observation of children's behaviour and performance in the school. According to the caregivers, the assessment covers a wide range of areas such as language ability, creativity, communication, social interaction, participation, autonomy, health and physical growth, and discipline. However, none of the pre-schools seem to use a specific assessment tool to monitor the progress of children systematically.

Recruitment and training of caregivers

On average, the caregiver-children ratio is 1 to 13. Each pre-school has at least two caregivers except one school-based pre-school in Lashio, where one caregiver is taking care of 32 children. The average age of the nine caregivers interviewed (all female) is 31 years. Six of them passed Grade 10 and two have University Degrees but one passed only Grade 9. The average years of teaching experience for these nine caregivers is 5.2 years.

The majority of caregivers have received ECCD training and seven caregivers indicated they received one month ECCD training. Among them, only two from school-based pre-schools have received training to work with children with disabilities. Six have attended refresher training. The training covered a wide range of topics such as child development and how to take care of children, curriculum planning and preparation, specific ECCD teaching methodologies such as storytelling, games, poems and songs, developing play and learning materials, getting feedback from the work, and parenting education. The training topics were similar for school-based and community-based pre-schools.

There is a significant difference in relation to how the pre-school is organized between those who have received ECCD training and those who have not. Two caregivers who have never been trained

on ECCD were not able to describe how ECCD activities could be properly organized and conducted in the pre-schools.

However, there seems an apparent lack of support for the teachers to ensure that they are working in accordance with the minimum standards set by the ECCD professional community in Myanmar. Daily observation, monitoring and providing feedback and guidance to the caregivers appears to be weak in all schools. The nine caregivers interviewed indicated that eight of the pre-schools have a management committee that oversees the management of the school. However, only five of them mentioned that the committees organize meetings with the caregivers, but again this is not done regularly and frequently. Further, the committees rarely visit the schools to observe teaching in the pre-school and give guidance to the caregivers. There is only one pre-school where the management committee visited the school, observed the teaching and gave the feedback and guidance to the caregiver more than ten times in 2013-14 school year. This is probably because these committees are not properly equipped with the necessary knowledge and skills to assume such responsibilities.

In contrast, seven out of eight principals from the pre-schools surveyed mentioned that there are regular caregivers' planning meetings, varying from once a week to half yearly. All respondents also indicated that there is regular observation of the classroom teaching though the frequency of observation varies from one school to another, ranging from daily to quarterly in a year. This is likely by the school principal, not by the management committee.

Community involvement

The involvement of parents and families is crucial for all round development of children in the communities, and there is a positive step towards this initiated by the pre-schools surveyed for this study. Out of eight pre-schools visited, seven indicated that the management committees and the principals have arranged to meet parents of the children, and all teachers were likely to have met parents last school year (2013-14). However, only limited effort has been made to mobilize parents for greater involvement in the school activities. The school management, mainly the principal, makes occasional talks to the parents in the annual meetings and ceremonies either in the school or at the church to encourage them to send their children to school. Apart from this, there does not seem to be any other notable efforts to encourage parents to be involved in the school activities. This is confirmed in focus group discussions.

Notwithstanding the limited parental involvement in the children's learning, many of the pre-schools are supported through community contributions and parents often contribute their time and effort for construction (e.g. for fences, walkways etc.). Due to limited government support, most of the pre-schools have many needs – some lack their own buildings, some lack toilets or a good water supply, most lack adequate play and teaching materials, bedding, tables and chairs. Most community pre-schools thus try to raise funds or obtain donations from private companies, NGOs or religious organisations.

Management

As half of the pre-schools are school-based pre-schools, the management of these pre-schools is part of the school management by the principals. For some school-based pre-schools, the caregivers

appear to be government teachers but for others, the recruitment is done in consultation with PTAs and School Management Committees. For some community pre-schools, the local church is also involved in the recruitment process as the school is run under the auspices of the church. Assignment of teachers for the pre-school is mostly done by the principal, and on some occasions in consultation with the teachers. The PTAs and Management Committees are not involved in the teacher assignment process. For caregivers who are not government teachers, their entitlements are usually decided by the PTA or the School Management Committee.

Most of the schools have a PTA and School Management Committee. The selection the members varies with some selected by the village administrator and others selected by the community. Irrespective of how they were selected, the members usually include the village administrator, 10 Household leaders, church leaders, teachers and parents. The number of members varies widely from about 15 to more than 30 members. Most committees consist of a Chair, Vice-Chair, Secretary, cashier/accountant and general members. They organize regular meetings mainly facilitated by the Chairperson of the PTA or the School Management Committee, who usually is the principal of the school. In the 2013-14 school year, the committees conducted meetings approximately 4 times, and the main topics discussed in those meetings include collection of fees and contributions, infrastructure improvement, developing toys and learning materials and preparation for various ceremonies such as PTA annual meetings, annual school sports and religious occasions. There is only one pre-school which has discussed the development and implementation of the annual school plan and establishment of a fund for development of education in the school with the communities. In most schools, meeting records are kept although some committees indicated they do not yet do so as they are new. Decisions are usually informed to the community by word of mouth, during church service or through the village authorities.

Although all pre-schools collect fees, only five schools mention that they raise extra funds. There is a wide gap in the amount each school raised in a school year. A couple of government high schools in the urban areas raised between 1,000,000 kyats to 5,000,000 kyats while most pre-schools raised only 100,000 to 200,000 kyats. For the high schools, this fund is for the entire school and was for specific projects (e.g. one school was fundraising for a staff house for teachers). These funds are usually used for infrastructure maintenance, furniture and giving prizes for outstanding students. One school uses all the funds for the caregivers' salary. Usually the committee oversees the management of the funds though the treasurer of the committee and the audit team of the organization.

Three pre-schools indicate that they have received training on school management, provided by the government and NGOs. The topics covered in the training include children's rights, protection for children, children with disabilities, gender equality and school administration. However, none of the School Management Committee members have received any training. There are a total of 5 caregivers who have been trained as ECCD trainers.

Household and community factors affecting early childhood development
It is recognized that the first three to four years of life are critical in the development of a child, and that the support and the quality of care that a child receives during this time is a major determinant in their well-being. In this context, the activities that parents or adults engage in with their children serve as an important indicator of the quality of home care. Furthermore, the amount of time spent

by adults on activities that support children can be important for a young child's mental development

The household survey showed that about 28% of children under-five in the survey get inadequate care, defined here as the percentage of children who were left alone or in the care of another child under-10 years of age for more than one hour at least once in the past week.

There have been few interventions to provide parenting education with only 9% of households having a member who has attended parenting education training. This was confirmed in focus group discussions where respondents noted that most of them had never received any parenting education but would be interested to do so. Only 11% of children under-five have access to children's books within their home. Nevertheless, many children under-five do have access to learning materials or "play things" such as toys -- 74% have toys made from objects around or in the household while a lessor number have access to play things bought in shops (66%) or which are homemade (43%).

Table 25: Children Under-five who have Access to Toys

Type of Toys	Percent of children
Homemade toys	43.0%
Toys bought from shops	66.0%
Household objects	73.9%

While most communities indicated an interest in supporting education for their children and are willing to attend any training provided, they are often at a loss about what to do: *"we need someone to lead or show us the way how to improve our effort to upgrade children's education."*

iv.   Primary School Education

Children's educational attainment at primary level
The indicators from the household survey on educational attainment of children at primary level are shown in Table 26.

Primary school enrolment

> **Net Primary Enrolment Rate** is the percent of children 5-9 years who are enrolled in primary school
>
> **Gross Primary Enrolment Rate** is the percent of children of any age enrolled in primary school over the children 5-9 years

Net Primary Enrolment Rate is a key impact indicator for the MEC. The data shows a high percentage of children in the MEC programme areas are attending primary school as indicated by the Net Primary Enrolment Rate of 84.9%. This is comparable to the national figure of 84.6% in 2011-2012 as reported in the Comprehensive Education Sector Review (CESR)[21] and but lower than the MICS figure of 90.2%. It is within the MEC targets for the program of moving from 84% to 90%

---

[21] (Ministry of Education, Government of Myanmar, 2013, p. 109)

within the program period.   As noted previously, there is no statistically significant difference in the Net Primary Enrolment Rate for boys and for girls.

Table 26: Children's educational attainment at primary level

Primary level educational attainment	Boys	Girls	Children with Disabilities	Total	National figures (where available)
Impact Indicators					
Net Primary Enrolment Rate	83.6%	86.2%	81.9%	84.9%	84.6% (CESR) 90.2% (MICS)
Gross Primary Enrolment Rate	108.9%	106.8%	105.7%	107.8%	
Grade 3 Promotion Rate	76.9%	74.6%	66.7%	75.7%	
Grade 5 Promotion Rate	72.2%	72.0%	54.5%	72.2%	
Outcome Indicators					
Net primary school completion rate	12.1%	16.5%	6.7%	14.1%	54.2% (MICS)
Gross primary school completion rate	63.0%	82.7%	53.3%	72.3%	68.6% (CESR)
Children with disabilities					
Percentage of children with disabilities who attend primary school with at least 80% attendance in the previous month	16.7%	35.7%	NA	22.0%	
Results Indicators					
Complementary Education					
Grade 3 Promotion Rate in complementary education system schools	68.6%	67.4%	66.7%	68.0%	

The high level of enrolment in primary schools was also reported in focus group discussions with many respondents noting that this is because primary school education is now free and the government is providing textbooks and other school materials. As noted from the Net Primary Intake Rate, most children however are over the official school age when they enter school and there are many children in primary school who are over-aged (see Table 21). This is also reflected in the higher Gross Primary Enrolment Rate of 107.8%.

The Net Primary Enrolment Rate for children with disabilities is 81.9% which is slightly lower than the average for all children.

The relatively high enrolment rate however does not detract from the fact that there are still significant numbers of children who are not in school even though primary education is free in Myanmar.

To better understand enrolment rates in school, the survey also looked at the number of children of different ages who were not enrolled in school, as shown in Table 27. The majority of children ages 5-13 years are in school but this drops significantly for children older than 14 years. This observation was mentioned in numerous focus group discussions in the survey sites. The high dropout is often

attributed to the lack of a secondary school in the village or due to the need to work, either in the home to take care of siblings or outside the home to earn money.

Table 27: Percentage of children in school at different ages

Age	Percentage children not in school
3-4 years	79.3%
5-9 years	17.9%
10-13 year	11.6%
14-15 years	43.1%
16-18 years	69.9%

Grade promotion rate

> **Grade 3 Promotion Rate** is the proportion of children who are in Grade 3 this year and were in Grade 2 last year
>
> **Grade 5 Promotion Rate** is the proportion of children who are in Grade 5 this year and were in Grade 4 last year

The MEC logframe also uses Survival Rate to Grade 3 and Grade 5 as an impact indicator. Survival rates, however, are not possible to calculate without school attendance data. The survey thus calculated the Grade Promotion Rate which is the proportion of children who successfully move from one grade to the next in the following year, excluding repeaters and dropouts.

The baseline survey shows that 75.7% of children in Grade 2 moved on to Grade 3 and this decreases slightly to 72.2% for children in Grade 4 moving on to Grade 5. The data suggests that there are important inefficiencies in the basic education system as around a quarter of students who should be moving on from Grade 2 and Grade 4 are not, because they are held back as repeaters or have dropped out of primary school. These figures are much lower in comparison to available national data from the MICS which shows Grade 3 and Grade 5 Promotion Rates of 98.8% and 96.2% respectively[22]. The MICS however notes that there significant differences in rural and urban areas and within poor to better off areas.

The Grade 3 Promotion Rate is even lower in complementary education areas[23] at 68.0% indicating that there is a higher level of repetition or drop-outs in schools in these areas, highlighting the importance of MEC focus in ethnic areas. Schools in these areas include both schools run by Ethnic Education Departments such as the KIO Education Department where the medium of instruction is the local ethnic language, as well as government schools which teach in Myanmar. The problems for education in these areas are further compounded by (i) access for children who live in mountainous areas, (ii) poverty, (iii) social and cultural factors, (v) instability and conflict and (iv) differences in levels of understanding in the medium of instruction among children from homes where other ethnic languages are spoken.

---

[22] (Ministry of Health, Lao Statistics Bureau, UNICEF, UNFPA, 2012, p. 102)
[23] These are sites implementing projects for Complementary Education – Moemauk, Kunlong, Hlaingbwe and Pekhon.

Primary school completion

> **Net Primary School Completion Rate** is the proportion among children nine years old who are in the last grade of primary school
>
> **Gross Primary School Completion Rate** is the proportion of children of any age who are in the last grade of primary school over children of age nine years

The Primary School Completion Rate was proposed as a proxy indicator for literacy and numeracy rates. It provides a picture of the proportion of children who have at least completed primary school and should thus have a basic level of literacy and numeracy. The results however show that this indicator has a high coefficient of variation due to the small sample size of the cohort of children nine years old who are in the last grade of school implying a low level of reliability of the estimate. However, information on literacy and numeracy levels is available from the school assessments and has been discussed in Section V. It is nevertheless useful to analyze the available information from school completion rates as it provides a picture of the efficiency of the education system in the MEC programme areas.

The Net Primary Completion Rate of 14.1% is very low in comparison with data from the MICS of 54.2%[24]. It is also in contrast with the Gross Primary School Completion Rate of 72.3% which indicates that the majority of children in the last grade of primary school are over the official age of nine years. Various factors may lead to poor performance on this indicator, including low quality of schooling, discouragement over poor performance and the direct and indirect costs of schooling. In one focus group discussion, the participants noted that students loose interest in school because they have to work after school and thus do not have time to complete homework; consequently they fall behind in their studies. The low figure for school completion is consistent with national findings that geographical location and socio-economic status play an important role on whether children complete primary school on time or not and MEC's focus on children in disadvantaged areas[25].

Children with special needs

While the Net Primary Enrolment Rate for children with disabilities is comparable with that for all children, the data indicates that a large percentage of these children do not attend school regularly. The household survey showed that only 22% of children with disabilities attended school for at least 80% of the time in the previous month. The majority of the schools visited do not provide any additional support for children with disabilities.

Primary level education services

Data on primary schools was collected from 19 primary schools in 6 townships -- 2 townships in Ayeyarwady for projects on inclusive education and 4 in northern Kachin (1 border village and 2 IDP camps), northern Shan (Kachin/Wa villages), southern Shan (Kayan villages) and Kayin (Kayin villages) for projects on complementary basic education. Of the 19 schools, 6 are government

---

[24] (Ministry of Health, Lao Statistics Bureau, UNICEF, UNFPA, 2012, p. 45)
[25] (Ministry of Health, Lao Statistics Bureau, UNICEF, UNFPA, 2012, p. 45)

schools in the Delta, 8 are government schools in ethnic regions and 5 are non-government schools supported by the community or Ethnic Education (Departments) Organizations in Kachin and Kayan areas. A total of 18 interviews were conducted with the school principals/senior teachers and 30 with school teachers in these 19 schools. In Pekhon township in southern Shan, the school data was collected in one community school while the caregiver/teacher questionnaire was administered in a different community school in an extended village in the same survey site[26].

Access to services

Most schools have a signed code of conduct and written rules and regulations for students' behavior. The signed code of conduct for teachers generally includes work ethics such as regular attendance, punctuality, fulfilling duties and responsibilities, personal appearance and behavior and abiding by rules and requirements as a teacher. Only one school indicated that gender equality is a part of their code of conduct. Five primary schools mentioned that they did not accept all children who wanted to enrol in 2013-14 school year but did not give any reason for this refusal.

Enrolment data from the schools showed that there are more boys than girls in all grades of primary school. Enrolment numbers decline after Grade 3. This data should be interpreted with caution due to the small number of schools visited.

There were 91 children with disabilities reported in the schools visited, with significantly more boys with disabilities than girls. Of the 91, 26% have a physical difficulty and 44% have a learning disability. However, only one of the schools has a specific strategy or action to encourage children with disabilities to enroll in schools. Half of the schools mention that they give special attention to those with disabilities but no specific strategy or action is in place. Approximately half of the children with disabilities are in the four non-government schools in the ethnic areas and the majority of them are in the IDP camp. Fortunately, many of the teachers interviewed in those schools have received training on inclusive education for working with children with disabilities. However, most teachers in other schools have not received training on inclusive education. In one of the schools visited, there are two children identified as children with learning difficulties who have been repeating the same grade (Grade 1) for 2 to 3 years, and teachers do not know how to help them to learn. This reflects the lack of knowledge and skills among teachers on how to help children with disabilities even when they are in school.

Generally no fees or contributions are collected from children in primary schools. Of the 19 schools visited, only two principals indicated that fees were collected from the families. One school is a church-based primary school which collects 54,000 Kyats per child per year and the other one is a government primary school in a remote village in Kayin State, which collects 50,000 Kyats per child per year. This appears to be a relatively significant amount for a primary school but there is no information on why the fees are collected.

---

[26] Although both forms are intended to be administered in the same school, the survey team collected information from different schools in this site. It was felt that it is would be useful to include the information from both schools in the analysis even though there is partial information from each school.
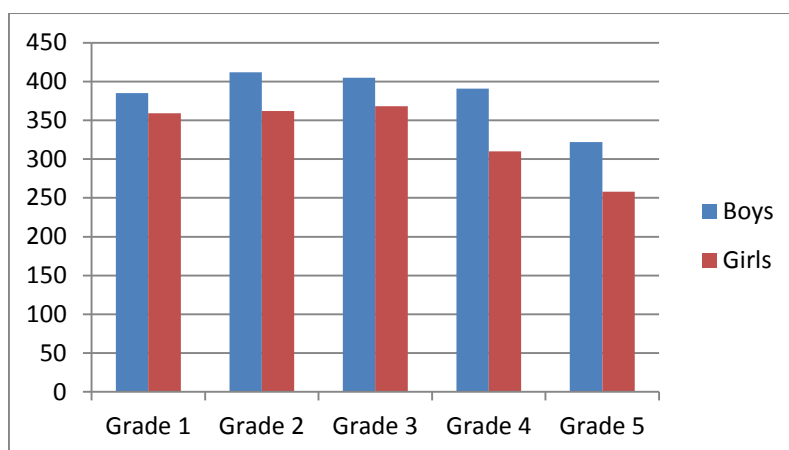
Chart 14: Enrolment in Primary Schools Visited

The average distance to primary school for the furthest students is about 3 miles with the majority of schools within 30 minutes from students' homes and most children walking to school. In four schools, students need more than an hour to get to school. All schools are open approximately six hours per day, five days a week. Only one government primary school operates with flexible school hours.

Learning environment

The majority of school buildings and classrooms in the government schools are permanent buildings. However, of the four schools managed by Ethnic Education Departments, two in Kachin have a mix of semi-permanent and temporary buildings while the two remaining schools have temporary buildings only. Almost all the schools have a roof (partly) made out of iron sheets, and about a quarter have their school walls and floors made out of concrete/brick. Approximately 10% of the buildings and 30% of the classrooms are either without a good floor, roof or walls, doors and windows, and 10% of the buildings and 12% of the classrooms are either being constructed or repaired. Twelve of the schools have buildings and classrooms which are accessible to children with a disability.

Most schools have enough student desks, student benches and blackboards although there are fewer desks, chairs and cupboards for teachers. Out of the 19 schools visited, only 8 schools gave information on whether the school has a playground or not. Of these, only six government schools have playgrounds, of which half are properly prepared and safe. However, none of these schools indicate that they have play equipment in the playground.

Tube wells are the most common drinking water source for all schools during the rainy season. Primary schools also use rainwater frequently as a source for drinking water. About 50% of the schools use tube wells throughout the year. The schools surveyed in Moemauk, Kunlong and Waing Maw do not use any water source and children bring their own drinking water. Eight of the schools which provided data on water treatment indicated that they use straining to treat the water and two primary schools do not treat the water at all. The majority of the schools store the water in a cover pot or bucket and but most do not provide cups.

There are approximately 9 latrines per school but only about half of the latrines are functioning and fly proof. On average there is one toilet for 24 students. However, one primary school does not

have any latrines at all and in two of the non-government schools, more than half of the latrines are not functioning and the latrines are shared with non-students. Five schools have shared toilets for boys and girls. Four schools do not have any hand washing facilities at all and only three schools have water and soap available all the time.

Teaching and learning approach
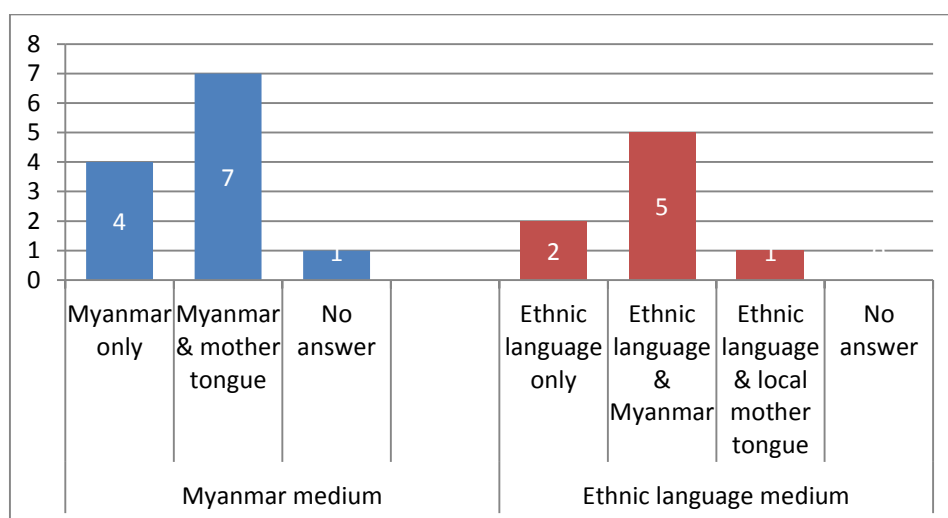
Chart 15: Teachers' Language of Instruction in Ethnic Children Majority Schools

Of the 19 schools visited, five government schools from the Delta are located in areas where Myanmar is the mother tongue of the majority of children in the school. The remaining 13 schools are in areas where ethnic languages are the mother tongue of the majority of the children in the school, including one in the Delta where Kayin is the mother tongue of most children in the area. Of the 13 schools, eight are government schools where Myanmar is the medium of instruction and five use an ethnic language as the medium of instruction (Kachin/Jingphaw, Lhaovo and Kayin). Of these five schools, one school uses the regional ethnic language, Jingphaw as the medium of instruction while the children speak Zaiwa as mother tongue.

Of the twenty teachers interviewed in the 13 ethnic children majority schools, five do not speak the mother tongue of the children in their school, including one teacher who speaks only Jingphaw while the children speak Zaiwa. Of the 12 teachers in schools where Myanmar is the medium of instruction, about half use the children's mother tongue in conducting activities. Of these teachers, almost all use mother tongue for explaining concepts and ideas and giving instructions, simple classroom interactions and for story-telling, while about half use it to teach songs and rhymes.

Of the 20 teachers who are working with ethnic children, the majority say that they introduce Myanmar language to their children. They do this by teaching songs and rhymes, giving instructions, explaining concepts and ideas, classroom interaction and story-telling. However, three teachers interviewed from the non-government schools do not speak Myanmar language so Myanmar is not introduced at all to their students.

Most of the teachers refer to the child centered approach (CCA) when asked about what type of teaching methods they use in their classrooms. However, most of them refer to CCA as the use of

teaching aids such as posters, drawing and real objects while they are teaching. The most frequently mentioned methods are verbally explaining concepts to the students, telling stories, poems and songs, group woks and discussions, practical experiments for science, and question and answers.

Despite the inability to identify specific teaching methods, the teachers interviewed reported that there is active involvement of students in learning activities. The majority reported that children sometimes work in a group to complete a learning activity as well as help each other out and share their work in the classroom for learning activities. All the teachers use discussions and questions in the classrooms. This is rather contrary to the findings of a study on the CCA practices in primary schools conducted by UNICEF, which concludes that Myanmar's primary school teachers use just nearly 4% of lesson time with pupil-centered forms of learning like group work[27].

Almost all teachers including those who do not have any training at all indicate that they prepare lesson plans, of which almost half prepare this on a weekly basis and all of them follow their lesson plans. Only two teachers from one non-government school do not prepare lesson plans.

About three quarters of the teachers make use of learning materials, but less than 10% say they have enough materials. Only a fifth of the primary school teachers adapt the materials for children with disabilities. Most of the teaching learning materials that the teachers refer to are posters and charts, pictures and drawings, models, real objects, and blackboard and chalk. The teachers in the non-government schools can identify a wider variety of teaching methods and materials. Of six untrained teachers in the government schools, four could not identify any teaching materials at all. This shows how important initial teacher trainings are and the impact of the training on the classroom practices of the teachers.

Assigning some responsibilities to the students has been a tradition in the schools of Myanmar. All the schools both in the government and non-government systems assign some daily duties to the students, the most common tasks of which includes cleaning of classrooms and other facilities such as toilets, arranging desks and chairs for class activities, and fetching and preparation of water for both drinking and toilet use. In the government schools, these responsibilities are assigned in teams which are established under the school council. In the non-government schools, similar team assignments are made but the students are delegated to identify their own leader for the tasks. In these schools, the students are also asked to assume responsibilities beyond basic classroom chores, and helping the teachers by checking attendance of students, collecting and distributing students' works, facilitating group studies, and taking care of classroom materials.

Almost all teachers in both government and non-government schools conduct some form of assessment to monitor progress of their children, and 65% of them do this as needed. Oral and written tests are the most common methods of assessment. Monthly tests are a prevalent form of assessment in the majority of the schools. Some of the teachers also use observation, lesson-end tests, homework and daily oral tests as well. Some teachers also mention that assessments cover children's understanding about lessons, their learning ability and creativity, health and hygiene

[27] (UNICEF, 2014)

status of the children, group work and sports participation, and their personal characteristics, attendance and obedience.

All head teachers organize meetings with the teachers. About 60% meet at least once a month and more than half of the teachers always attend these meetings. At most of the schools, the principal or School Management Committee observes classrooms while a teacher is teaching. The frequency of observation is for most of the schools daily. However, teachers in two schools in Kunlong have never had a principal observing their teaching during the school year 2013-14. In the same year, more than half of the teachers reported that the principal provided guidance once or twice to them. Chart 16 and Chart 17 reveal that even though the principals are observing classes frequently, provision of feedback and guidance is rather limited.
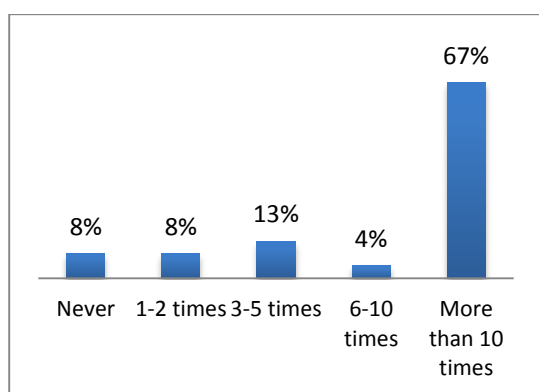
Chart 16: Frequency Principal Observes Classroom Teaching
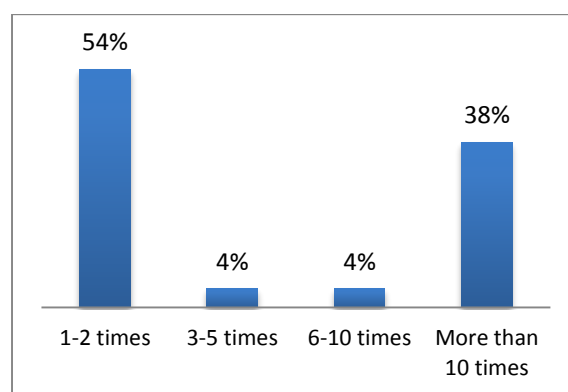
Chart 17: Frequency Principal Provides Guidance

Teacher recruitment and training

The average student teacher ratio in the primary schools is 14 to 1. On average a school has about 11 teachers of which 10 are female. However, this average includes the general workers in the government schools who are working as teachers and also some volunteer teachers in schools in camps for internally displaced populations (IDPs). Approximately one position per school is vacant. Out of 12 teachers who left the schools in the last year, five were volunteers working in the IDP camps. For other teachers, the reasons for leaving were to get married, transfer to another school, retirement, and moving out of the area.

None of the schools have teachers below 15 years, with the youngest teacher being 17 years of age. Slightly over half of teachers passed matriculation and have more than 3 years' experience as a teacher. The majority of teachers in non-government schools are those who have completed Grade 10 but the majority of teachers in government schools are either university graduates or are at the undergraduate level.

Most of the teachers have received various forms of training from the government, NGOs and Ethnic Education (Departments) Organizations. However, only a handful of the teachers have received mentoring support from mobile training teams, or refresher training in the last year. The schools where the NGOs and Ethnic Organizations are active in the education sector receive more training and follow-up support. For instance, in the non-government schools supported by the NGOs and Ethnic Education (Departments) Organizations in Kachin and Northern Shan areas, 92% of teachers

have been trained and 13% of them have received refresher training last year. However, the trainings are rather short, generally about one to three months. On the contrary, the majority of teachers in the government schools have received trainings of at least one year. At the same time there are also some exceptions, and in the schools visited in Southern Shan and Kayin States, more than 80% of the teachers have never been trained and none of the teachers have received any mentoring support and refresher training even though most of these schools are government schools.

Community involvement

Almost all schools make arrangements for teachers to meet the parents of their students. However, the data did not indicate how many teachers met parents in the last school year. In the government schools, almost all teachers tried to meet parents but it is difficult to verify if they did from the data. All the schools, except one, mentioned that they encourage parents to be involved in school activities. However, the majority of the schools do not have any specific strategies or efforts to promote parental involvement. In most cases, giving an awareness raising talk in the PTA annual meeting and/or ceremonial occasions is the only way of encouraging parents to support their children's education. There are a few schools where teachers meet parents of children with poor performance. One government school in Yekyi township promotes closer collaboration with parents by allowing parents to visit schools during lunch time every day, and by working with them on road safety of the children during opening and closing hours of the school days. However, one school closes the gates after 9am and parents are not allowed in the school after that except to talk to a teacher.

The community usually contributes financially or physically to provide labour for construction although in most areas, schools do not raise funds from parents as they are very poor. They may however seek donations from richer community members for activities such as prize giving to outstanding students and sports competitions or for new buildings, fencing, toilets and water supply. In many of the communities visited, the Church plays an important role in supporting the schools. Some of the community schools are managed by the Church.

In focus group discussions, the respondents noted that there is variation in who attends parents meetings. In some areas, fathers dominate even though mothers are the main caretakers while in some areas mothers are the ones who attend school meetings. This may be dependent on local cultural norms, when school meetings are held and the interests of the school principal/Management Committees. In the Delta regions, there is strong support for education from the communities. In some areas, Management Committees and teachers have established night school to provide additional support to students who need it or do not have electricity at home to study at night.

School management

The management of the schools is generally done by the school principals. Most of the schools have a PTA and school management committee. The six schools in the Delta have a Board of Trustees. The involvement of these bodies in actual management of the schools appears to be limited. In some government schools, School Grant Committees have been established to manage funds provided by the government. The principal is usually the Chair of the committees and leads most of

the activities of these school bodies. These bodies usually include parents, teachers, village/ward administrators and other community leaders. Most Boards of Trustees are predominantly male with 4 of the 6 not having any female members at all. Similarly the School Grant Committees and the Parent Teachers Association are dominated by men. It was noted that often, the same individuals are on all the school bodies.

In the schools in the IDP camps, the members of the School Management Committees are assigned by the authorities and are linked to the camp management committee – the Chair is an Education Department officer, the school principal is the Secretary and remaining members are block headman, other government authorities, church leaders, parents and members of the women's association. Parents are selected from among those who have an interest. Meetings are organized monthly by the principal and all members attend as "*we have nowhere to go*".

In other areas, School Management Committees and PTA members are selected by the community and usually include the village headman/administrator, 10 household leaders, church and village leaders, parents and teachers. Most committees are led by the principal and other members provide support as needed.

For the government schools, both recruitment and decisions on staff entitlement are usually done by the government authorities like the government education department and township education officer. For the non-government schools supported by the NGOs and Ethnic Education (Departments) Organizations, recruitment and decisions on entitlement are generally made by the organizations. Only in one church-based primary school, the school management committee gets involved in those decisions.

Class assignment is done by the principal or the principal together with teachers. There are no schools where the School Management Committee is involved in such decisions.

In 2013-14 school year, these bodies met on average about 4 times, and most of the issues discussed are general situation of education of the children in the school and the need for support from families and communities, infrastructure improvement of the schools, financial matters including collection of fess in some schools, the need for furniture and other school supplies, and disciplinary issues in the schools. Very few schools include specific actions and plans for improvement of learning outcomes of the students. No school mentioned strategic action plans for improvement of the schools. Decisions are disseminated by word of mouth or through the 10 household leaders.

The schools usually keep a wide variety of records concerning the information about the children in schools. For government schools, the type of records they keep are similar to each other, and the main records are Student Identity record (probably meaning admission register book), attendance and leave records, records of disciplinary issues, and examination results and report cards. However, the system in the non-government schools is slightly different. They keep records of student characteristics and individual student's performance and participation in the class and school activities, apart from attendance and test scores.

Only half of the primary schools have funds raised by the PTAs and School Management Committees in the last school year. The amount of funds raised varies from 5,000 Kyats in one primary school to 1,500,000 Kyats in a secondary school. In government schools, primary education is now free and

the government provides textbooks, exercise books and school uniforms. In the Delta region, it was noted that PTAs have not been allowed to raise funds in the last 6 to 7 years. The government provides school development funds which are managed by the School Grant Committee. There are strict complicated rules on their use, such as what the funds can be used for, how much can be used for each activity. However, the funds are not always sufficient and additional donations are sought as needed from private companies (e.g. rice mills), monasteries or other donors.

Funds raised are mainly used for school infrastructure improvement and giving prizes for outstanding students. Common needs for schools are school furniture such as tables and chairs, fencing, water and sanitation, play materials, playground. Teacher salaries are low and in some areas, housing for teachers is an issue. In one school in Kachin, the school enrolment has increased from 400 to 2000 students due to influx of internally displaced populations even though the school is not recognized as an IDP school because it is not in an IDP camp.

Half of the schools received training on school management; the training was conducted by the government for government schools and by the NGOs for the others. The main topics discussed were: child rights, child protection, gender equality, and to a lesser degree school management, disability inclusion and other topics. Two non-government schools received leadership training, and school management is part of it. Members of the School Management Committees however noted that they have not received any training. Most are willing to receive training in topics such as school management, community mobilization, parenting education, report writing and financial management. However, in one village they indicated they have no time to join training even if it is provided as they have to struggle for their daily living.

In the government schools, there is only one teacher who has been trained to be a trainer while there are 5 in the non-government schools that have been trained as trainers.

Household and community factors affecting primary education

In all the survey sites, participants in focus group discussions indicated that the majority of the population are poor and are not able to contribute much financially. In most areas, however, the communities contribute their labour and time to construct or repair infrastructure for the school such as school fencing when needed. In remote regions, schools find it difficult to recruit qualified teachers who are willing to stay. Conflict, which is still on-going in some places has a significant impact on schooling. In one school in Kunlong, the community noted that education had been neglected for many years in their village: "*It looks like everybody is sleeping with regards to education.*" The school only had one teacher and had to close when there was no teacher. It has recently been recognized as a government school and two new teachers have been assigned to the school, one who is a full time government staff and one paid on a daily basis.

In order to get an understanding of community attitudes towards mother tongue instruction, the household survey included a number of language related questions. Among the households interviewed, 73% indicated that they believe it is important for children to receive mother tongue instruction in school. The question was not clear however on whether this referred to mother tongue as the medium of instruction or as a language taught in the school. About 69.6% of households where ethnic language is the mother tongue knows of a school where mother tongue lessons are provided.

In areas where ethnic languages are being taught as the medium of instruction however, FGD participants noted that the students find it difficult to enter government schools for higher studies because of their poor command of Myanmar. In other areas, FGD participants noted the importance of teaching local ethnic languages but also recognize the need for children to learn English and Myanmar.

v.   Out-of-school Children

Educational status of out-of-school children

Situation of out-of-school children

Table 28: Educational status of older children

Educational status of older children	Boys	Girls	Children with Disabilities	Total	National figures (where available)
Percentage of out-of-school children (5-15 years)	19.2%	16.6%	21.2%	17.8%	
Transition Rate to Secondary School	89.8%	83.3%	90.9%	86.4%	81.0% (CESR) 95.3% (MICS)
Net Secondary Enrolment Rate	37.2%	43.1%	27.5%	40.2%	58.3% (MICS)
Gross Secondary Enrolment Rate	42.9%	51.2%	30.4%	47.1%	

The household survey indicates that 17.8% of school-aged children 5-15 years old are not in school in the MEC programme areas (Table 28).

Transition Rate to Secondary School is the percentage of children in the first year of secondary school (Grade 6) this year who were in the last year of primary school the year before (Grade 5)

Net Secondary Enrolment Rate is the percent of children 10-15 years who are enrolled in secondary school

Gross Secondary Enrolment Rate is the percent of children of any age enrolled in secondary school over the children 10-15 years

---

While younger aged children who are not in school are likely to start school at a later stage, children who are older are primarily those who have dropped out of school. Chart 18 shows that the number of children who are not in school increases significantly after 13 years old.

Table 29 shows that there are multiple reasons for children not being in school. Not interested in schooling, not having a school nearby, working to earn money and helping with family business, distance to school and cost of schooling are the key reasons given.

The higher dropout rate for older children is also reflected in the low Net Secondary Enrolment Rate of 40.2%. This figure is lower than the national figure of 58.3% (MICS). The Gross Secondary

Enrolment Rate is also low at 47.1% indicating that many of the over-aged children in primary school have dropped out at the secondary level.

Table 29: Reasons Children are Not in School

Reason	Male	Female	Children with Disabilities	Total
Not interested in school	30.3%	13.6%	14.3%	14.7%
No School		6.1%		9.6%
Working to earn money	10.6%	13.6%	14.3%	9.2%
Have to farm, fish, keep animals or help in family business	13.6%	13.6%		7.9%
Distance to School	7.6%	9.1%		6.8%
Cost of Schooling	4.5%	12.1%		6.3%
Have to take care of siblings or other housework	3.0%	7.6%	14.3%	2.6%
Illness	3.0%	3.0%		2.2%
Education is not important	1.5%	4.5%	14.3%	1.1%
No Teacher	1.5%	1.5%		0.9%
Different language used in school				0.6%
Conflict		1.5%		0.2%
Other	24.2%	13.6%	14.3%	38.1%
Total	**100.0%**	**100.0%**	**100.0%**	**100.0%**
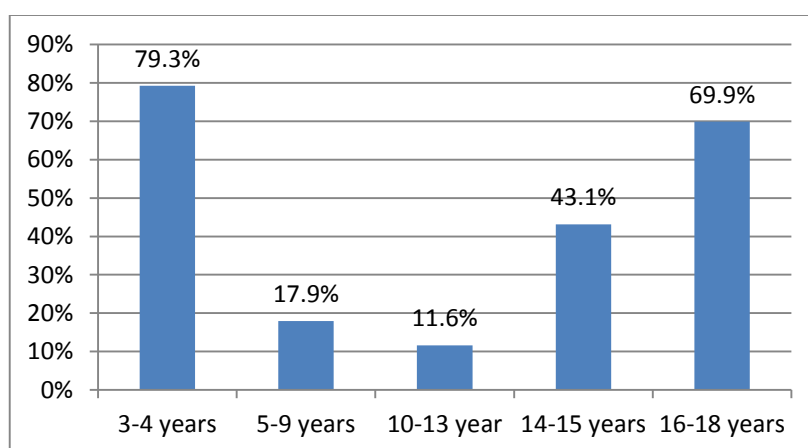
Chart 18: Percentage of children who are not in school by age group

From focus group discussions, it was noted that lack of access to secondary schools is a key reason for children dropping out of school. While a significant proportion of those in the last year of primary school move on to secondary school, the Transition to Secondary School Rate of 86.4% in MEC programme areas is lower than the reported national figure of 95.3% in the MICS[28] but slightly higher than that reported in the CESR of 81%[29]. Many of the survey sites are remote villages where there are limited opportunities for continuing education beyond primary school. Secondary schools

---

[28] (Ministry of Health, Lao Statistics Bureau, UNICEF, UNFPA, 2012, p. 45)
[29] (Ministry of Education, Government of Myanmar, 2013)

are significantly further away than primary schools and in some areas students would need to move to a different town and find boarding in order to attend secondary schools. Participants in focus group discussions also noted the difficulty for children from ethnic language schools to move to the government secondary schools in towns after completing primary school in their villages due to language problems.

In the survey site for the project on out-of-school children in Hlegu, participants in focus group discussions noted that many children in their community drop out of school after primary school to work. Although primary education is now free and the government provides textbooks, books and other materials, some of the schools are crowded and not well managed. Girls find work in the factories in Yangon, Bago, Hlegu or take care of siblings at home. Boys work in tea shops, on farms or catch fish. Some children also work in rubber plantations in the area. In one village, the children have to walk for about one hour to the next village to go to primary school so transportation is also a problem. Some parents cannot take the children to school as they have to go to work early and in the rainy season the children cannot go by themselves because the road is very bad.

In general, the participants in focus group discussions say that there is no difference in dropouts between boys and girls. In some sites, some participants noted that more boys drop out of school because there are more opportunities for work for boys.

Educational attainment

The survey did not collect any information specifically on educational attainment of out-of-school children. In general, there is very little data on the situation of out-of-school children in Myanmar as well as information about the programmes and initiatives taken by different agencies to address the needs of these children. For the purpose of the MEC baseline, it is useful to refer to available indicators on the results of the national Non-Formal Primary Education programme (NFPE) to be used as comparable indicators for the programme. The MEC supported project for out-of-school children appears to follow this programme which is acknowledged by the Ministry of Education as an alternative primary education model equivalent to the formal primary education. It is often called the equivalency primary education programme and targets out-of-school children of ages 10 to 14 years. It has two levels: level 1 is equivalent to lower primary completion (equivalent to Grade 3), and level 2 is upper primary completion (equivalent to Grade 5). Those who complete NFPE level 2 are qualified to enroll in Grade 6 in formal secondary schools.

Table 30: Indicators from National Non-Formal Primary Education Programme

Indicator	2012 – 2013 school year	2013 – 2014 school year*
NFPE level 1 completion	65.14%	66.43%
Transition rate from Level 1 to 2	71.00%	72.01%
NFPE level 2 completion	77.03%	79.08%
Transition from NFPE level 2 to Grade 6 in formal secondary school	27.18%	38.10%

*2013-2014 figures are tentative estimates

According to the Myanmar Literacy Resource Center (MLRC), which is currently the focal organization to implement the equivalency NFPE programme, the situation of student flow in NFPE centers nationally is as shown in Table 30[30]. No data is available for enrolment rates.

Education services for out-of-school children

The MEC is supporting one project for out-of-school children in Hlegu township outside Yangon. The baseline survey visited 3 non-formal education centers in Hlegu -- one in a peri-urban ward, one in a large village and one in a small village. All three centers are relatively new having only been established within the last year by S4SK, the NGO being supported by MEC.

Access to services

Of the three centers, only one center has a code of conduct signed by the teachers which includes points on positive discipline and caring for children. All the centers visited have a policy to accept any child who would like to enroll. However, there are no specific strategies or actions to help children with disabilities to attend the NFE center, the reason given being because NFE teachers have no experience in teaching children with disabilities. However, there are two students identified as children with disabilities enrolled in the center, one with difficulty in seeing and the other with learning difficulties.

Two out of the three centers indicate that they have written rules and regulations for students' behavior, and these rules are presented either by displaying on the notice board or informing students at school assemblies. However, none of the centers have procedures for resolving conflicts in the center.

The NFE centers are small with about 15 students each. The majority of children are from the age group of 11-14 years. Since there is no information on how many children are out-of-school in those communities, it is not possible to estimate the coverage of the services in relations to need. Less than one-third of the students are girls and the number of girls decreases with age, with no girls of the age 15-18 years enrolled in any of the centers. This proportionately low enrolment of girls in the NFE centers has also been seen in other NFE programmes[31]. This is notably different from the overall gender parity in primary education. It would be worthwhile to find out why girls are not enrolling in NFE centers and what barriers they face.

---

[30] (Myanmar Literacy Resource Center, 2014)
[31] (Myanmar Literacy Resource Center, 2014)

Table 31: Enrolment in NFE Centers Visited

Age (years)	Boys	Girls	Total
08-10	4	3	7
11-14	24	12	36
15-18	3	0	3
Total	**31**	**15**	**46**
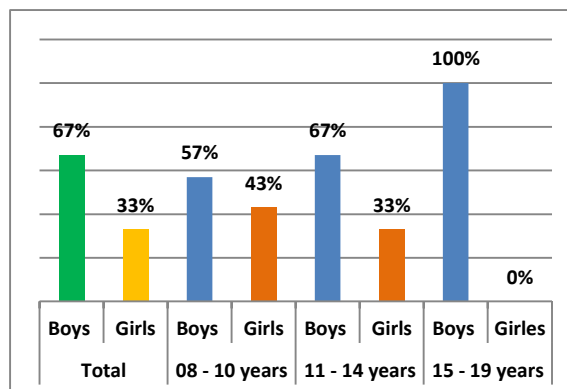
The average time the furthest student takes to come to the centers is 16 to 30 minutes for two centers, and 31 – 60 minutes for the other center. All centers operate five days a week and three hours per day. Two out of three NFE centers have flexible opening hours. None of the NFE centers collect school fees or contributions and they provide a stipend for children who attend. Despite this flexibility and support and moderate geographical proximity, the coverage of the NFE programme appears to be low. During focus group discussions, the parents of the current NFE students said that they appreciate the NFE centers as they provide free education as well as pocket money for the students. However, they also noted that most parents in the community are not interested in the education of their children.

> *"Most families cannot think apart from their daily food and expense... they are less interested in children's education and don't even think about their children's future"*

Learning environment

Physical facilities of NFE centers appear to be rather poor. Each of the three centers has one building with one classroom only. Only one center is in a semi-permanent building and one center is run from the home of the NFE facilitator. The centers are run with the bare minimum furniture of student desks and blackboards only. Only one NFE center indicated that it is accessible for all children including children with disabilities.

Well water is available all year round and is usually treated with either chlorination or straining it through a cloth for drinking. One center uses only bottled water. Drinking water is properly stored and cups are available for each child. All centers have functioning flyproof toilets and hand-washing facilities with availability of water and soap all the time. Each center has only one toilet that is shared between boys and girls as well as among teachers and students. A shared toilet among such a small number of students (15 students per center) might not be considered an important issue, but it is critical to take into account the nature of the specific age group of children with girls being a notable minority in the centers.

All three centers also mention that they have adequate textbooks and posters but there is a shortage of other materials such as toys, models and other reading materials. All three centers also indicate the need for play equipment and materials. One center mentioned the need for a first aid kit with basic medicines.

Teaching and learning approach

The non-formal education programme in the three centers comprises of four learning areas -- Myanmar language, English, Mathematics and general life skills. The general life skills education in the programme includes basic knowledge like personal hygiene and science as well as the skills of communication, interpersonal relations with families and friends, and vocational oriented handicraft skills. As noted previously, the programme appears to following the national Non Formal Primary Education (NFPE) programme.

The teachers in the NFE centers prepare lessons plans; one center does this daily and the other two every week. All of the centers make use of learning materials, which include real objects such as marbles, sticks, fruits and leaves; color cards with drawings; and with words. However, only one center mentioned that they have enough materials. None of them adapt these learning materials to children with disabilities as they do not have any experience in teaching children with disabilities. Two centers indicated that the students participate in the discussions and raise questions.

The three centers assess and monitor the progress of each child individually. For one center, this is done once a year and the other two do it as needed. The assessment is generally done in two ways: formal written tests and informal observation. When observing the students, they check their improvement in learning, both strong and weak points, their communication skills, relationship to their friends, good or bad habits (e.g. smoking, drinking alcohol), personal appearance and hygiene practices. The teachers also keep records of student attendance.

Teacher recruitment and training

The recruitment of teachers for the NFE programme was done by S4SK, the organization implementing the project. The average age of the NFE teachers is 31 years. They all have only a little over one year of teaching experience under the NFE programme. Two of the teachers passed Grade 11 and one is a university graduate. All three teachers have received three-phase teacher training on implementation of the NFE curriculum. Topics covered include:

- Child rights and education
- Lesson planning
- Active learning methods such as use of games and stories
- Children's behaviors and disciplining
- Caring and handling children
- Educating parents on the importance of education; and
- The vicious cycle of poverty

Since there is only one teacher per center, the supervision on the performance of the teachers is done by the organization (S4SK). Although management committees have been established for the centers, these are very new and the teachers noted that the committees have never observed their teaching and provided any guidance to them.

Community involvement

The centers are established and run by S4SK and community involvement is rather limited. Most of the population around the centers are from low income families who work as casual laborers or

have small stalls. The management committees which have been established include parents and other village leaders. The parents are willing to help but they do not have any ideas on how they could contribute. They feel that they are all in the same situation and cannot help each other. They seem to be waiting for some leadership and external support.

> *"We don't know how to start the first step and have no confidence because the village leader is not interested in education."*

The teachers also appear to be at a loss of how to promote the involvement of the community and do not have specific ideas about parental involvement in the programme although they believe that parents and communities are willing to support in whatever ways they can. There are currently no fund raising efforts in the NFE centers.

Management

As indicated above, the Management Committees for the NFE centers were only established this year. In general, committees have 6 members each; 3 male, 3 female, which includes the village headman or ten household leader, the NFE facilitator, parents and other interested individuals.

The committees have a structure with a Chairperson, General Secretary and members. However, they are not yet functioning well and have not had regular meetings nor developed any plans. There have been a number of meetings but the teachers at the NFE centers indicated they did not attend any of these meetings. In one site, the committee noted that they have never held any formal meetings with the ward leaders and only depend on personal relationships.

The three teachers have received neither training on school management nor training to become a trainer on NFE.

Household and community factors affecting education for out-of-school children

As noted above the communities where the non-formal education project for out-of-school children is located are very poor and education is not a high priority for many families. In some areas, many of the people are migrant workers who have come from other parts of the country. In one site, most of the people, including women, work in surrounding rubber plantations and often take younger children with them to work. As a result, they were not available for interviews during the survey.

In one site, the parents noted that one of the problems for migrant populations is the lack of a birth certificate and as a result, many children start school late. It is noted however that birth certificates are not a requirement for school enrolment.

The household survey in the whole programme area showed that although 93% of respondents are supportive of non-formal education for out-of-school children, only 17% have knowledge that there are schooling opportunities for these children. Even in the sites with NFE centers, only 63% of respondents know of a center that provides education for out-of-school children.

vi.   Children with Disabilities

The study sought to ensure the inclusion of children with disabilities in the household survey. Consequently, the household sample was boosted to ensure that an adequate number of households with children with disabilities were interviewed. It is recognized however that there

were many limitations in the study in this area as there was limited expertise to adequately identify and assess these children, in particular children with learning disabilities.

Among the children with disabilities surveyed, 16.2% had a hearing disability, 8.5% a seeing disability, 30.0% a physical disability and 23.8% a learning disability. The higher number of children with a physical disability may be because the survey sites included many remote and fragile environments exposed to past conflict and instability. According to the CESR of 2013[32], special needs education or inclusive education in Myanmar is primarily being implemented to help individuals with disabilities as well as socially disadvantaged individuals, including ethnic minorities and people from poor households, to learn/study in a regular schooling. Currently, students with disabilities tend to study at public schools, while students with social disadvantages often end up studying within monastic education schools. The CESR goes on to mention that in addition to the need to establish individual learning achievement/targets according to an individual's degree of disability, there are currently no clear criteria for judging children with disabilities, including that for identifying the degree of disability.

Educational attainment for children with disabilities

The Net Primary Enrolment Rate for children with disabilities, 81.9%, is comparable with that for other children. Apart from this indicator, it is difficult to assess educational attainment for children with disabilities due to the lower level of reliability of the data (coefficient of variation higher than 10%) resulting from the smaller sample size. In general, however, the indicators for children with disabilities tend to be lower than the overall figures for all children combined. The comparison for primary school educational attainment indicators is shown in Chart 19.
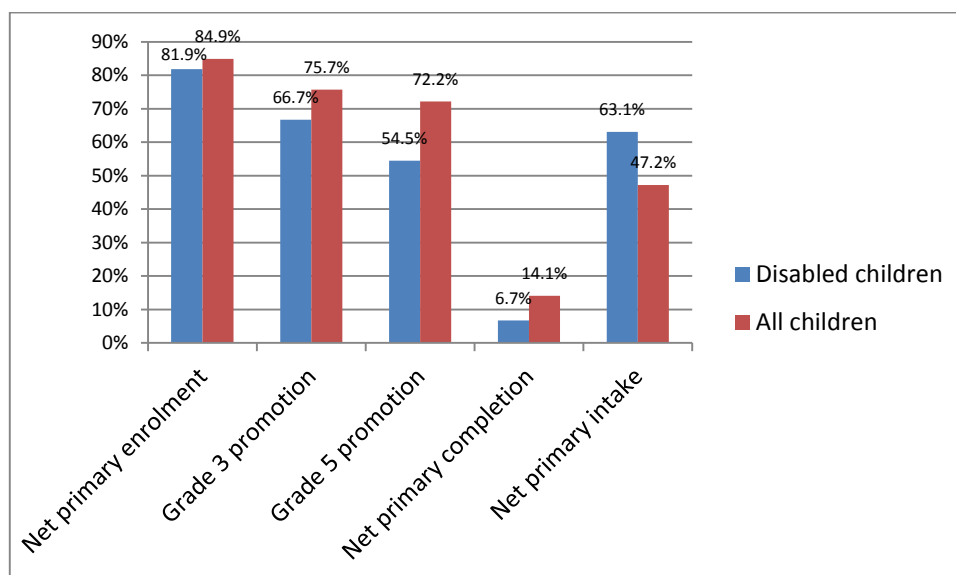

Chart 19: Comparison of indicators for children with disabilities

---

[32] (Ministry of Education, Government of Myanmar, 2013)

Education services for children with disabilities

The household survey found that only about 18% of children with disabilities get extra help within schools regardless of the kind of school. Most children with disabilities take the same examinations as other students under the same conditions. As a result children with disabilities tend to do less well when compared with regular children in school. There is lack of consideration for each disabled student to study according to his/her degree of disability including an appropriate support system and evaluation for these individuals.

Among the households with children with disabilities who are not going to school, the following reasons were given for why the child is not in school.

Table 32: Reasons Children with Disabilities are Not in School

Reasons for not being in school	Percent
Cannot learn	30.2%
Cannot get to school	20.9%
No school in the area	14.0%
Not interested in school	14.0%
Education too costly	7.0%
Other	14.0%

Information on how existing education services cater to children with disabilities have been discussed in the sections on these education services above. In general, interviews in schools showed that most schools do not provide access for children with disabilities and most teachers have not been trained to work with such children. In some areas, some teachers noted that this is because they do not have children with disabilities in their schools but this begs the question of why these children are not in those schools.

Household and community factors affecting education for children with disabilities

Despite the barriers noted, the study showed that a majority of people surveyed have positive attitudes towards schooling for children with disabilities. Seventy eight percent of total households interviewed responded positively to 2 of the 3 questions: whether children with disabilities should go to school; whether they should be integrated in regular schools: and whether they should get special help in regular schools. The positive attitudes were also reflected in focus group discussions where respondents noted that there is no discrimination against children with disabilities.

VII. Conclusions

The following are some of the key implications of the findings of the survey for consideration by MEC for further study and in the development of its programme with its partners.

1. The study shows that there are positive attitudes towards schooling for children with disabilities in the community and enrolment for children with disabilities is comparable with that of other children. However, it appears that children with disabilities are not attending school regularly and education attainment is somewhat lower than other children. This is likely because although children with disabilities are being accepted into regular schools, most teachers have not been trained to work with these children. Most teachers do not adapt materials for children with disabilities and no additional assistance is provided in the classroom. Furthermore, there are no accepted tools for assessing and thus identifying children with disabilities, in particular those with learning disabilities. MEC should support its partners to pilot models for inclusive education which can be promoted for wider acceptance in the government education system.

2. The study shows that children who speak the same language as that used in school have better comprehension rates highlighting the importance of mother tongue instruction in schools. The majority of the households interviewed consider it important to learn mother tongue, as well as Myanmar and English in the ethnic areas. Many of the schools supported by the MEC in the ethnic areas are government schools with Myanmar as the medium of instruction. The MEC should consider supporting partners to:

    a. Develop methods and materials for teaching Myanmar as a second language to students in ethnic areas. Currently, the same teaching methods and materials used for teaching Myanmar to Myanmar students are used with ethnic children. As a result, ethnic children may learn to read and write Myanmar but do not necessarily understand the language.

    b. Support schools to introduce and strengthen methods for teaching of ethnic languages in schools where Myanmar is the medium of instruction.

    c. Provide support for use of mother tongue in the classroom for explaining concepts and instructions where Myanmar is the medium of instruction. This may include supporting teacher assistants and adapting teacher recruitment policies to ensure that there is a teacher who can speak the language of the children in each classroom.

3. Many of the children in school are over-aged indicating late entry into school and high repetition rates. In addition to tracking net enrolment rates, MEC should assess the gross enrolment rates to better understand enrolment levels in schools. Furthermore, MEC should support partners to better understand why children are starting school late in order to be able to better address this issue.

4. Although there is a relatively high primary school enrolment rate, the study shows that there is a high drop-out rate particularly in secondary school and there are many children who are not in school. While there is community support for education for out-of-school children, the coverage and enrolment in non-formal education centers visited is very low, particularly for girls. MEC should support its partner working with out-of-school children to identify the barriers for attending non-formal education, particularly for girls in order to increase its coverage.

5. A number of indicators from the study are not consistent with the findings from other studies, in particular the lower reading ability of students who have attended a pre-school in comparison

with those who have not, as well as the high percentage of children in first grade who have attended a pre-school. MEC should carry out additional studies to better understand the reasons for the differences.

6. Most of the schools have inadequate facilities. In particular, there is a need to improve water and sanitation facilities, particularly in non-government schools. MEC should consider providing support for these areas to its partners.

7. Although there appears to be significant community involvement in school management bodies and Parent Teacher Associations, these bodies have a minimal role and most of school management is led by the school principal. MEC should support partners to find ways to better promote community involvement, for example in extra-curricular activities.

8. The survey found that most schools have inadequate funds and fees are currently being collected in pre-schools limiting accessibility by some children. In order to better understand financial management and financing needs in non-government schools, including in community and Ethnic Education Department schools and non-formal education centers, MEC should support a cost and financing study in collaboration with its partners.

VIII. Bibliography

Poverty and Disability in Myanmar: Why empowering persons with disabilities reduces poverty. (2012, February). *Social Policy and Poverty Research Bulletin, Vol. 1 No. 1*.

edddata II, USAID. (2014). Early Grade Reading Assessment. Retrieved August 2014, from www.eddataglobal.org.

Education Policy and Data Center. (2009). *How (well) is education mesaured in household surveys: A comparative analysis of the education modules in 30 household surveys from 1996-2005* . International Household Survey Network.

Hayden, M., & Hayden, R. (2013, July). Recovery of the education system in Myanmar. *Journal of International and Comparative Education, 2*(2).

JICA. (2013). *Data collection survey on education sector in Myanmar, Final report Part 1 and 2.*

Lwin, D. T., & Reagan-Fascell. (2007). *Education and democrcy in Burma: Decentralization and classroom-level educational reform.* National Endowment for Democracy.

Ministry of Education, Government of Myanmar. (2013). *Comprehensive Education Sector Review, Phase I Rapid Assessment Report.*

Ministry of Health, Lao Statistics Bureau, UNICEF, UNFPA. (2012). *Lao Social Indicator Survey (LSIS) 2011-2012 (Multiple Indicator Cluster Survey/Demographic and Health Survey).* Vientiane, Lao PDR.

Ministry of National Planning and Economic Development, Ministry of Health, UNICEF. (2011). *Myanmar Multiple Indicator Cluster Survey 2009-2010.* Yangon.

Ministry of National Planning and Economic Development, UNDP, UNICEF, SIDA. (2011). *Integrated Household Living Conditions Survey 2009-2010, Poverty profile.*

Ministry of National Planning and Economic Development, UNDP, UNICEF, SIDA. (2011). *Integrated Household Living Conditions Survey 2009-2010: MDG Data Report.*

Myanmar Literacy Resource Center. (2014). *Letsintkam Panyagon 2 (Handed down the flower grove 2).* Yangon.

RTI International. (2008). *Early grade mathematics assessment (EGMA): A conceptual framework based on mathematical skills development in children.*

RTI International. (2014). *Early Grade Mathematics Assessment (EGMA) Toolkit.*

Save the Children. (2004). *Early childhood care and development: A positive impact.*

UNESCO. (2009). *Education Indicators: Technical guidance.*

UNICEF. (2013). *Learning achievement outcomes.* Yangon.

UNICEF. (2014). *Baseline study: Child-centered aproaches and teaching and learning practices in selected primary schools in Child Friendly School focused townships in Myanmar.*

USAID. (n.d.). *Early grade reading barometer: Actionable data for a more literate world.* Retrieved July 7, 2014, from Early Grade Reading Barometer Website: http://www.EarlyGradeReadingBarometer.Org

WHO. (2011). *World Report on Disabilities.*

World Bank. (n.d.). *Making the grade: assessing literacy and numeracy in African countries. DIME Brief.* Retrieved July 7, 2014, from World Bank Website: http://www.worldbank.org/dime

Annexes

Annex A: MEC logframe indicators

IMPACT	Impact Indicator 1
Increased number and proportion of children accessing and completing quality basic education	Net primary enrolment rate in targeted townships (disaggregated for girls, boys and children with special needs)
	Impact Indicator 2
	Survival rate to grade 3 and 5 in targeted townships (disaggregated for girls, boys and children with special needs)

OUTCOME	Outcome Indicator 1
Innovative, coordinated and quality driven community and complementary education services ensure more children and particularly the hardest to reach are ready to enter primary education and greater opportunity exists for children to gain quality learning in complementary education systems	% of students at key stages demonstrating basic literacy in Myanmar language and numeracy skills (disaggregated for girls, boys and children with special needs)
	Outcome Indicator 2
	% of pre-school aged children assessed as being ready for school (disaggregated for girls, boys and children with special needs)

COMPONENT 1	Component 1 - Indicator 1
All children are ready to be successful in school through quality ECD learning experiences	% of children currently in first grade of primary school who have benefited from an ECD intervention (disaggregated for girls, boys and children with special needs)
	Component 1 - Indicator 2
	# of children newly accessing ECD services (disaggregated for girls, boys and children with special needs)
	Component 1 - Indicator 3
	Most significant changes in parenting practices
OUTPUT 1.1	**Output 1.1 - Indicators**
Access to community-managed ECD services meeting minimum standards	# of community-managed ECD centers set up
	% of community-managed ECD centers that meet minimum quality standards
OUTPUT 1.2	**Output 1.2 – Indicators**
Access to school-based ECD services meeting minimum standards	# of school-based ECD centers set up
	% of school-based ECD centers that meet minimum quality standards
OUTPUT 1.3	**Output 1.3 – Indicators**
Increased awareness of parents and extended families on ECD	# of parents and extended family members trained on parenting practices
	% of parents and extended family members trained demonstrating basic knowledge on parenting practices
OUTPUT 1.4	**Output 1.4 - Indicators**
Increased access to capacity building and systematic professional development for ECD caregivers	# of ECD caregivers trained
	% of ECD caregivers trained that are demonstrating minimum standards of competency
OUTPUT 1.5	**Output 1.5 - Indicator**
All children experience a 'smooth transition' to primary school education	# of students in grade 1 and grade 2 benefiting from transition to primary school interventions
OUTPUT 1.6	**Output 1.6 - Indicators**
Systems of quality control strengthened among ECD providers	# of township ECD network groups strengthened
	% of township ECD network groups that are functioning according to agreed standards

COMPONENT 2	Component 2 - Indicator 1
Access to quality complementary basic education systems significantly improved	Retention rate in complementary Education system schools (disaggregated for girls, boys and children with special needs)
OUTPUT 2.1	**Output 2.1 - Indicators**
Management and leadership capacity of the monastic school system strengthened	# of teacher trainers in school hubs trained
	% of teacher trainers who are capable to train teachers in child-centred approaches to education, assessment, curriculum development, and school administration
	# of school administrators and school principals trained
	% of school administrators and school principles that are applying minimum standards in school administration
OUTPUT 2.2	**Output 2.2 - Indicators**
Teachers and schools deliver effective child-centred education meeting minimum standards	# of teachers of complementary education system schools trained
	% of teachers of complementary education system schools trained that are applying child-centred teaching and learning methods
OUTPUT 2.3	**Output 2.3 - Indicator**
Schools are safe, healthy and child-friendly environments conducive to learning	# of complimentary education system schools in target townships that received support to make schools safe, healthy and child friendly.
	%of complementary education system schools in target townships which meet quality criteria
OUTPUT 2.4	**Output 2.4 - Indicator**
Parents and communities actively engaged in education	# of complimentary education system schools that had awareness raising about parents associations.
	% of complementary education system schools having an active parents association

COMPONENT 3	Component 3 - Indicator 1
Civil society engage in education sector policy debate	# of policy reform areas identified and commonly agreed upon
	Component 3 - Indicator 2
	# of minimum standards formulated and adopted and legal frameworks changed based on inputs from civil society
	Component 3 - Indicator 3
	Civil Society Empowerment Index: Civil society actors: a) represent the diversity of people in the their working area including vulnerable groups b) demonstrate ability to access information, service providers and mobilize financial resources c) effectively link and network with other organizations d) report improvements in the operating environment e) report that the MEC helps to achieve their goals and has a positive impact on their work and sector
OUTPUT 3.1	**Output 3.1 - Indicator**
Enhanced cooperation of non-state actors in education	# of examples of good practice, innovations and new approaches documented and shared with ETWG and relevant government departments
OUTPUT 3.2	**Output 3.2 - Indicator**
Innovative and scalable education programs implemented by civil society organizations (e.g. local NGOs, CBOs, FBOs)	# of grantees successfully implementing basic education improvement activities
	% of grant funds that go to marginalized groups

COMPONENT 4	Component 4 - Indicator 1
Out-of-school children access quality alternative education programs	# of additional children enrolled in alternative education programs (disaggregated for girls, boys and children with special needs)
	Component 4 - Indicator 2
	% of children fully literate after completing NFE classes
OUTPUT 4.1	**Output 4.1 - Indicator**
Appropriate interventions researched and developed	# of intervention models developed for out-of-school children
OUTPUT 4.2	**Output 4.2 - Indicators**
Out-of-school children have opportunities to access literacy and numeracy training, life skills education, and reengage with school-based learning	# of NFE centers set up
	% of NFE centers set up which meet quality criteria

COMPONENT 5	Component 5 - Indicator 1
Access to education in emergencies	# of timely education emergency response interventions implemented with partners in response to emergencies
OUTPUT 5.1	**Output 5.1 - Indicator**
Emergency education fund mechanism established for immediate education needs in emergencies	% of proposals for Emergency Fund for Education approved by MEC steering committee within 48 hours of receiving proposals
OUTPUT 5.2	**Output 5.2 - Indicator**
Local partners and communities are equipped and prepared to initiate an education in emergency response	# of education partners trained on education in emergencies
OUTPUT 5.3	**Output 5.3 - Indicator**
Education equipment repository system set up	Education equipment repositories set up for emergencies

Annex B: Sampling Approach

A multi-cluster sampling design was used to minimize costs and control for uncertainty related to the indicators of interest for the study.

The sampling procedure involved three stages. Firstly, one township was selected from each of the partner's project sites. Townships where the partners plan to or already cover at least four villages or education centers were identified and townships were selected from among these to provide a spread across the country in the states and regions where partners are working. Given the remoteness and difficulties in reaching some of these townships, the selection was confirmed and revised with the partners to ensure accessibility, safety, security and feasibility for the study.

In the second step of the sampling procedure, three villages/ward clusters were selected from each township purposefully to include villages/wards where there is an intervention or planned intervention school and to ensure accessibility and feasibility within the time, financial and human resources available. During the fieldwork, additional adjacent villages were included where the selected villages were too small to provide the adequate sample size. In urban areas, sub-wards where the schools were located were identified where the wards were too big to allow random sampling over the whole ward.

In the final step, households with a child 5-9 years (the base population for the key indicator Net Primary Enrollment Rate) were selected randomly from each village/ward cluster using a number of approaches based on the situation in the village. Where possible, households were selected randomly from a list of households with children aged 5-9 years. Where only the list of total households was available, the number of households to be screened were initially selected randomly from the list. Enumerators then visited the houses selected and conducted an interview if there was a child 5-9 years in the household.

Where it was not possible to obtain a list of households, a systematic sampling approach using a random walk and right hand rule was used. In villages where the systematic sampling approach was not possible, for example where households are scattered far apart, a non-probability snowball sampling approach was used with enumerators starting from different parts of the village. Using this approach, the enumerator spun a water bottle from the landmark to select the first house to approach. Following that enumerators asked respondents in the selected houses to identify another household with a child 5-9 years. If the respondent could not identify a household with a child 5-9 years, the enumerator spun the bottle again and repeated the process.

Sample size

The sample size for the household survey was determined for a comparative before and after study. The Net Primary Enrolment Rate was used as the key indicator for the calculation of the sample size. The sample size was calculated to allow the study to detect a statistically significant change in the key indicator between the beginning and end of project. The number of samples required for the study, n, was calculated using the following formula:

$$n = \frac{deff \times \left[Z_{1-\alpha/2}\sqrt{2P(1-P)} + Z_{1-\beta}\sqrt{P_1(1-P_1) + P_2(1-P_2)} \right]^2}{(P_2 - P_1)^2}$$

where   *deff*   = the design effect

                $Z_{1-\alpha/2}$ = standard normal 1-α quintile corresponding to a Type I error for a two-sided test

                $Z_{1-\beta}$ = standard normal 1-β corresponding to the power of the test

                P_1 = estimated value of the indicator at the baseline

                P_2 = expected value of the indicator at the endline (end of project target)

                P = $(P_1 + P_2)/2$

The design effect was set at 1.5 and the significance level at 5%. Baseline and end-of-project values for the Net Primary Enrolment Rate were taken from the MEC program logframe and were set at 84% at the start and 90% at the end of the program. Allowing for a 10% non-respondent rate, the sample size required for the study was **812 households** with a child aged 5-9 years. The sample size was divided equally among all townships in the survey as each township represents a different partner.

The sample size required for calculating Net Primary Enrolment for children with disabilities was determined to be **139 children with disabilities using** a worst case scenario of an initial rate of 50% and a conservative endline estimate of 70%.

Annex C: Early Childhood Development Index

'Early child development' is defined as an orderly, predictable process along a continuous path, in which a child learns to handle more complicated levels of moving, thinking, speaking, feeling and relating to others. Physical growth, literacy and numeracy skills, socio-emotional development and readiness to learn are vital domains of a child's overall development, which is a basis for overall human development.

A 10-item module is used to calculate the Early Child Development Index (ECDI). The ECDI is based on benchmarks that children are expected to reach if they are progressing in their development as the majority of children in their age group develop.

Each of the 10 items is used in one of four domains to determine whether children are developmentally on track in that domain. The domains in question are:

- Literacy-numeracy: Children are identified as being developmentally on track according to whether they can identify/name at least 10 letters of the alphabet, whether they can read at least four simple, popular words, and whether they know the names and recognize the symbols of all numbers from 1 to 10. If at least two of these capabilities are found, the child is considered developmentally on track
- Physical: If the child can pick up a small object such as a stick or a rock from the ground with two fingers, and/or the mother or caretaker does not indicate that the child is sometimes too sick to play, then the child is regarded as being developmentally on track in the physical domain
- Social-emotional: Children are considered to be developmentally on track if two of the following are true: the child gets along well with other children; the child does not kick, bite or hit other children; and the child does not get distracted easily
- Learning: If the child follows simple directions on how to do something correctly and/or when given something to do, is able to do it independently, then the child is considered to be developmentally on track in this domain

ECDI is calculated as the percentage of children who are developmentally on track in at least three of these four domains.

Sources: *Lao Social Indicator Survey (LSIS) 2011-2012 (Multiple Indicator Cluster Survey/Demographic and Health Survey*. December 2012. Lao PDR.

Annex D: Reading and Mathematics Assessment

Background

Although students' learning outcomes have been a central concern of all stakeholders in the education sector, there is no proper system for monitoring learning achievement of students at any key stage of basic education in Myanmar. There was one attempt to establish such a system for primary education in 2005 when Myanmar joined the regional initiative called East Asia Learning Achievement Study (EALAS). The assessment EALAS assessment was conducted for Grade 3 and 5 students on Myanmar Language, Mathematics, Science and Social Studies. However, it was not adopted as a part of the Government of Myanmar's national assessment and monitoring agenda, and the approach and methodologies have been used only to establish baseline and end-line indicators for UNICEF supported education programmes. Recently, the Ministry of Education has also piloted the Early Grade Reading Assessment (EGRA) in selected schools of Yangon Region with support of the World Bank. The initiative is at an early stage and it is not possible to comment on the extent that this new assessment approach could be replicated to measure learning outcomes of the majority of children in the country.

In order to respond to the need to set up a baseline for students' literacy and numeracy skills for the MEC programme, the possibility for utilizing the two assessment models above was initially considered. However, both models need proper field level test administration, which is requires significant investment in time and resources. Further, there is also a need to obtain approval from the Ministry of Education to use the tools of both initiatives. Given the limited timeframe, it was not possible to develop a comprehensive assessment approach and related tools specifically for this baseline study. It was thus agreed that a simple assessment tool which could be easily administered to a few selected sample of Grade 3 and 5 students in each survey site by the survey teams be developed for each for the two learning areas, literacy and numeracy. The literacy and numeracy assessment is meant to give snapshots to the programme partners regarding children's learning achievements in the respective areas. The findings from this rather small study are not meant to represent the learning outcomes of the student population of the programme areas.

Methodology

Reading assessment

The reading assessment tool is a simplified and brief version of the EGRA. Similar simplification of EGRA with modifications has been used in many African countries such as Ghana, Liberia, Gambia, Senegal and Sierra Leone[33]. The tool used for literacy assessment covers two critical elements of children's reading ability: **oral reading fluency (ORF) and reading comprehension**. ORF is the ability to read a connected text with appropriate speed and accuracy, and is measured by the **correct words per minute (cwpm)** when a child reads aloud a given passage (story). It is considered as the

---

[33] (World Bank, n.d.)

best single measure of a child's reading proficiency in the elementary grades, and it has also been shown to be a powerful predictor of overall reading competence and comprehension[34]. The oral reading is followed by four basic comprehension questions to check the child's understanding about the passage (story). Each reading comprehension question is given a score of 25 points, thus totalling 100 points for all four questions.

There is no oral reading fluency benchmark established for Myanmar yet. According to a World Bank report, the US bench mark is 110 cwpm for Grade 3 and 124 cwpm for Grade 5. In cognitive neuroscience, the brain must process words at a minimum rate of 35 to 60 words per minute to understand a text[35]. Some African countries such as Ghana and Liberia have set a 45 cwpm threshold[36]. Based on this information, the study proposed a threshold of 50 cwpm as mid-level oral reading fluency.

It is necessary, however, to note that the technical notion of "word" in Myanmar language is slightly different from other languages. Due to the nature of the Myanmar language as a monosyllabic-oriented and agglutinating language, and also due to the lack of mandatory (but arbitrary) requirement of a physical space between words in its orthography, it is difficult to mark word boundaries precisely within a phrase or a sentence. Therefore, ORF in this study is measured by counting syllables rather than words in a true sense.

Mathematics assessment

The tool used for numeracy assessment tests children's ability to perform the four basic mathematical calculation skills -- addition, subtraction, multiplication and division. The test is an **oral maths test** in the form of word problems, based on the approach of the Early Grade Maths Assessment (EGMA)[37], which has been used by USAID and the World Bank in some countries. The normal EGMA test involves only addition and subtraction but in this test, multiplication and division items are also included. The reason for testing all four basic calculation skills is because these skills are part of the curriculum even for Grade 3. The same test is also administered to Grade 5 children. The test consists of four questions, one for each mathematical operation. As in the basic comprehension test, each math question is given a score of 25 points, thus totalling 100 points for all four questions.

---

[34] (USAID, n.d.)

[35] (World Bank, n.d.)

[36] (World Bank, n.d.)

[37] (RTI International, 2008)

Annex E: Key Indicator Definitions

Baseline indicator	Definition		Remarks (numbers in brackets refer to the questions in the household survey to collect data for the indicator)
	Numerator	Denominator	
Impact indicators			
Net primary enrolment rate	Number of children of primary school age attending primary school	Total number of children of primary school age (5-9 years)	MEC log frame goal indicator (ED6)
Gross primary enrolment rate	Number of children of any age attending primary school	Total number of children of primary school age (5-9 years)	Additional indicator for comparison (ED6)
Grade 3 promotion rate	Number of children in Grade 3 (Standard 2) in 2013-2014 school year and in Grade 2 (Standard 1) in 2012-2013 school year	Number of children in Grade 2 (Standard 1) in 2012-2013 school year	Proxy for MEC logframe goal indicators Survival rate to grade 3 and 5 in targeted townships. Also proxy indicator for partner outcome indicator for projects on inclusive education (% of children with disbilities who pass to the following grade) and result indicator for projects on complementary education (retention rate in complementary education systems). (ED6, ED9)
Grade 5 promotion rate	Number of children in Grade 5 (Standard 4) in 2013-2014 school year and in Grade 4 (Standard 3) in 2012-2013 school year	Number of children in Grade 4 (Standard 3) in 2012-2013 school year	
Outcome indicators			
Net primary school completion rate	Number of children of age 9 years attending the last grade of primary school (Standard 4)	Total number of children of primary school completion age (9 years)	Proxy for MEC outcome indicator as well as partner outcome indicator (COMP) on key stage literacy and numeracy. Additional info on literacy and numeracy available from school student assessment. (ED6)
Gross primary school completion rate	Number of children of any age attending the last grade of primary school (Standard 4)	Total number of children of primary school completion age (9 years)	Additional indicator for comparison (ED6)
Transition rate to secondary school	No. of children who are in the first grade of secondary school during the 2013-2014 school year (Standard 5) and who were in last grade of primary school (Standard 4) in 2012-2013 school year	No. of children in the last grade of primary school (Standard 4) in 2012-2013 school year	Additional indicator
Net secondary enrolment rate	No. of children of secondary school age attending secondary school in 2013-2014 school year	No. of children of secondary school age (10-15 years)	Additional indicator

| Baseline indicator | Definition | | Remarks (numbers in brackets refer to the questions in the household survey to collect data for the indicator) |
	Numerator	Denominator	
Gross secondary enrolment rate	No. of children of any age attending secondary school	No. of children of secondary school age (10-15 years)	Additional indicator
Early childhood development			
Net intake rate in primary education	Number of children of school-entry age (5 years) who are in the first grade of primary school (KG)	Total number of children of school-entry age (5 years)	Partner outcome indicator uses % on time enrolment in primary school (ECCD) which would have the same definition. Net intake rate is a standard indicator used in the education sector. (ED6)
Gross intake rate in primary education	Number of children of who are in the first grade of primary school (KG)	Total number of children of school-entry age (5 years)	Additional indicator for comparison (ED6)
Early Child Development Index	Number of children 3-5 years developmentally on track in 3 of 4 domains (literacy-numeracy, physical, social-emotional and learning)	Total number of children 3-5 years	Proxy indicator for MEC outcome indicator, % of pre-school children assessed as being ready for school (EC15 to EC27)
Children with disabilities			
Percentage of children with disabilities who attend primary school with at least 80% attendance in the previous month	Number of children with disabilities with at least 80% attendance at primary school in previous month	Total number of children with disabilities of primary school age (5-9 years)	Proxy indicator for partner outcome indicator (SN), % of children enrolled in school regularly attended primary school (at least 80% of school year) (DA23)
Result indicators			
ECCD Component			
Percentage of children currently in the first grade of primary school who have benefitted from an ECCD intervention	Number of children in first grade (KG) who attended pre-school during the previous school year	Total number of children attending the first year of primary school (KG)	MEC result indicator for ECCD component. (ED6, ED9)
Net ECCD enrolment rate	Number of children of any age attending an early childhood education program	Total number of children age 36-59 months	Additional indicator for comparison (ED6)
Gross ECCD enrolment ratio	Number of children age 36-59 months who are attending an early childhood education program	Total number of children age 36-59 months	Indicator related to MEC outcome indicator on # of children newly accessing ECCD services by comparing baseline and endline survey (ED6)
Percentage of households with school-going children where one	Number of households with pre-school aged children where one member has	Number of households pre-school aged children	Baseline indicator providing information on partner result indicator (ECCD), # of parents

Baseline indicator	Definition		Remarks (numbers in brackets refer to the questions in the household survey to collect data for the indicator)
	Numerator	Denominator	
member has attended parenting education training	attended parenting education training		trained on parenting practices (positive parenting practices, child rights and child safe guarding) (HC17)
Attitudes towards parenting practices	Number of respondents who have positive attitudes towards parenting (2 of 3 attitudes)	Total number of respondents	Baseline indicator providing information on partner result indicator (ECCD), Percentage of parents and extended family members trained demonstrating basic knowledge on parenting practices (HC20 to HC22)
Complementary education component			
Grade 3 promotion rate in complementary education system schools	Number of children in Grade 3 (Standard 2) in 2013-2014 school year and in Grade 2 (Standard 1) in 2012-2013 school year in complementary education system schools	Number of children in Grade 2 (Standard 1) in last school year in complementary education system schools	MEC result indicator, retention rates in complementary education systems, does not specify for which grade. End of lower primary level, Grade 3 is used as a mid-point. (ED6, ED9))
Contact with school	Number of households where an adult has had contact with the school	Number of households with children in school	Baseline indicator providing information on partner result indicator (COMP) on Parents and communities engage actively in school (HC18, HC19)
Children with special needs			
Percentage of respondents with positive attitudes towards inclusive schooling for children with disabilities	Number of respondents with at least 2 of 3 positive attitudes towards children with disabilities	Total number of respondents in survey	Baseline indicator for partner result indicator (SN), % of community members show a % change in positive attitudes towards children with disabilities (HC23 to HC25)
Out of school children			
Percentage of respondents with positive attitudes towards education for out of school children	Number of respondents with positive attitudes towards education for out of school children (at least 1 of 2 attitudes)	Total number of respondents in survey	Baseline indicator for partner result indicator (OOSY), % of community members show a % change in positive attitudes towards out of school working children (HC26 to HC27)

Annex F: Standard Errors, Coefficient of Variation and Confidence Intervals for Key Indicators

The standard errors, coefficient of variation and 95% confidence intervals for the key indicators are shown below. The coefficient of variation is a useful indication of how much part of the estimate can be attributed to error and thus provides an idea of how reliable the calculated value is. It is a standardized quantity and does not depend on the unit of measurement of the variable. As a rule of thumb, a coefficient of variation of less than 10% is considered ideal. Values for which the coefficient of variation is higher than 10% are highlighted in yellow in the table below.

The estimates for the majority of the indicators for the total population have a high level of reliability with single-digit values for the coefficient of variation except the Net Primary Completion Rate. However, as expected, the coefficient of variation increases significantly for children with disabilities due to the smaller sample size for this population. The Net Primary Enrolment Rate for children with disabilities, the key indicator for the study however, has an acceptable coefficient of variation of 5%.

For the Net ECCD Enrolment Rate, the coefficient of variation when disaggregated by sex is high but is sufficiently reliable for both sexes combined.

Indicator	Disaggregation	Value	Standard Error	Coefficient of Variation	Confidence Interval	
					95% Lower	95% Upper
Net Primary Enrolment Rate	Boys	83.6	1.6	2%	80.5	86.7
	Girls	86.2	1.4	2%	83.4	89.0
	Children with Disabilities	81.9	4.2	5%	73.5	90.4
	Total	84.9	1.1	1%	82.9	87.0
Grade 3 Promotion Rate	Boys	76.9	3.9	5%	69.2	84.5
	Girls	74.6	3.7	5%	67.4	81.9
	Children with Disabilities	66.7	12.6	19%	39.6	93.7
	Total	75.7	2.6	4%	70.5	80.9
Grade 5 Promotion Rate	Boys	72.2	5.3	7%	61.6	82.8
	Girls	72.2	5.1	7%	62.1	82.3
	Children with Disabilities	54.5	15.7	29%	19.5	89.6
	Total	72.2	3.7	5%	65.0	79.4
Net Primary School Completion Rate	Boys	12.1	3.4	28%	5.3	18.9
	Girls	16.5	4.2	25%	8.1	24.8
	Children with Disabilities	6.7	6.7	100%	0.0	20.8
	Total	14.1	2.7	19%	8.8	19.4
Transition Rate to Secondary School	Boys	89.8	4.4	5%	81.0	98.6
	Girls	83.3	5.1	6%	73.1	93.6
	Children with Disabilities	90.9	9.1	10%	70.6	100.0
	Total	86.4	3.3	4%	79.7	93.1
Net Secondary Enrolment Rate	Boys	37.2	2.5	7%	32.2	42.1
	Girls	43.1	2.6	6%	38.1	48.2
	Children with Disabilities	27.5	5.4	20%	16.7	38.4
	Total	40.2	1.8	4%	36.6	43.7
Net Intake Rate in Primary Education	Boys	48.7	4.5	9%	39.8	57.7
	Girls	45.7	4.4	10%	36.9	54.5
	Children with Disabilities	63.1	11.4	18%	39.3	87.0
	Total	47.2	3.2	7%	41.0	53.4
Children with disabilities in primary school with at least 80% attendance	Boys	16.7	6.3	38%	3.9	29.5
	Girls	35.7	13.2	37%	7.0	64.4
	Total	22.0	5.9	27%	10.1	33.9
Children in first grade who have benefitted from ECCD	Boys	58.5	3.5	6%	51.5	65.4
	Girls	62.2	3.5	6%	55.3	69.1
	Children with Disabilities	76.3	7.0	9%	62.2	90.5
	Total	60.3	2.5	4%	55.4	65.2
Net ECCD Enrolment Rate	Boys	22.3	3.1	14%	16.2	28.4
	Girls	23.3	3.5	15%	16.4	30.2
	Children with Disabilities	21.4	11.4	53%	0.0	46.0
	Total	22.7	2.3	10%	18.2	27.3
Grade 3 Promotion Rate in Complementary Schools	Boys	68.6	6.6	10%	55.5	81.8
	Girls	67.4	6.8	10%	53.7	81.0
	Children with Disabilities	66.7	16.6	25%	28.2	100.0
	Total	68.0	4.7	7%	58.7	77.3

Myanmar Education Consortium

BASELINE STUDY
Lessons Learnt Report

DantDaLun Management and Consulting Services
November 2014

TABLE OF CONTENTS

I. INTRODUCTION
The Myanmar Education Consortium (MEC) is a multi-donor program supporting improved outcomes in basic education for children in Myanmar. In July 2014, the MEC contracted DantDaLun Management and Consulting Services to conduct a baseline for its program encompassing 12 of its 13 civil society organisation partner projects. This report presents some of the issues and lessons learnt by the baseline survey team in conducting the survey. Some of these lessons will be useful for the endline survey.

II. THE BASELINE
The MEC baseline was conducted in 11 townships in seven states/regions with 12 of the MEC partners each implementing projects in one of the four programme components – early childhood development, complementary basic education in ethnic areas, inclusive education for children with disabilities and non-formal education for out-of-school children. Five data collection instruments were developed – a household questionnaire, a school data collection form, a caregiver/teacher interview form, a reading and math assessment for students in primary schools and focus group discussion (FGD) guides for school management bodies and community members. Data was collected by three teams each headed by a Team Leader working with enumerators selected from among partner staff and volunteers. Different teams were used based on the local language in the site.

III. LESSONS LEARNT

i. Survey design

General
- The time planned to review and revise the questionnaires was too short. The questionnaires were initially developed in English and translated to Myanmar. Inputs were initially obtained from partners, MEC and Save the Children based on which changes were made. These were agreed on with MEC following which the questionnaires were field tested. Following field testing, the questionnaires were again revised. Each time changes were made, both versions had to be revised and checked with final approval given by MEC. Adequate time should be provided for this process in the future.

Household questionnaire
- Although the questionnaire was field tested in three sites, the following issues were not identified until fieldwork had started.
  - There was a mistake in the school year for questions HC7, HC8, HC12 and HC13. The questions should refer to the 2013-2014 school year rather than the 2012-2013 school year. This mistake was identified in the first site and all enumerators were informed to make the changes to the questionnaires during the training sessions. However, the questionnaires could not be reprinted and in some cases the change may not have been made when the questions were asked. The questions related to the amount spent for education by the household in a year, and the year does not significantly affect the answer; however, recall is likely to be much better if it refers to the last year rather than the year before last.

- o There was some confusion in the school year in the section on education. ED5 and ED6 refer to the 2013-2014 school year while ED7 refers to the current school year. Question ED7 should be changed to refer to the 2013-2014 school year. In general this was not a problem but caused confusion if a student attended school in 2013-2014 but is no longer in school in the current school year.
- Although the survey team had taken steps to ensure questions on language and ethnicity were appropriately formulated, the survey would have benefited from more consultation with MEC partners on these questions. The baseline team had adopted the list of languages used in a national education conference which included participation by civil society and government (and was thus considered to be accepted by both sides). Also, the questions on language were phrased to allow participants to state their language rather select from the list. Nevertheless, in some areas, the survey team could not ask the questions on language as local authorities felt the list of languages in the questionnaire did not fully reflect the range of languages in their areas. The issue of ethnic language in education remains highly sensitive in Myanmar and inputs of MEC partners could have helped to avoid these problems.
- More consideration needs to be given to how to include the disabled in the survey. The baseline team set a target for the number of interviews in households with children with disabilities and in some areas, the teams oversampled households in order to reach this target. Teams found it difficult to find terms for "disabled" in local languages which do not project a negative connotation. Due to stigma, disabilities tend to be hidden making it difficult to identify households with children with disabilities. Further, there is little understanding of and means to assess learning disabilities in Myanmar and thus most children with learning disabilities could not be identified. The MEC may seek to conduct a special study on education for children with disabilities to provide more information.
- The definition of "under-five" children to be included in the early childhood development component should be clearly provided to enumerators. The survey defined "under-five" as those who had not reached their fifth birthday. However, some enumerators considered all children in pre-school as those under-five. Although all children who have reached their fifth birthday are eligible to start school, they do not do so until the next school year. Some children in pre-school have thus passed their fifth birthday. The early childhood development component should be called the under-five component to avoid this confusion.
- The definition of ECCD center was also not clearly provided to enumerators. Some enumerators may have included informal day care centers as pre-schools in the household survey but information on these centers were not collected through the school data collection and caregiver/teacher interviews.

Reading and Math Assessment

- The reading assessment assesses reading ability in Myanmar. However, in some areas, the schools visited use other ethnic languages (Kachin and Kayan) as the language of instruction. MEC may thus consider working with partners to develop assessments in local languages when developing of a more comprehensive assessment for measuring key stage literacy rates.
- Clearer guidance should be given to the teams on selection of students for the reading and math assessment. In some sites, students were selected using systematic random sampling from the attendance list while in some sites, students were "randomly" selected by teachers. In one case,

a disabled child was selected purposefully to be included in the survey. Clearer guidelines for random sampling should be provided so that the same procedures are used in all sites.

School Data Collection and Caregiver/Teacher Questionnaires

- Two ECCD project partners selected sites where there were no ECCD centers in place yet. Data collection and interviews in schools could thus not be carried in these areas. In some areas, informal day care centers were present but the caregivers were not interviewed.
- In one site, the school data collection was conducted in a different school from the caregiver/teacher interview giving partial information about each of the schools.

Focus Group Discussions

- While the teams sought to exclude principals from Focus Group Discussions with school management bodies to enable triangulation with the school data collection and caregiver/teacher interviews, this was not possible as the management bodies are dependent on the principal to organize them. Many of management bodies have little experience and it was difficult to encourage discussion during the FGDs. Members often turn to the principal for answers and specifically request his/her presence to answer questions. Other methods will be needed to mobilize community members to present their views.

ii. Data collection

- Random sampling from a list of households with children 5-9 years is the most effective way to identify households for the household interviews. It is possible to get this list if adequate time is given during fieldwork in each site. Teams used different strategies to get this list – some teams obtained them from immigration authorities, some from village leaders, some from teachers, midwives and pastors. The systematic random sampling method using the right hand rule was not practical and was not used by any of the teams.
- Training for enumerators is more effective if they are able to practice using the questionnaire in the field rather than in a role play among themselves in a workshop setting.
- Strong support from the lead consultants early during the fieldwork phase is important to ensure that any misunderstandings are addressed early and any changes made by one team are clearly communicated to all teams.
- Similarly it is important for Team Leaders to review the work of enumerators on a daily basis particularly when working with a new team to ensure that any mistakes and issues are addressed early on.
- It is important to provide flexibility to field teams during data collection particularly in remote areas with poor infrastructure and transportation. Some of the challenges faced by the survey teams included long travel times using numerous transportation means (walking, motorbike, boat, car) in difficult terrain; the need to request for changes in enumerators who do not speak the local language; flash floods leading to some questionnaires and personal property being destroyed; adjusting for school holidays on Buddhist Sabbath days (which fall on different days of the week during the Buddhist Lent); working with mixed Adventist and Baptist enumeration teams who observe different days of rest (Saturdays for Adventists and Sundays for Baptists); gaining access to schools, particularly primary schools which will not benefit from the MEC program for the reading and math assessment. Having Team Leaders who are experienced is important to manage such environments.

iii. Working with partners

- The partners provided crucial support to enable the survey to take place. The partners have strong relationships in the survey areas and thus were able to obtain local permissions for the data collection, including in government schools. Their guidance and knowledge was crucial for the survey teams.

- The initial workshop with partners was very important to gain the input and involvement of the partners. However, in some cases information about the survey was not adequately communicated to staff in field sites. The survey Team Leaders thus had to brief partner staff during the fieldwork.

- Involving enumerators from partner organisations sometimes made management more difficult. Furthermore most of the enumerators do not have any survey experience. In a number of cases, partner staff did not have the time to engage in the survey and were not able to participate fully as planned. However, the benefits outweigh the challenges. In particular, local enumerators speak the local language, understand the local situation and have the trust of local communities. Furthermore, the experience gained by the enumerators will benefit the partner organisation and has strengthened ownership of the survey by the partner.